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Department of Energy
Albuquerque Operations Office
Los Alamos Area Office
Los Alamos, New Mexico 87544

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Mr. Carl Will
LANL Permits Project Leader
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, New Mexico 87505

Dear Mr. Will:

Subject: Submittal of the Closure Certification Report for the TA-16-394 Burn Tray

The purpose of this letter is to submit the above referenced document for the Hazardous Waste Bureau's review and concurrence. The document contains the required independent engineer's certification as well as the required certifications by both the owner and co-operators for the Los Alamos National Laboratory.

A review of the report shows that there were some deviations taken in implementing the closure plan. Due to the discovery of a crack in the secondary containment of the unit, different approaches to the implementation were studied. Once a path forward was selected, Michael Chacon of the New Mexico Environment Department (NMED) was contacted and invited to tour the site so he would understand what the situation was.

Because of the crack discovered in the secondary containment vessel of the TA-16-394 Burn Tray, the decision was made to excavate to the maximum level proposed in the closure plan (5 feet) rather than excavating and sampling foot-by-foot. To ensure that this approach was agreeable to NMED, a site visit was arranged on April 12, 2000 for Mike Chacon. Mr. Chacon verbally agreed to the approach after discussing the issue and viewing the site. Val Rhodes discussed with Mr. Chacon the NMED TPH guidance that he requested be used. It was agreed that if we excavated to 5 feet and the TPH levels were below the guidance levels and the EPA screening levels listed in the closure plan, excavation could stop at 5 feet.

6299

TC

If you should have any questions or concerns regarding this request, please feel free to contact either Gene Turner of my staff at (505) 667-5794 or Jack Ellvinger of LANL/ESH-19 at (505) 667-0633.

Sincerely,

Joseph C. Vozella
Assistant Area Manager
Office of Environment

LAAME:3GT-014

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Contract 003CT0008-8L
Project No. 819592.07
May 2001

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Los Alamos National Laboratory Technical Area 16 Closure Certification Report for the TA-16-394 Burn Tray

Revision 0.0

Prepared by

Los Alamos National Laboratory
Hazardous and Solid Waste Group (ESH-19)
Los Alamos, New Mexico 87545

LA-UR-01-2322

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CLOSURE CERTIFICATION REPORT FOR THE TA-16-394 BURN TRAY AT TECHNICAL AREA 16

REVISION 0.0

Facility ID No.:	NM0890010515
Facility Name:	Los Alamos National Laboratory
Legal Owner:	U.S. Department of Energy
Legal Operators:	U.S. Department of Energy Los Alamos Area Office 528 35th Street Los Alamos, New Mexico 87544 University of California P. O. Box 1663 Los Alamos, New Mexico 87545
Contact Person:	David A. Gurulé, P.E. Area Manager, Los Alamos Area Office U.S. Department of Energy Albuquerque Operations
Date:	May 2001

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ACRONYMS AND ABBREVIATIONS

EPA	U.S. Environmental Protection Agency
ESA	Engineering Sciences and Applications Division
HE	high explosive
ID	identification
LANL	Los Alamos National Laboratory
20.4.1 NMAC	New Mexico Administrative Code, Title 20, Chapter 4, Part 1
NMED	New Mexico Environment Department
PVC	polyvinyl chloride
QA	quality assurance
QC	quality control
RCRA	Resource Conservation and Recovery Act
SVOC	semivolatile organic compounds
TA	technical area
TAL	target analyte list
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbons
VOC	volatile organic compounds
WCS	Waste Control Specialists

EXECUTIVE SUMMARY

This report summarizes the actions performed in order to meet closure requirements for the TA-16-394 burn tray located at Technical Area (TA) 16, Los Alamos National Laboratory. The closure plan, entitled "Closure Plan for the TA-16-394 Burn Tray" (LANL, 1999), was submitted to the New Mexico Environment Department (NMED) on December 2, 1999. The closure plan addressed the nature and management of the waste, the decommissioning procedures to be followed during closure, the closure schedule, and the intent for closure certification. A revised closure plan, incorporating NMED's comments, was submitted in February 2001. The revised closure plan for the TA-16-394 burn tray was approved by the NMED Water and Waste Management Division on February 19, 2001.

Closure of TA-16-394 burn tray was performed in accordance with the revised closure plan. The burn trays were removed, treated by open burning, and recycled. The secondary containment structure, composed of a curbed concrete pad, sand, and gravel, was removed and disposed of as hazardous waste. The soil and tuff underneath and surrounding the secondary containment structure was excavated and disposed of as nonhazardous waste. The firebricks were removed and disposed of as hazardous waste. The metal piping was removed, treated by open burning, and recycled. The polyvinyl chloride piping, which composed the outfall drain, was removed and disposed of as hazardous waste. Samples collected at the excavation depth confirmed that all contaminants related to burn tray activities were successfully removed to below the screening levels provided in the revised closure plan.

CLOSURE CERTIFICATION REPORT FOR THE TA-16-394 BURN TRAY AT TECHNICAL AREA 16

1.0 INTRODUCTION

1.1 Background

This report summarizes the activities performed in order to meet closure requirements for the TA-16-394 burn tray located at Technical Area (TA) 16, Los Alamos National Laboratory (LANL). The TA-16-394 burn tray, hereinafter referred to as the burn tray, was a hazardous waste treatment structure regulated by New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20.4.1 NMAC), Subpart VI, and operated pursuant to New Mexico air quality regulation 20.2.60 NMAC.

1.2 Purpose

The purpose of this report is to present the activities conducted during the closure of the burn tray and the associated components, and to demonstrate that closure was performed in accordance with the revised closure plan. Deviations from the revised closure plan are also presented. Additionally, this report presents the independent registered professional engineer's closure certification, as required by 20.4.1 NMAC, Subpart VI, §265.115, revised June 14, 2000 [6-14-00].

1.3 Report Organization

Section 1.0 presents the purpose of the report and provides a description of the burn tray and associated components, the burn tray process, and the waste treated in the burn tray. Section 2.0 includes a description of the closure activities, results of the sampling and analysis, details regarding disposition of decommissioned materials, deviations from the closure plan, location of the supporting documentation, and statement of quality assurance (QA) and quality control (QC) adequacy. Section 3.0 presents the certification of the accuracy of this report and the independent registered professional engineer's certification.

1.4 Burn Tray Description

The burn tray was an open burning structure located at TA-16, within an area referred to as the TA-16 Burn Ground. The open burning structure consisted of two elevated 8-inch-high welded-steel trays located within a secondary containment structure. The approximately 14 x 14 feet secondary containment structure consisted of a curbed concrete pad that contained gravel and sand. Firebricks lined the sides of the secondary containment structure.

The secondary containment structure was originally a filter bed that received high explosive (HE)-contaminated wash water from the basket wash facility, TA-16-390. Filtered wash water collected within perforated metal piping, which ran along the bottom of the filter bed and gravity-drained through a polyvinyl chloride (PVC) pipe to an adjacent outfall area southwest of the bed. The basket wash facility and the filter bed operated from 1951 to 1966. The filter bed is identified as Solid Waste Management Unit 16-010(j) in the Solid Waste Management Unit Report (LANL, 1990), and is listed in Module VIII of LANL's Hazardous Waste Facility Permit (NMEID, 1989).

In October 1990, the inactive filter bed was converted to the burn tray, a hazardous waste treatment structure. The burn tray is included in the "Los Alamos National Laboratory General Part A Permit Application," Revision 0.0 (LANL, 1998). It was operated pursuant to 20.4.1 NMAC, Subpart VI, and New Mexico air quality regulation New Mexico Administrative Code, Title 20, Chapter 2, Part 60. In 1997, LANL received a five-year open burn permit from the New Mexico Environment Department (NMED) Air Quality Bureau.

1.5 Process

The burn tray structure was used to burn HE-contaminated liquid waste; spent solvent waste; and liquid acids, bases, and inorganic salt wastes. Waste was poured into the burn trays, several hundred pounds of wood were stacked under and around the burn trays, and the burn trays were ignited remotely. Residues from burning were appropriately characterized and managed as either Resource Conservation and Recovery Act (RCRA) hazardous waste or New Mexico Special Waste. Additional information regarding operation of the burn tray, including operations and waste management practices, can be found in "RCRA Part B Permit Application: Technical Area 16, Building 88, Container Storage Area; Flash Pads 387 and 388, Open Burn

Units; Burn Pads 388 and 399, Open Burn Units; Burn Trays 388 and 394, Open Burn Units; Filter Vessels 401 and 406, Open Burn Units" (LANL, 1996), hereinafter referred to as the TA-16 Part B.

1.6 Description of Waste

At LANL, HE wastes and HE-contaminated wastes are generated primarily from HE research and development, HE production, and decontamination and decommissioning activities. They are described in detail in the "Waste Analysis Plan for Thermal Treatment by Open Burning at Technical Area 16," Section 3b, of the TA-16 Part B (LANL, 1996). The following waste streams were treated at the burn tray:

- HE-contaminated water with solvent waste consisting primarily of water and solvent from laboratory analysis and/or solvents for HE processing.
- Spent solvent waste consisting of spent solvents used to dissolve HE and polymers and spent solvents from laboratory analysis.
- HE-contaminated used oil originating from hydraulic presses and lubrication systems associated with HE machining operations.
- Liquid acids, bases, and/or inorganic salt wastes consisting of materials used as titrates, solvents, cleaning fluids, and/or materials from hydrolysis research.

The total volume of RCRA-regulated waste treated at the burn tray at any time was 250 gallons, which is the process design capacity specified in the "Los Alamos National Laboratory General Part A Permit Application," Revision 0.0 (LANL, 1998).

2.0 PERFORMANCE OF CLOSURE

2.1 Phase I Closure Activities

Phase I closure activities for the burn tray at TA-16 began on July 17, 2000. Phase I closure activities were performed in accordance with the closure plan, except as noted in Section 2.3 of this closure report. Prior to initiating closure, radiological field screening was conducted at the burn tray. No radiological contamination was detected.

Phase I closure activities involved the removal, treatment, and/or disposition of all components of the burn tray, which included: two welded-steel trays; sand and gravel; firebrick; metal and PVC piping; a concrete secondary containment structure; and the aluminum burn tray covers. The following provides a description of the removal, treatment, and/or disposition of each component.

2.1.1 Welded-Steel Trays

Closure was initiated by removing the two welded-steel trays from the secondary containment structure. Photograph 1 shows the welded-steel trays following removal from the concrete secondary containment structure. The welded-steel trays were treated by open burning to remove residual HE and organic residues. The welded-steel trays were recycled as scrap metal by Gallegos Metal.

2.1.2 Burn Tray Covers

Aluminum covers were used to prevent rainwater accumulation in the two welded-steel burn trays. These covers could not be treated by open burning because the aluminum would melt. Therefore, the burn tray covers were decontaminated at TA-16, Building 400. Building 400 is designed for decontamination activities and includes troughs that capture all decontamination water. Decontamination water was disposed of at the HE Wastewater Treatment Facility. Following decontamination, the burn tray covers were recycled as scrap metal by Gallegos Metal.

2.1.3 Firebrick

The firebricks, which surrounded the perimeter of the secondary containment structure, were removed and treated by open burning. The firebricks were sampled for volatile organic

compounds (VOC), semivolatile organic compounds (SVOC), total petroleum hydrocarbons (TPH), and toxicity characteristic leaching procedure (TCLP) metals. Analytical results are summarized in Table 1 and indicate the presence of trace VOCs and SVOCs, and low levels of barium and TPH. The firebricks were characterized as hazardous waste and will be sent to Waste Control Specialists (WCS) in Andrews, Texas, for disposal.

2.1.4 Sand and Gravel

The sand and gravel from the secondary containment structure were removed and placed into roll-off bins. Two samples of the sand were collected. The first sample was collected from within the concrete secondary containment structure at 0-6 inches and analyzed for VOCs, SVOCs, TPH, and TCLP metals. The second sample was collected from the roll-off bin and analyzed for TPH. Analytical results are summarized in Table 2 and indicated the presence of tetrachloroethene and elevated TPH levels. The sand and gravel were characterized as hazardous waste and sent to WCS in Andrews, Texas, for disposal.

2.1.5 Concrete Secondary Containment Structure

Due to obvious staining, the concrete secondary containment structure was demolished, removed, and placed into the roll-off bins with the sand and gravel. This is a deviation to the revised closure plan, which had specified treatment by open burning. The concrete secondary containment structure was characterized as hazardous waste and sent to WCS in Andrews, Texas, along with the sand and gravel, for disposal.

It should be noted that following removal of the sand and gravel, a crack was discovered in the bottom of the concrete secondary containment structure (see Figure 1). Footprint Sample Location #1 (see Section 2.2.1) corresponds to the area underneath the crack. As discussed in Section 2.2.3, soils underneath this area were excavated to a depth of five feet and contaminants related to burn tray activities were successfully removed.

2.1.6 Piping

Metal piping was removed during the sand and gravel removal. The metal piping was treated by open burning and recycled as scrap metal by Gallegos Metal.

PVC piping, which comprised the outfall drain, was removed during sand and gravel removal. PVC piping was characterized as hazardous waste under the same waste characterization profile as the sand and gravel and sent to WCS in Andrews, Texas, for disposal.

2.2 Phase II Closure Activities

Phase II closure activities for the burn tray began on July 26, 2000. Phase II closure activities involved footprint, perimeter, and outfall sampling; excavation of soil and tuff adjacent to and beneath the secondary containment area; and disposal of excavated soil and tuff.

2.2.1 Sampling Activities

Soil and tuff samples were collected from the footprint area (directly underneath the secondary containment structure), the perimeter, and the outfall area to determine if contaminants existed and if cleanup was required. Figure 1 illustrates each sample location, the number of samples collected at each location, and the depth of each sample.

Perimeter Samples

Samples were collected at four perimeter locations (see Figure 1). At Perimeter Sample Locations #1, #2, and #3, samples were collected at depths of 0-1 feet, 1-1.5 feet, and 3-4 feet. At Perimeter Sample Location #4, samples were collected at 0-1 feet and 1-1.5 feet. At Perimeter Sample Location #4, a sample was not collected at 3-4 feet, as specified in the closure plan, because contaminant concentrations detected in the 0-1.5 foot samples were below the screening limits provided in Section 3.2.2 of the approved revised closure plan.

Outfall Area Samples

Samples were collected at three locations in the outfall area (see Figure 1). At Outfall Sample Location #1, samples were collected at depths of 0-1 feet and 1-1.5 feet. At Outfall Sample Location #2, samples were collected at depths of 0-1 feet, 1-1.5 feet, and 2.5 feet. At Sample Location #3, samples were collected at 0-1 feet, 1-1.5 feet, and 2 feet. At each of the outfall sample locations, samples were not collected at 3-4 feet, as specified in the revised closure plan, because contaminant concentrations detected in the 0-2.5 foot samples were below the screening limits provided in Section 3.2.2 of the approved revised closure plan.

Footprint Samples

Samples were collected at two locations within the footprint area (see Figure 1). Footprint Sample Location #1 corresponds to the cracked area of the concrete secondary containment structure. At both locations, samples were collected at 0-1 feet, 3-4 feet, and 5 feet. The samples collected at 5 feet were collected following excavation and represent the total excavation depth.

2.2.2 Analytical Suites

Phase II analytical results are summarized in Table 3. Perimeter and outfall samples collected from the 0-1 foot depth were analyzed for TPH and target analyte list (TAL) metals; all were spot-tested for HE. The HE Spot Test is a method designed and developed by the LANL Explosives Technology Group and indicates the presence of HE, as demonstrated by a color change. Perimeter and outfall samples from the 1-1.5 foot depth were analyzed for VOCs. Selected samples from the 0-1 foot and 1-1.5 foot depths were analyzed for VOCs, SVOCs, and TCLP metals (Sample Identification Numbers [ID Nos.] 394-24, 394-25, and 394-26). Perimeter and outfall samples collected from 2-2.5 and 3-4 foot depths were spot-tested for HE and analyzed for VOCs, TPH, and TAL metals.

The closure plan indicates that samples were to be analyzed for HE using U.S. Environmental Protection Agency (EPA) SW-846 Method 8330 (EPA, 1986). Subsequent to closure plan submittal, it was discovered that the analytical turn-around time for Method 8330 would be several months. To expedite the closure process, it was decided that samples would be analyzed for HE using the HE Spot Test. As a confirmatory measure, those samples thought to be the most contaminated were also analyzed for HE using Method 8330.

Footprint samples were spot-tested for HE and analyzed for VOCs, TPH, and TAL metals. As discussed above, samples from Footprint Sample Location #1 (Sample ID Nos. 394-27 and 394-29) thought to be the most contaminated were also analyzed for HE using Method 8330. Samples from Footprint Sample Location #2 were spot-tested for HE. Footprint Sample Location #1 Sample ID No. 394-27 was also analyzed for SVOCs and TCLP metals. The footprint samples collected from the total excavation depth were analyzed for VOCs, SVOCs, TPH, HE (Method 8330), and TCLP metals.

2.2.3 Excavation Activities

Based on footprint and perimeter sampling results, it was decided to excavate an area extending 5 feet to each side of the footprint area and 5 feet in depth. Photograph 2 shows the excavation in progress. Excavated soil and tuff were placed into roll-off bins. Photograph 3 shows the roll-off bins containing the excavated soil and tuff. Visible contamination of the tuff was no longer evident at the 5-foot excavation level. Photograph 4 shows the excavation at total depth. Two samples were collected from the bottom of the excavation at Footprint Sample Locations #1 and #2. Perimeter samples at 5-6 foot and 9-10 foot sample depths and footprint samples at 9-10 foot depths were not collected, as specified in the revised closure plan because contaminant concentrations in the samples collected within the 5-foot perimeter were below the screening limits provided in Section 3.2.2 of the approved revised closure plan. The excavation was backfilled with clean fill.

The outfall area was not excavated. Based on the lack of TPH present in samples collected in the outfall area, it was evident that contamination from burn tray activities was not present. TPH served as a screening tool to identify the array of oils and solvents associated with burn tray activities. Any further actions at the outfall area will be conducted under corrective action activities.

In conclusion, the area beneath the secondary containment structure and 5 feet to each side was excavated to a depth of 5 feet. Samples collected at excavation depth confirmed that contaminants related to burn tray activities were successfully removed to below the screening levels provided in the revised closure plan.

2.2.4 Soil and Tuff Disposition

The soil and tuff were characterized using worst-case analytical results from the perimeter and footprint sampling. Additionally, a grab sample of the excavated soil and tuff (Sample ID No. 394-100) was collected from the roll-off bins and analyzed for VOCs, SVOCs, TPH, and TCLP metals. The grab sample analytical results are consistent with the analytical results of perimeter and footprint samples collected at the 5-foot depth. Analytical results are summarized in Table 3 and indicate the presence of trace organic constituents.

The soil and tuff removed from the excavation were determined to be nonhazardous based on a "no longer contained in" determination. Analytical results indicated that concentrations of F-listed organic constituents in the soil and tuff were well below EPA Region 6 Human Health Medium-Specific Screening Levels. In letters dated October 31, 2000, and November 9, 2000, LANL requested from NMED a "no longer contained in" determination for the soil and tuff waste. In a letter dated November 29, 2000, NMED concurred with the "no longer contained in" determination and confirmed that the waste need not be managed as F-listed hazardous waste. Attachment A contains LANL's request for determination letters and NMED's response letter. The excavated soil and tuff will be sent to Waste Management of New Mexico Industrial Waste Landfill in Rio Rancho, New Mexico, for disposal as nonhazardous waste.

2.3 Deviations from the Revised Closure Plan

The closure of the burn tray at TA-16 was performed in accordance with the revised closure plan, with the exception of the following deviations.

- Closure Plan, Section 2.1 and Section 3.2.1(e), Treatment of the Concrete Secondary Containment Structure: The concrete secondary containment structure was not treated by open burning. LANL chose to dispose of the concrete secondary containment structure as hazardous waste due to the presence of extensive staining.
- Closure Plan, Section 3.2.1(b), Sand and Gravel: Two samples of the sand were collected. The first sample was collected from within the concrete secondary containment structure at 0-6 inches and was analyzed for VOC, SVOC, TPH, and TCLP metals. The second sample was collected from the roll-off bin and was analyzed for TPH. The revised closure plan specified collection of one grab sample of sand from the roll-off bin with analysis for VOC, SVOC, TPH, and TCLP metals. Collecting a sample from within the concrete secondary containment structure at 0-6 inches allowed for sampling of the most contaminated material.
- Closure Plan, Section 3.2.1(d), Piping: The metal piping was not disposed of with the sand and gravel. LANL chose to treat the metal piping by open burning and recycling.
- Closure Plan, Section 3.2.2(b), Radiological Survey: A radiological survey was not conducted following removal of the secondary containment structure. Based upon the negative survey results of the initial radiological survey, additional surveying was deemed unnecessary.

- Closure Plan, Section 3.2.2(b), Radiological Survey of Samples: Samples were not field-screened to detect radiological contamination. Based upon the negative survey results of the initial radiological survey, additional surveying was deemed unnecessary.
- Closure Plan, Section 3.2.2(b), Sampling Locations in Perimeter and Outfall Area:
  1) Samples collected at 3-4 foot: The 3-4 foot samples at Perimeter Sample Location #4 and Outfall Sample Locations #1, #2, and #3 were not collected because contaminant concentrations in the samples collected above were less than the screening limits provided in Section 3.2.2 of the approved revised closure plan.
  2) HE Sampling: Not all samples were analyzed for HE using Method 8330. The revised closure plan indicated that samples were to be analyzed for HE using Method 8330. Subsequent to revised closure plan submittal, it was discovered that the analytical turn-around time for Method 8330 would be several months. To expedite the closure process, it was decided that samples would be analyzed for HE using the HE Spot Test. As a confirmatory measure, those samples thought to be the most contaminated were also analyzed for HE using Method 8330.
  3) Additional Samples at Excavation Depth: Additional perimeter samples (two per structure side) at 5-6 feet and 9-10 feet were not collected because the contaminant concentrations detected in the samples collected within the 5-foot perimeter were below the screening limits provided in Section 3.2.2 of the approved revised closure plan.
- Closure Plan, Section 3.2.2(b), Sampling Locations Beneath Removed Structure
  1) HE Sampling: Not all samples collected in the footprint area were sampled for HE using Method 8330 due to the reasons stated above.
  2) Additional Samples at Excavation Depth: Additional samples at the 9-10 foot interval were not collected because contaminant concentrations detected in the 5-foot samples were below the screening limits provided in Section 3.2.2 of the approved revised closure plan.
- Closure Plan, Section 3.2.2(c), Soil/Tuff Grab Sampling: Only one grab sample was collected from the excavated soil and tuff. Instead, worst-case perimeter and footprint sampling results were used to characterize the excavated soil and tuff for disposal.
- Closure Plan, Section 3.2.2(e), Sampling of Decontamination Water: The water used to decontaminate the burn tray covers was not sampled. Based on process knowledge,

potential contaminants resulting from decontamination of the burn tray covers were appropriate for treatment at the TA-16 HE Wastewater Treatment Facility.

2.4 Location of Supporting Documentation

The following supporting documentation will be retained by the Engineering Sciences and Applications (ESA) Division at LANL, TA-16, Building 900:

- field logs,
- laboratory sample analysis reports,
- QA/QC documentation, and
- chain-of-custody records.

2.5 Statement of Quality Assurance/Quality Control Adequacy

A review of the sampling and shipping procedures and analytical data was conducted by ESA Division personnel. It was determined that the analytical data related to closure of the burn tray are of acceptable quality and should therefore be accepted as valid.

3.0 CERTIFICATIONS

3.1 Certification of Accuracy

I certify under penalty of law that these documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

Document title: Closure Certification Report for the TA-16-394 Burn Tray at Technical Area 16 Revision 0.0

Date: 5/30/01

Dennis J. Erickson
Division Director for Environment, Safety, and Health Division
Los Alamos National Laboratory
Operator

Date: 6/11/01

David A. Gurule, P.E.
Area Manager, Los Alamos Area Office
U.S. Department of Energy
Albuquerque Operations
Owner/Operator

3.2 Independent Registered Professional Engineer's Certification

This certification was prepared in accordance with generally accepted professional engineering principles and practice pursuant to the requirements of 20.4.1 NMAC, Subpart VI, §265.115 [6-14-00], for an independent registered professional engineer's certification. These services have been performed with the care and skill ordinarily exercised by members of the profession practicing under similar conditions at the same time and in the same manner or in a similar locality. We make no other warranty either expressed or implied. The finding and certification are based on 1) reviewing the NMED-approved revised closure plan dated February 7, 2001; 2) discussion with the Roy F. Weston, Inc. field representative who was present during closure and sampling activities; 3) witnessing closure and sampling activities; and 4) reviewing the analytical results.

With the signature and seal below, I certify that, except for the deviations presented in Section 2.3, the closure of the TA-16-394 Burn Tray at TA-16 was conducted in accordance with the NMED-approved revised closure plan. The information presented in this report is, to the best of my knowledge and belief, true, accurate, and complete.

Respectfully,

IT CORPORATION

Tyson Calvin Lansford
New Mexico Registered Professional Engineer No. 9755
Expires December 31, 2001

Date: 4-25-01

4.0 REFERENCES

EPA, 1986, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA SW-846, 1986 and all approved updates, U.S. Government Printing Office, Washington, D.C.

LANL, 1999, "Closure Plan for the TA-16-394 Burn Tray," original date December 1999, revised February 2001, Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 1998, "Los Alamos National Laboratory General Part A Permit Application," Revision 0.0, April 1998, Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 1996, "RCRA Part B Application for Technical Area 16, Building 88, Container Storage Area; Flash Pads 387 and 388, Open Burn Units; Burn Pads 388 and 399, Open Burn Units; Burn Trays 388 and 394, Open Burn Units; Filter Vessels 401 and 406, Open Burn Units," original date June 1995, revised April 1996, Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 1990, "Solid Waste Management Unit Report," Volume II of IV (TA-10 through TA-25), LA-UR-90-3400, November 1990, Los Alamos National Laboratory, Los Alamos, New Mexico.

NMEID, 1989, "Hazardous Waste Facility Permit," November 8, 1989, New Mexico Health and Environment Department – Environmental Improvement Division, Santa Fe, New Mexico.

TABLES

Table 1
TA-16-394 Burn Tray Closure
Analytical Summary of Firebrick Samples

Sample ID	Sample Collection Date	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	TCLP Metals[4] mg/L	
394-2	12/15/00	1,2,4-Trimethylbenzene	0.053	1-Methylnaphthalene	0.19	250	Ba	2.8
		Benzene	0.054	2,4-Dimethylphenol	0.19			
		Ethylbenzene	0.016	2-Methylnaphthalene	0.46			
		o-Xylene	0.016	2-Methylphenol	0.086			
		p/m-Xylenes	0.050	3+4 Methylphenol	0.33			
		Toluene	0.14	Anthracene	0.030			
				Chrysene	0.043			
				Fluoranthene	0.071			
				Naphthalene	0.38			
				Phenanthrene	0.14			
				Pyrene	0.12			
394-TB6 (trip blank)	12/15/00		Not Detected					

Shaded Area = Not Analyzed For

[1]Volatile Organic Compounds (VOC)
Method: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA SW-846, 1986 and all approved updates, U.S. Government Printing Office, U.S. Environmental Protection Agency, Washington, D.C. (SW-846) 8260A Purgeable VOCs by Gas Chromatography/Mass Spectrometry (GS/MS)
Detection Limits milligrams per kilogram (mg/Kg): 1,2,4-Trimethylbenzene 0.005; Benzene 0.005; Ethylbenzene 0.005; o-Xylene 0.005; p/m-Xylene 0.01; Toluene 0.005

[2]Semivolatile Organic Compounds (SVOC)
Method: SW-846 3550A/8270B SVOCs by GC/MS
Detection Limits (mg/Kg): 1-Methylnaphthalene 0.03; 2,4-Dimethylphenol 0.03; 2-Methylnaphthalene 0.03; 2-Methylphenol 0.03; 3+4 Methylphenol 0.03; Anthracene 0.03; Chrysene 0.03; Fluoranthene 0.03; Naphthalene 0.03; Phenanthrene 0.03; Pyrene 0.03

[3]Total Petroleum Hydrocarbons (TPH)
Method: SW-846 Methanol Extraction/8015A Diesel Range Organics by Gas Chromatography/Flame Ionization Detector
Detection Limit (mg/Kg): 25

[4]Toxicity Characteristic Leaching Procedure (TCLP) Metals
Method: SW-846 1311/3010A/6010A Inductively Coupled Plasma TCLP
Detection Limit milligrams per liter (mg/L): Barium (Ba) 0.1

Table 2
TA-16-394 Burn Tray Closure
Analytical Summary of Sand and Gravel Samples

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	TCLP Metals[4] mg/L	
394-1	7-14-00	0-.5	Tetrachloroethene	0.15		Not Detected	910	Ba Hg Pb	0.6 0.0003 0.2
394-1 Trip Blank	7-14-00	Not Applicable		Not Detected					
394-1A	7-18-00	Grab Sample					7400		

Shaded Area = Not Analyzed For

[1]Volatile Organic Compounds (VOC)
Method: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA-SW-846, 1986 and all approved updates, U.S. Government Printing Office, U.S. Environmental Protection Agency, Washington, D.C. (SW-846) 8260A Purgeable VOCs by Gas Chromatography/Mass Spectrometry (GC/MS)
Detection Limit milligrams per kilogram (mg/Kg): Tetrachloroethene 0.005

[2]Semivolatile Organic Compounds (SVOC)
Method: SW-846 3550A/8270B SVOCs by GC/MS

[3]Total Petroleum Hydrocarbons (TPH)
Method: SW-846 Methanol Extraction/8015A Diesel Range Organics by Gas Chromatography/Flame Ionization Detector
Detection Limit (mg/Kg): 25

[4]Toxicity Characteristic Leaching Procedure (TCLP) Metals
Methods: 1) SW-846 1311/3010A/6010A Inductivity Coupled Plasma TCLP (for barium [Ba]), 2) SW-846 1311/3010A/7000 series Flame Atomic Absorption TCLP (for lead [Pb]), 3) SW-846 1311/7470 Cold Vapor Atomic Absorption TCLP (for mercury [Hg])
Detection Limits milligrams per liter (mg/L): Ba 0.1; Hg 0.0002; Pb 0.1

Table 3
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
Perimeter Sample Location #1													
394-3	7-19-00	0-1					94	HMX RDX	795 (Detection Limit [DL]=50) 1,162 (DL=0.5)	Al Ba Ca Cr Co Cu Fe Mg Mn Ni K Na V Zn Pb	2,950 282 1,700 5.1 1.5 7.2 5,990 493 144 7.0 392 112 8.26 25.3 13.7		
394-7	7-19-00	1-1.5		Not Detected (ND)									
394-11	7-19-00	3-4		ND			ND	HMX RDX	54.3 (DL=0.46) 50.5 (DL=0.46)	Al Ba Be Ca Cr Co Cu Fe Mg Mn Ni K Na V Zn Pb	7,140 120 0.54 2,020 5.6 2.1 4.2 8,890 1,300 247 3.0 990 158 9.96 40.5 12.3		

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
Perimeter Sample Location #2													
394-4	7-19-00	0-1					48			Al	7,090		
										Ba	179		
										Be	0.60		
										Ca	1,820		
										Cr	6.0		
										Co	4.6		
										Cu	11.5		
										Fe	9,050		
										Mg	1,100		
										Mn	374		
										Ni	5.5		
										K	912		
										Na	116		
										V	11.5		
										Zn	94.0		
										Pb	15.1		
394-24	7-19-00	0-1		ND	Benzo(a)pyrene	0.070						Ba	1.9
					Benzo(b&k)fluoranthene	0.12							
					bis(2-Ethylhexyl)phthalate	0.43							
					Chrysene	0.048							
					Fluoranthene	0.046							
					Pyrene	0.046							
394-8	7-19-00	1-1.5		ND									
394-24	7-19-00	1-1.5			Benzo(b&k)fluoranthene	0.046						Ba	2.0
394-12	7-19-00	3-4		ND			49			Al	5,490		
										Ba	127		
										Be	0.48		
										Ca	1,420		
										Cr	4.9		
										Co	2.2		
										Cu	8.9		
										Fe	6,910		
										Mg	822		
										Mn	213		
										Ni	3.8		
										K	666		
										Na	68.0		
										V	8.76		
										Zn	77.2		
										Pb	27.7		

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
Perimeter Sample Location #3													
394-5	7-20-00	0-1					44	HMX	50.3 (DL=0.4)	Al	6,220		
										Ba	112		
								RDX	1.1 (DL=0.4)	Be	0.48		
										Ca	1,380		
										Cr	5.1		
										Co	2.2		
										Cu	6.2		
										Fe	7,650		
										Mg	987		
										Mn	276		
										K	791		
										Se	4.1		
										Na	57.6		
										V	9.50		
										Zn	69.4		
										Pb	19.6		
394-9	7-20-00	1-1.5	Toluene	0.006									
394-13	7-20-00	3-4		ND			80	HMX	47.5 (DL=0.5)	Al	4,620		
										Ba	116		
								RDX	4.4 (DL=0.5)	Ca	1,560		
										Cr	5.3		
										Co	2.2		
										Cu	7.0		
										Fe	6,760		
										Mg	723		
										Mn	165		
										Ni	3.2		
										K	582		
										Na	47.6		
										V	8.32		
										Zn	79.4		
										Pb	19.7		

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
Perimeter Sample Location #4													
394-6	7-20-00	0-1					48			Al	7,100		
										Ba	591		
										Ca	2,770		
										Cr	6.1		
										Co	4.4		
										Cu	4.0		
										Fe	7,040		
										Mg	921		
										Mn	207		
										Ni	4.3		
										K	1,030		
										Se	3.0		
										Na	153		
										V	14.2		
										Zn	15.4		
										Pb	11.7		
394-25	7-20-00	0-1	1,2 Dichlorobenzene	0.024		ND						Ba	5.3
			1,4 Dichlorobenzene	0.008								Hg	0.0006
394-25/10	7-20-00	1-1.5	1,1,2,2 Tetrachloroethane	0.022									
			1,2 Dichlorobenzene	0.034									
			1,4 Dichlorobenzene	0.012									
			2-Butanone (MEK)	0.031									
			Acetone	0.16									
			Tetrachloroethene	0.071									
394-25	7-20-00	1-1.5			2,4-Dimethylphenol	1.3						Ba	8.6
					2-Methylphenol	0.14							
					3+4 Methylphenol	1.2							
					Benzo(b&k)fluoranthene	0.56							

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
Outfall Sample Location #1													
394-15	7-20-00	0-1					ND			Al	3,140		
										Ba	110		
										Ca	1,710		
										Cr	3.7		
										Co	1.4		
										Cu	26.4		
										Fe	4,310		
										Mg	696		
										Mn	96.3		
										Ni	2.9		
										K	488		
										Na	36.2		
										V	6.42		
										Zn	33.5		
										Pb	10.9		
394-18	7-20-00	1-1.5		ND									
Outfall Sample Location #2													
394-16	7-20-00	0-1					ND	HMX	32.5 (DL=0.4)	Al	4,680		
										Ba	200		
								RDX	Below Quantification Limit (BQL)	Ca	1,340		
										Cr	4.5		
										Co	3.2		
										Cu	6.1		
										Fe	6,590		
										Mg	777		
										Mn	228		
										Ni	3.5		
										K	651		
										Na	43.1		
										V	11.3		
										Zn	42.8		
										Pb	33.2		
394-26	7-20-00	0-1	1,2 Dichlorobenzene	0.006	bis(2-Ethylhexyl)phthalate	0.33						Ba	3.2
394-26/19	7-20-00	1-1.5	1,2 Dichlorobenzene	0.010									
394-26	7-20-00	1-1.5				ND						Ba	2.9

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
394-22	7-20-00	2.5	1,2 Dichlorobenzene	0.022			ND	HMX	5.2	Al	6,160		
			1,4 Dichlorobenzene	0.010					(DL=0.4)	Ba	72.8		
								RDX	BQL	Be	0.55		
										Ca	1,150		
										Cr	4.8		
										Co	2.0		
										Cu	4.2		
										Fe	8,280		
										Mg	1,060		
										Mn	249		
										Ni	2.7		
										K	748		
										Na	77.7		
										V	8.19		
										Zn	33.9		
										Pb	9.4		
Outfall Sample Location #3													
394-17	7-20-00	0-1					ND			Al	10,500		
										Ba	160		
										Be	0.64		
										Ca	2,480		
										Cr	5.2		
										Co	3.4		
										Cu	5.8		
										Fe	8,140		
										Mg	1,180		
										Mn	184		
										Ni	5.6		
										K	1,180		
										Se	3.1		
										Na	95.8		
										V	10.4		
										Zn	21.3		
										Pb	18.9		
394-20	7-20-00	1-1.5		ND									

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
394-23	7-20-00	2		ND			ND			Al	6,100		
										Ba	150		
										Be	0.60		
										Ca	2,810		
										Cr	4.4		
										Co	2.4		
										Cu	3.9		
										Fe	7,970		
										Mg	1,000		
										Mn	228		
										Ni	2.6		
										K	819		
										Na	83.8		
										V	9.67		
										Zn	23.9		
										Pb	19.0		
Footprint Sample Location #1													
394-27	7-25-00	0-1	1,1,1 Trichloroethane	0.039	1-Methylnaphthalene	0.84	13,000	HMX	0.94	Al	7,580	Ba	2.1
			1,1,2,2 Tetrachloroethane	0.091	2,4-Dimethylphenol	7.5			(DL=0.4)	Ar	5.9		
			1,2 Dichloroethane	0.040	2-Methylnapthalene	0.79		RDX	0.53	Ba	182		
			1,2,4-Trimethylbenzene	0.37	2-Methylphenol	1.2			(DL=0.4)	Ca	4,340		
			1,3,5-Trimethylbenzene	0.18	3+4 Methylphenol	5.6				Cr	4.1		
			Acetone	0.096	Fluoranthene	0.91				Co	1.3		
			Chloroform	0.006	Fluorene	0.21				Cu	4.9		
			Ethylbenzene	0.015	Phenanthrene	0.88				Fe	8,400		
			Naphthalene	0.093	Phenol	1.0				Mg	919		
			o-Xylene	0.036	Pyrene	1.8				Mn	148		
			p/m-Xylenes	0.046						K	816		
			Tetrachloroethene	0.087						Na	343		
			Toluene	0.26						V	8.40		
			Trichloroethene	0.017						Zn	32.8		
										Hg	0.26		

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
394-29	7-26-00	3-4		ND			250	HMX RDX	BQL BQL	Al Ar Ba Be Ca Cr Co Cu Fe Mg Mn Ni K Na V Zn	2,950 3.5 27.0 0.57 852 2.9 1.2 6.3 6,670 497 244 2.8 446 124 4.60 32.2		
349-51	8-23-00	5		ND	Fluoranthene Pyrene	0.059 0.068	580	HMX RDX	0.59 (DL=0.5) 1.26 (DL=0.5)			Ba	0.7
Footprint Sample Location #2													
394-28	7-25-00	0-1	1,1,2,2 Tetrachloroethane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Tetrachloroethene	0.021 0.009 0.008 0.026			2300			Al Ar Ba Ca Cr Co Cu Fe Mg Mn K Se Na V Zn	6,830 6.6 328 6,280 4.5 1.9 6.1 9,300 932 208 792 51.7 226 8.80 40.4		

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

Sample ID	Sample Collection Date	Sample Depth (feet)	VOC[1] mg/Kg		SVOC[2] mg/Kg		TPH[3] mg/Kg	HE[4] (Detection Limit) mg/Kg		TAL Metals[5] mg/Kg		TCLP Metals[6] mg/L	
394-30	7-26-00	3-4		ND			340			Al	4,690		
										Ar	6.1		
										Ba	63.5		
										Be	0.88		
										Ca	1,520		
										Cr	4.3		
										Co	1.8		
										Cu	3.9		
										Fe	8,400		
										Mg	863		
										Mn	358		
										Ni	2.9		
										K	646		
										Na	107		
										V	8.04		
										Zn	46.3		
394-50	8-23-00	5		ND		ND	ND	RDX	BQL			Ba	1.3
Sample from Excavated Soil and Tuff													
394-100	9-22-00	Not Applicable (N/A)		ND	bis(2-Ethylhexyl)phthalate Fluoranthene	0.32 0.032	290					Ba	6.3
Trip Blank Samples													
394-2TB	7-19-00	N/A	Trichloroethene	0.002									
394-3TB	7-25-00	N/A		ND									
394-TB4	8-23-00	N/A	Acetone	0.011									
394-TB5	9-22-00	N/A	Acetone	0.018									

Shaded Area = Not Analyzed For

[1]Volatile Organic Compounds (VOC)
Method: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA SW-846, 1986 and all approved updates, U.S. Government Printing Office, U.S. Environmental Protection Agency, Washington, D.C. (SW-846) 8260A Purgeable VOCs by Gas Chromatography/Mass Spectrometry (GC/MS)
Detection Limits milligram per kilogram (mg/Kg): Acetone 0.05; 2-Butanone 0.025; Chloroform 0.005; 1,2 Dichlorobenzene 0.005; 1,4 Dichlorobenzene 0.005; 1,2 Dichloroethane 0.005; Ethylbenzene 0.005; Naphthalene 0.025; 1,1,2,2 Tetrachloroethane 0.005; Tetrachloroethene 0.005; 1,1,1 Trichloroethane 0.005; Trichloroethene 0.005; 1,2,4-Trimethylbenzene 0.005; 1,3,5-Trimethylbenzene 0.005; Toluene 0.005; o-Xylene 0.005; p/m-Xylenes 0.01

Table 3 (continued)
TA-16-394 Burn Tray Closure
Analytical Summary of Phase II Samples
Organized by Sample Location

[2]Semivolatile Organic Compounds (SVOC)
Method: SW-846 3550A/8270B SVOCs by GC/MS
Detection Limits (mg/Kg): Benzo(a)pyrene 0.03; Benzo(b&k)fluoranthene 0.03; bis(2-Ethylhexyl)phthalate 0.3; Chrysene 0.03; 2,4-Dimethylphenol 0.03; Fluoranthene 0.03; Fluorene 0.03; 1-Methylnaphthalene 0.03; 2-Methylnapthalene 0.03; 2-Methylphenol 0.03; 3+4 Methylphenol 0.03; Phenanthrene 0.03; Phenol 0.3; Pyrene 0.03

[3]Total Petroleum Hydrocarbons (TPH)
Method: SW-846 Methanol Extraction/8015A Diesel Range Organics by Gas Chromatography/Flame Ionization Detector
Detection Limit (mg/Kg): 25

[4]High Explosives (HE)
Method: SW-846 8330
Detection Limits (mg/Kg); High Melting Explosive (HMX) Specified in Table 3; Research Department Explosive (RDX) Specified in Table 3

[5]Target Analyte List (TAL) Metals
Methods: 1) SW-846 3050A/6010A Inductively Coupled Plasma (ICP), 2) SW-846 3050A/7000 series Flame Atomic Absorption (AA-FL) for Pb, 3) SW-846 7471 Cold Vapor Atomic Absorption (CVAA) for Hg
Detection Limits (mg/Kg): Aluminum (Al) 25; Arsenic (Ar) 3; Barium (Ba) 0.5; Beryllium (Be) 0.5; Calcium (Ca) 15; Chromium (Cr) 1; Cobalt (Co) 0.5; Copper (Cu) 0.5; Iron (Fe) 15; Magnesium (Mg) 10; Manganese 0.25; Nickel (Ni) 2; Potassium (K) 10; Selenium (Se) 2.5; Sodium (Na) 15; Vanadium (V) 0.15; Lead (Pb) 5; Mercury (Hg) 0.05; Zinc (Zn) 5

[6]Toxicity Characteristic Leaching Procedure (TCLP) Metals
Methods: 1) SW-846 1311/3010A/6010A ICP TCLP, 2) SW-846 1311/3010A/7000 series AA-FL TCLP (for Pb), 3 SW-846 1311/7470 CVAA TCLP (for Hg)
Detection Limits milligrams per liter (mg/L): Barium (Ba) 0.1; Mercury (Hg) 0.0002; Lead (Pb) 0.1

FIGURES

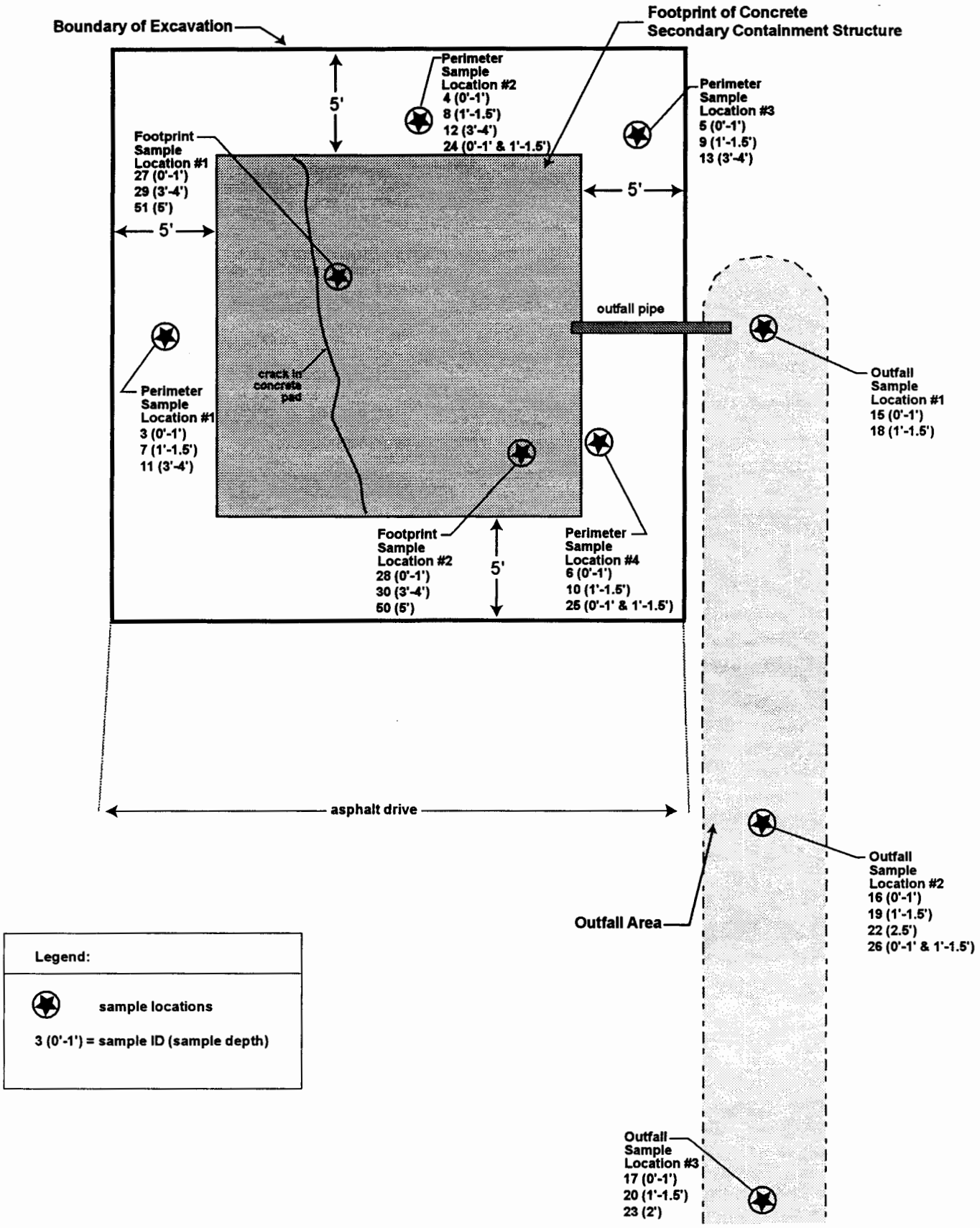

Figure 1. TA-16-394 Burn Tray Closure, Phase II Sample Locations and Depths

PHOTOGRAPHS

Photograph 1. TA-16-394 Burn Tray Closure, Welded Steel Trays Following Removal from the Concrete Secondary Containment Structure

Photograph 2. TA-16-394 Burn Tray Closure, Excavation of Soil and Tuff from Underneath Concrete Secondary Containment Structure and Five Feet to Each Side

Photograph 3. TA-16-394 Burn Tray Closure, Roll-off Bins Containing Excavated Soil and Tuff

Photograph 4. TA-16-394 Burn Tray Closure, Excavation at Total Depth

ATTACHMENT A

"NO LONGER CONTAINED IN" WASTE DETERMINATION CORRESPONDENCE

State of New Mexico
ENVIRONMENT DEPART.
Hazardous Waste Bureau
2044 A Galisteo Street
P.O. Box 26110
Santa Fe, New Mexico 87502-6
Telephone (505) 827-1557
Fax (505) 827-1544

GARY E. JOHNSON
GOVERNOR

CERTIFIED MAIL
RETURN RECEIPT REQUES

November 29, 2000

Dr. John Browne, Director
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P.O. Box 1663, Mail Stop A100
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Mr. Theodore Taylor, Project Manager
Los Alamos Area Office
Department of Energy
528 35th Street, Mail Stop A316
Los Alamos, New Mexico 87544

RE: CONTAINED-IN DETERMINATION FOR PARTIAL CLOSURE ACTIVITIES AT THE TECHNICAL AREA 16-394 BURN TRAY
LOS ALAMOS NATIONAL LABORATORY
NM 0890010515
HWB-LANL-99-045

Dear Dr. Browne and Mr. Taylor:

The New Mexico Environment Department's Hazardous Waste Bureau (HWB) has reviewed the request from Los Alamos National Laboratory (LANL) and Department of Energy (DOE) for a "contained-in" determination for environmental media generated during partial closure activities at the Technical Area (TA) 16-394 Burn Tray. The request is dated October 31, 2000 from Julie Canepa of LANL and Ted Taylor of DOE to John Young of HWB, with additional information supplied November 9, 2000 (and referenced by ER2000-629 and ER2000-657). Under the "contained-in" policy, HWB has the discretion to determine that media contaminated with listed wastes at concentrations below health-based levels do not need to be managed as hazardous waste. The "contained-in" determination is being requested for environmental media contaminated with low concentrations of F-listed hazardous waste, including tetrachloroethylene, toluene, acetone and trichloroethylene. The environmental media consist of soil and tuff that were excavated adjacent to and beneath the structure during the partial closure activities. HWB evaluated the analytical data in accordance with current "contained-in" guidance to determine whether the environmental media excavated must be managed as F-listed hazardous waste.

The "contained-in" determination is based on conservative, health-based soil concentrations (i.e., US EPA Region 6 Human Health Medium-Specific Screening Levels) for direct exposure to an

industrial receptor using a reasonable maximum exposure scenario. An industrial worker scenario is appropriate for this determination because the environmental media excavated will be properly disposed of in an engineered landfill, further reducing the risk to human health and the environment.

LANL reported the following maximum concentrations for these organic constituents: 1,1,2,2-tetrachloroethane at 0.091 parts per million (ppm); tetrachloroethylene at 0.087 ppm; 2-butanone at 0.031 ppm; toluene at 0.26 ppm; acetone at 0.16 ppm; trichloroethylene at 0.017 ppm; 1,1,1-trichloroethane at 0.039 ppm; 1,2-dichloroethane at 0.040 ppm; ethylbenzene at 0.015 ppm; o-xylene at 0.036 ppm; and p/m-xylenes at 0.046 ppm. Based on the information provided, the maximum concentrations are all well below US EPA Region 6 Human Health Medium-Specific Screening Levels (MSSLs). HWB believes that the media excavated which contain constituents at concentrations below the health-based screening levels do not need to be managed as F-listed hazardous waste. Any material with hazardous constituents in concentrations equal to or greater than the proposed health-based concentrations shall be managed as F-listed hazardous waste. Since the reported maximum concentrations to date are also all below Land Disposal Restrictions (LDR) treatment standards in 40 CFR 268.48, additional treatment prior to land disposal is not required.

The requested approval is granted if the excavated material (i.e., environmental media) is managed as solid waste that will be properly disposed of in a Subtitle D engineered facility as specified in the request letter. This "contained-in" determination is limited to the contaminants specifically mentioned, the contaminated environmental media for which the data were submitted for review and the activities conducted during the partial closure. The waste must be managed in the manner described above.

If you have any questions regarding this "contained-in" determination, please contact Michael Chacón at (505) 827-1558 extension 1017 or Eliza Frank at extension 1048.

Sincerely,

John Young
LANL Corrective Action Project Leader
Permits Management Program

JRY:caf

cc: P. Allen, NMED HWB
J. Bearzi, NMED HWB
M. Chacón, NMED HWB
R. Dinwiddie, NMED HWB

Environmental Restoration
University of California
Environmental Science and Waste Technology (E)
Environmental Restoration, MS M992
Los Alamos, New Mexico 87545
505-667-0808/FAX 505-665-4747

U.S. Department of Energy
Los Alamos Area Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
505-667-7203/FAX 505-665-4504

Date: November 9, 2000
Refer to: ER2000-0657

Mr. John Young, Corrective Action Project Leader
Permits Management Program
NMED – Hazardous Waste Bureau
2044 A Galisteo
Santa Fe, NM 87502

SUBJECT: CLARIFICATION TO "NO LONGER CONTAINED IN" REQUEST AND SUPPORTING DATA FOR THE TECHNICAL AREA (TA)-16-394 BURN TRAY

Dear Mr. Young:

The purpose of this letter is to clarify Los Alamos National Laboratory's (LANL's) letter (dated October 31, 2000 and referenced by ER2000-0629) requesting a "no longer contained in" determination for the environmental media generated during partial closure activities at the TA-16-394 Burn Tray and to provide analytical data that supports the request. This clarification and data submittal was requested by the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) during a November 7, 2000 phone conversation with LANL.

In the request letter to NMED-HWB, LANL reported that recently received analytical data indicate that low levels of five organic constituents (1,1,2,2-tetrachloroethane, tetrachloroethylene, trichloroethylene, toluene, and acetone) are associated with the excavated environmental media. However, several organic constituents were inadvertently omitted from the list that was presented in the text of the letter, namely 1,1,1-trichloroethane, 1,2-dichloroethane, 2-butanone, ethylbenzene, o-xylene and p/m xylenes. Additionally, trichloroethylene was correctly reported in the text but was omitted from the table included in the request letter. The table in the request letter reporting the detected organic constituents, their maximum concentrations, and proposed Medium-Specific Screening Levels (MSSLs) has been revised to include all these organic constituents as well as to reflect corrections to some of the previously reported maximum concentrations. The revised table is presented below:

Organic Constituent	Maximum Concentration (mg/kg)	MSSL (mg/kg)
1,1,2,2-tetrachloroethane	0.091	0.84
Tetrachloroethylene	0.087	13
2-butanone	0.031	26000
Toluene	0.26	520
Acetone	0.16	5800
Trichloroethylene	0.017	6
1,1,1-trichlorothane	0.039	1400
1,2-dichloroethane	0.040	0.75
ethylbenzene	0.015	230
o-xylene	0.036	280
p/m-xylenes	0.046	210*

*MSSL for m-xylene, which is lower than the MSSL for p-xylene.

Attachment A contains analytical data resulting from 20 samples collected at locations surrounding (perimeter samples) and beneath (footprint samples) the TA-16-394 burn tray structure. These sample results represent the environmental media excavated during partial closure activities and are being used to characterize the excavated environmental media for disposal. All samples were submitted to a fixed laboratory for chemical analysis of Target Analyte List (TAL) metals, total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), high explosives (HE), and/or Toxicity Characteristic Leaching Procedure (TCLP) metals. Attachment B contains the schematics showing sample locations, depths, and results that were provided at the NMED-HWB/LANL ER monthly meeting on September 20, 2000. The following table summarizes the location, depth, and analyses for the 20 samples:

Sampling Location	Sample Number	Sample Depth (ft)	Analyses
Footprint samples corresponding to crack in former concrete structure	27 29 51	0-1 3-4 5-6	TPH, VOCs, SVOCs, HE TPH, VOCs, HE TPH, VOCs, SVOCs
Footprint samples from SE quadrant of former concrete structure	28 30 50	0-1 3-4 5-6	TPH, VOCs TPH, VOCs TPH, VOCs, SVOCs
Perimeter samples from W side of concrete structure	3 7 11	0-1 1-1.5 3-4	TPH, TAL metals, HE VOCs TPH, VOCs, TAL metals, HE
Perimeter samples from N side of concrete structure	4 24 8 12	0-1 0-1/1-1.5 1-1.5 3-4	TPH, TAL metals, HE TPH, VOCs, SVOCs, TCLP metals VOCs TPH, VOCs, TAL metals, HE
Perimeter samples from NE corner of concrete structure	5 9 13	0-1 1-1.5 3-4	TPH, TAL metals, HE VOCs TPH, VOCs, TAL metals, HE
Perimeter samples from E side of concrete structure	6 25 10	0-1 0-1/1-1.5 1-1.5	TPH, TAL metals, HE, VOCs, SVOCs, TCLP metals VOCs
Perimeter sample from SE corner of concrete structure	23	1-2	TPH, VOCs

The clarification and data submittal contained herein should assist NMED-HWB with review of and response to LANL's original "no longer contained in" request. If you have any questions, please call Dave McInroy at (505) 667-0819 or Gene Turner at (505) 667-5794.

Sincerely,

Julie A. Canepa, Program Manager
Los Alamos National Laboratory
Environmental Restoration

Sincerely,

Theodore J. Taylor, Project Manager
Department of Energy
Los Alamos Area Office

JC/TT/VR/eim

Enclosures: 1) Attachment A
2) Attachment B

Cy (w/enc.):
G. Bacigalupa, ESH-19, MS K490
M. Buksa, E/ET, MS M992
R. Dinwiddie, NMED-HWB
J. Ellvinger, ESH-19, MS K490
D. Hickmott, E/ER, MS M992
D. McInroy, E/ER, MS M992
D. Neleigh, US EPA (2 copies)
V. Rhodes, ER, MS M992
A. Sherrard, ESA, MS C924
T. Taylor, LAAO, MS A316
G. Turner, LAAO, MS A316
J. Tymkowych, E/ER, MS M992
J. Davis, NMED-SWQB
M. Leavitt, NMED-GWQB
J. Parker, NMED-DOE OB
S. Yanicak, NMED-DOE OB, MS J993
J. Young, NMED-HWB (2 copies)
E/ER File, MS M992
RPF, MS M707

Cy: (w/o enc.)
J. Bearzi, NMED-HWB
J. Canepa, E/ER, MS M992
J. Kieling, NMED-HWB

ATTACHMENT A

SUPPORTING ANALYTICAL DATA

FOR TA-16-394 BURN TRAY

TA-16-394 FOOTPRINT DATA

ASSAIGAI
ANALYTICAL
LABORATORIES, INC.
7300 Jefferson, NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood Dr., Suite N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	analyte detected in Method Blank
E	result is estimated
H	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

LOS ALAMOS NATIONAL LABS
attn: ANN SHERRARD
TA-16 S-SITE
LOS ALAMOS, NM 87544

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS
Project: 0007282 MR3R 0000 0000 0000

William P. Bieve: President of Assaigai Analytical Laboratories, Inc.

Client Sample ID: *394-27/0-1'* Sample Matrix: S Sample Collected: 07/25/00 10:55:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007282-01A		EPA 418 Modified							
X00285	MW.2000.1147-16		TRPH	48000	mg / Kg	100	25		08/02/00
0007282-01A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00272	XG.2000.823-5		Diesel Range Organics	13000	mg / Kg	25	25		08/03/00
0007282-01B		SW846 8260A Purgeable VOCs by GC/MS							
X00274	XG.2000.822-23	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	71-55-6	1,1,1 Trichloroethane	0.039	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	79-34-5	1,1,2,2 Tetrachloroethane	0.091	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	107-06-2	1,2 Dichloroethane	0.040	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	95-63-6	1,2,4-Trimethylbenzene	0.37	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	108-67-8	1,3,5-Trimethylbenzene	0.18	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		08/04/00
X00274	XG.2000.822-23	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		08/04/00

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Project: **0007282** **MR3R 0000 0000 0000**

X00274	XG.2000.822-23	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	67-64-1	Acetone	0.096	mg / Kg	1	0.06		08/04/00
X00274	XG.2000.822-23	107-02-8	Acrolein	ND	mg / Kg	1	0.1		08/04/00
X00274	XG.2000.822-23	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		08/04/00
X00274	XG.2000.822-23	71-43-2	Benzene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	75-25-2	Bromoform	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	67-66-3	Chloroform	0.006	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	100-41-4	Ethylbenzene	0.015	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23		Freon 113	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	75-71-8	Freon 12	ND	mg / Kg	1	0.05		08/[illegible]
X00274	XG.2000.822-23	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		08/04/00
X00274	XG.2000.822-23	91-20-3	Naphthalene	0.083	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	95-47-6	o-Xylene	0.036	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	108-38-3/106-42	p/m Xylenes	0.046	mg / Kg	1	0.01		08/04/00
X00274	XG.2000.822-23	100-42-5	Styrene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	127-18-4	Tetrachloroethene	0.087	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	108-88-3	Toluene	0.26	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	79-01-6	Trichloroethene	0.017	mg / Kg	1	0.005		08/04/00
X00274	XG.2000.822-23	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		08/04/00
X00274	XG.2000.822-23	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		08/04/00

0007282-01C **SW846 3050A/6010A ICP**

M00882	MW.2000.1170-32	7429-90-5	Aluminum	7580	mg / Kg	1	25		08/08/00
M00882	MW.2000.1170-32	7440-36-0	Antimony	ND	mg / Kg	1	1.5		08/08/00
M00882	MW.2000.1170-32	7440-38-2	Arsenic	5.9	mg / Kg	1	3		08/08/00
M00882	MW.2000.1170-32	7440-39-3	Barium	182	mg / Kg	1	0.5		08/08/00
M00882	MW.2000.1170-32	7440-41-7	Beryllium	ND	mg / Kg	1	0.5		08/08/00
M00882	MW.2000.1170-32	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		08/08/00
M00882	MW.2000.1177-24	7440-70-2	Calcium	4340	mg / Kg	1	15		08/08/00

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Project: 0007282 MR3R 0000 0000 0000

M00882	MW.2000.1170-32	7440-47-3	Chromium	4.1	mg / Kg	1	1		08/08/00
M00882	MW.2000.1170-32	7440-48-4	Cobalt	1.3	mg / Kg	1	0.5		08/08/00
M00882	MW.2000.1170-32	7440-50-8	Copper	4.9	mg / Kg	1	0.5		08/08/00
M00882	MW.2000.1170-32	7439-89-6	Iron	8400	mg / Kg	1	15		08/08/00
M00882	MW.2000.1170-32	7439-92-1	Lead	ND	mg / Kg	1	2		08/08/00
M00882	MW.2000.1170-32	7439-95-4	Magnesium	919	mg / Kg	1	10		08/08/00
M00882	MW.2000.1170-32	7439-96-5	Manganese	148	mg / Kg	1	0.25		08/08/00
M00882	MW.2000.1170-32	7440-02-0	Nickel	ND	mg / Kg	1	2		08/08/00
M00882	MW.2000.1170-32	7440-09-7	Potassium	816	mg / Kg	1	10		08/08/00
M00882	MW.2000.1177-24	7782-49-2	Selenium	ND	mg / Kg	1	2.5		08/09/00
M00882	MW.2000.1170-32	7440-22-4	Silver	ND	mg / Kg	1	1		08/08/00
M00882	MW.2000.1170-32	7440-23-5	Sodium	343	mg / Kg	1	15		08/08/00
M00882	MW.2000.1170-32	7440-28-0	Thallium	ND	mg / Kg	1	20		08/08/00
M00882	MW.2000.1170-32	7440-62-2	Vanadium	8.40	mg / Kg	1	0.15		08/08/00
M00882	MW.2000.1170-32	7440-66-6	Zinc	32.8	mg / Kg	1	5		08/08/00

0007282-01D SW846 8330

GLP7188-001-011	TT.2000.741-1	1,3,5-Trinitrobenzene	ND	ug/kg	1	217	S	09/02/00
GLP7188-001-011	TT.2000.741-1	1,3-DNB	ND	ug/kg	1	217	S	09/02/00
GLP7188-001-011	TT.2000.741-1	2,4,6-Trinitrotoluene	ND	ug/kg	1	217	S	09/02/00
GLP7188-001-011	TT.2000.741-1	2,4-Dinitrotoluene	ND	ug/kg	1	217	S	09/02/00
P7188-001-1	TT.2000.741-1	2,6-Dinitrotoluene	ND	ug/kg	1	217	S	09/02/00
GLP7188-001-011	TT.2000.741-1	2-Amino-4,6-Dinitrotoluene	ND	ug/kg	1	217	S	09/02/00
GLP7188-001-011	TT.2000.741-1	4-Amino-2,6-Dinitrotoluene	ND	ug/kg	1	217	S	09/02/00
GLP7188-001-011	TT.2000.741-1	HMX	937	ug/kg	1	435	S	09/02/00
GLP7188-001-011	TT.2000.741-1	m-Nitrotoluene	ND	ug/kg	1	435	S	09/02/00
GLP7188-001-011	TT.2000.741-1	Nitrobenzene	ND	ug/kg	1	217	S	09/02/00
GLP7188-001-011	TT.2000.741-1	o-Nitrotoluene	ND	ug/kg	1	435	S	09/02/00
GLP7188-001-011	TT.2000.741-1	p-Nitrotoluene	ND	ug/kg	1	435	S	09/02/00
GLP7188-001-011	TT.2000.741-1	RDX	533	ug/kg	1	435	S	09/02/00
GLP7188-001-011	TT.2000.741-1	Tetryl	ND	ug/kg	1	435	S	09/02/00

0007282-01E SW846 3550A/8270B SVOCs by GC/MS

X00276	XG.2000.864-3	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	25	0.03		08/24/00

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X00276	XG.2000.864-3	90-12-0	1-Methylnaphthalene	0.84	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	90-12-0	1-Methylnaphthalene	0.88	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	3	1.5		08/12/00
X00276	XG.2000.903-1	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	25	1.5		08/24/00
X00276	XG.2000.864-3	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	105-67-9	2,4-Dimethylphenol	7.5	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	105-67-9	2,4-Dimethylphenol	9.4	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	3	0.67		08/12/00
X00276	XG.2000.903-1	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	25	0.67		08/24/00
X00276	XG.2000.864-3	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	91-58-7	2-Chloronaphthalene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	91-58-7	2-Chloronaphthalene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	95-57-8	2-Chlorophenol	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	95-57-8	2-Chlorophenol	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	91-57-6	2-Methylnaphthalene	0.79	mg / Kg	3	0.03		08/1[illegible]
X00276	XG.2000.903-1	91-57-6	2-Methylnaphthalene	0.85	mg / Kg	25	0.03		08/[illegible]
X00276	XG.2000.864-3	95-48-7	2-Methylphenol	1.2	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	95-48-7	2-Methylphenol	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	88-74-4	2-Nitroaniline	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	88-74-4	2-Nitroaniline	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	88-75-5	2-Nitrophenol	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	88-75-5	2-Nitrophenol	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3		3+4 Methylphenol	6.6	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1		3+4 Methylphenol	5.0	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-2	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	25	0.3		08/12/00
X00276	XG.2000.903-1	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	99-09-2	3-Nitroaniline	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	99-09-2	3-Nitroaniline	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	106-47-8	4-Chloroaniline	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	106-47-8	4-Chloroaniline	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	100-01-6	4-Nitroaniline	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	100-01-6	4-Nitroaniline	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	100-02-7	4-Nitrophenol	ND	mg / Kg	3	0.6		[illegible]

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X00276	XG.2000.903-1	100-02-7	4-Nitrophenol	ND	mg / Kg	25	0.6		08/24/00
X00276	XG.2000.864-3	83-32-9	Acenaphthene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	83-32-9	Acenaphthene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	208-96-8	Acenaphthylene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	208-96-8	Acenaphthylene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	62-53-3	Aniline	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	62-53-3	Aniline	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	120-12-7	Anthracene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	120-12-7	Anthracene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	56-55-3	Benzo (a) anthracene	ND	mg / Kg	25	0.03		08/12/00
X00276	XG.2000.903-1	56-55-3	Benzo (a) anthracene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.903-1	50-32-8	Benzo(a)pyrene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.903-1		Benzo(b & k)fluoranthene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.903-1	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	64-85-0	Benzoic acid	ND	mg / Kg	3	3		08/12/00
X00276	XG.2000.903-1	64-85-0	Benzoic acid	ND	mg / Kg	25	3		08/24/00
X00276	XG.2000.864-3	100-51-6	Benzyl alcohol	ND	mg / Kg	3	1.5		08/12/00
X00276	XG.2000.903-1	100-51-6	Benzyl alcohol	ND	mg / Kg	25	1.5		08/24/00
X00276	XG.2000.864-3	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-2	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	25	0.3		08/12/00
X00276	XG.2000.903-1	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-2	85-68-7	Butylbenzylphthalate	ND	mg / Kg	25	0.03		08/12/00
X00276	XG.2000.903-1	85-68-7	Butylbenzylphthalate	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-2	218-01-9	Chrysene	ND	mg / Kg	25	0.03		08/12/00
X00276	XG.2000.903-1	218-01-9	Chrysene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	84-74-2	di-n-Butylphthalate	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	84-74-2	di-n-Butylphthalate	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.903-1	117-84-0	di-n-Octylphthalate	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.903-1	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	132-64-9	Dibenzofuran	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	132-64-9	Dibenzofuran	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	84-66-2	Diethylphthalate	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	84-66-2	Diethylphthalate	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	131-11-3	Dimethylphthalate	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	131-11-3	Dimethylphthalate	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	206-44-0	Fluoranthene	0.91	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	206-44-0	Fluoranthene	1.2	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	86737	Fluorene	0.21	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	86737	Fluorene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	118-74-1	Hexachlorobenzene	ND	mg / Kg	3	0.03		08/12/00

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X00276	XG.2000.903-1	118-74-1	Hexachlorobenzene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	87-68-3	Hexachlorobutadiene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	87-68-3	Hexachlorobutadiene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	3	1.5		08/12/00
X00276	XG.2000.903-1	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	25	1.5		08/24/00
X00276	XG.2000.864-3	67-72-1	Hexachloroethane	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	67-72-1	Hexachloroethane	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.903-1	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	78-59-1	Isophorone	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	78-59-1	Isophorone	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	91-20-3	Naphthalene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	91-20-3	Naphthalene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	98-95-3	Nitrobenzene	ND	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.903-1	98-95-3	Nitrobenzene	ND	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	87-86-5	Pentachlorophenol	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	87-86-5	Pentachlorophenol	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-3	85-01-8	Phenanthrene	0.88	mg / Kg	3	0.03		08/12/00
X00276	XG.2000.910-1	85-01-8	Phenanthrene	1.1	mg / Kg	25	0.03		08/[illegible]
X00276	XG.2000.864-3	108-95-2	Phenol	1.0	mg / Kg	3	0.3		08/[illegible]
X00276	XG.2000.903-1	108-95-2	Phenol	ND	mg / Kg	25	0.3		08/24/00
X00276	XG.2000.864-2	129-00-0	Pyrene	1.6	mg / Kg	25	0.03		08/12/00
X00276	XG.2000.903-1	129-00-0	Pyrene	1.8	mg / Kg	25	0.03		08/24/00
X00276	XG.2000.864-3	110-86-1	Pyridine	ND	mg / Kg	3	0.3		08/12/00
X00276	XG.2000.903-1	110-86-1	Pyridine	ND	mg / Kg	25	0.3		08/24/00

0007282-01G SW846 1311/3010A/6010A ICP TCLP

M00857	MW.2000.1148-64	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-64	7440-39-3	Barium	2.1	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-64	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-64	7440-47-3	Chromium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-64	7439-92-1	Lead	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-64	7782-49-2	Selenium	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-64	7440-22-4	Silver	ND	mg / L	1	0.04		08/03/00

0007282-01G SW846 1311/7470 CVAA TCLP

M00861	MW.2000.1150-26	7439-97-6	Mercury	ND	mg / L	1	0.0002		08/03/00

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Client Sample ID: 394-28/0-1' | Sample Matrix: S | Sample Collected: 07/25/00 13:25:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007282-02A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00272	XG.2000.823-2		Diesel Range Organics	2300	mg / Kg	10	25		08/02/00
0007282-02B		SW846 8260A Purgeable VOCs by GC/MS							
X00274	XG.2000.822-24	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	79-34-5	1,1,2,2 Tetrachloroethane	0.021	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	95-63-6	1,2,4-Trimethylbenzene	0.009	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	108-67-8	1,3,5-Trimethylbenzene	0.008	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-24	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	67-64-1	Acetone	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-24	107-02-8	Acrolein	ND	mg / Kg	1	0.1	2	08/04/00
X00274	XG.2000.822-24	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	2	08/04/00
X00274	XG.2000.822-24	71-43-2	Benzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	75-25-2	Bromoform	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	67-66-3	Chloroform	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	2	08/04/00

Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS

Project: 0007282 MR3R 0000 0000 0000

X00274	XG.2000.822-24		Freon 113	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	75-71-8	Freon 12	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-24	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-24	91-20-3	Naphthalene	ND	mg / Kg	1	0.026	2	08/04/00
X00274	XG.2000.822-24	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01	2	08/04/00
X00274	XG.2000.822-24	100-42-5	Styrene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	127-18-4	Tetrachloroethene	0.026	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	108-88-3	Toluene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-24	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-24	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	2	08/04/00

0007282-02C SW846 3050A/6010A ICP

M00882	MW.2000.1170-35	7429-90-5	Aluminum	6830	mg / Kg	1	25		08/08/00
M00882	MW.2000.1170-35	7440-36-0	Antimony	ND	mg / Kg	1	1.5		08/08/00
M00882	MW.2000.1170-35	7440-38-2	Arsenic	6.6	mg / Kg	1	3		08/08/00
M00882	MW.2000.1170-35	7440-39-3	Barium	328	mg / Kg	1	0.5		08/08/00
M00882	MW.2000.1170-35	7440-41-7	Beryllium	ND	mg / Kg	1	0.5		08/[illegible]
M00882	MW.2000.1170-35	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		08/08/00
M00882	MW.2000.1177-25	7440-70-2	Calcium	6280	mg / Kg	1	15		08/09/00
M00882	MW.2000.1170-35	7440-47-3	Chromium	4.6	mg / Kg	1	1		08/08/00
M00882	MW.2000.1170-35	7440-48-4	Cobalt	1.9	mg / Kg	1	0.5		08/08/00
M00882	MW.2000.1170-35	7440-50-8	Copper	6.1	mg / Kg	1	0.5		08/08/00
M00882	MW.2000.1170-35	7439-89-6	Iron	9300	mg / Kg	1	15		08/08/00
M00882	MW.2000.1170-35	7439-92-1	Lead	ND	mg / Kg	1	2		08/08/00
M00882	MW.2000.1170-35	7439-95-4	Magnesium	932	mg / Kg	1	10		08/08/00
M00882	MW.2000.1170-35	7439-96-5	Manganese	208	mg / Kg	1	0.25		08/08/00
M00882	MW.2000.1170-35	7440-02-0	Nickel	ND	mg / Kg	1	2		08/08/00
M00882	MW.2000.1170-35	7440-09-7	Potassium	792	mg / Kg	1	10		08/08/00
M00882	MW.2000.1177-25	7782-49-2	Selenium	51.7	mg / Kg	1	2.5		08/09/00
M00882	MW.2000.1170-35	7440-22-4	Silver	ND	mg / Kg	1	1		08/08/00
M00882	MW.2000.1170-35	7440-23-5	Sodium	226	mg / Kg	1	15		08/08/00
M00882	MW.2000.1170-35	7440-28-0	Thallium	ND	mg / Kg	1	20		08/08/00
M00882	MW.2000.1170-35	7440-62-2	Vanadium	8.80	mg / Kg	1	0.15		08/08/00
M00882	MW.2000.1170-35	7440-66-6	Zinc	40.4	mg / Kg	1	5		08/08/00

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**
Project: **0007282 MR3R 0000 0000 0000**

Client Sample ID: *394-29/3-4'* | Sample Matrix: *S* | Sample Collected: *07/26/00 11:30:00*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007282-03A		EPA 418 Modified							
X00285	MW.2000.1147-13		TRPH	600	mg / Kg	1	25		08/02/00
0007282-03A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00272	XG.2000.823-3		Diesel Range Organics	250	mg / Kg	1	25		08/02/00
0007282-03B		SW846 8260A Purgeable VOCs by GC/MS							
X00274	XG.2000.822-25	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-25	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	67-64-1	Acetone	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-25	107-02-8	Acrolein	ND	mg / Kg	1	0.1	2	08/04/00
X00274	XG.2000.822-25	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	2	08/04/00
X00274	XG.2000.822-25	71-43-2	Benzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	75-25-2	Bromoform	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	67-66-3	Chloroform	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	2	08/04/00

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Client: LOS ALAMOS NATIONAL LABS

Project: 0007282 MR3R 0000 0000 0000

X00274	XG.2000.822-25	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25		Freon 113	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	75-71-8	Freon 12	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-25	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-25	91-20-3	Naphthalene	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01	2	08/04/00
X00274	XG.2000.822-25	100-42-5	Styrene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	108-88-3	Toluene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-25	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-25	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	2	08/04/00

0007282-03C — **SW846 3050A/6010A ICP**

M00875	MW.2000.1166-20	7429-90-5	Aluminum	2950	mg / Kg	1	26		08/07/00
M00875	MW.2000.1166-20	7440-36-0	Antimony	ND	mg / Kg	1	1.5		08/0
M00875	MW.2000.1166-20	7440-38-2	Arsenic	3.5	mg / Kg	1	3		08/07/00
M00875	MW.2000.1166-20	7440-39-3	Barium	27.0	mg / Kg	1	0.5		08/07/00
M00875	MW.2000.1166-20	7440-41-7	Beryllium	0.57	mg / Kg	1	0.5		08/07/00
M00875	MW.2000.1166-20	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		08/07/00
M00875	MW.2000.1170-7	7440-70-2	Calcium	852	mg / Kg	1	15		08/08/00
M00875	MW.2000.1166-20	7440-47-3	Chromium	2.9	mg / Kg	1	1		08/07/00
M00875	MW.2000.1166-20	7440-48-4	Cobalt	1.2	mg / Kg	1	0.5		08/07/00
M00875	MW.2000.1166-20	7440-50-8	Copper	6.3	mg / Kg	1	0.5		08/07/00
M00875	MW.2000.1170-7	7439-89-6	Iron	6570	mg / Kg	1	15		08/08/00
M00875	MW.2000.1166-20	7439-92-1	Lead	ND	mg / Kg	1	2		08/07/00
M00875	MW.2000.1166-20	7439-95-4	Magnesium	497	mg / Kg	1	10		08/07/00
M00875	MW.2000.1166-20	7439-96-5	Manganese	244	mg / Kg	1	0.25		08/07/00
M00875	MW.2000.1166-20	7440-02-0	Nickel	2.8	mg / Kg	1	2		08/07/00
M00875	MW.2000.1166-20	7440-09-7	Potassium	446	mg / Kg	1	10		08/07/00
M00875	MW.2000.1166-20	7782-49-2	Selenium	ND	mg / Kg	1	2.5		08/07/00
M00875	MW.2000.1166-20	7440-22-4	Silver	ND	mg / Kg	1	1		08/07/00
M00875	MW.2000.1166-20	7440-23-5	Sodium	124	mg / Kg	1	15		08/07/00
M00875	MW.2000.1166-20	7440-28-0	Thallium	ND	mg / Kg	1	20		08/07/00
M00875	MW.2000.1166-20	7440-62-2	Vanadium	4.60	mg / Kg	1	0.15		08/07/00
M00875	MW.2000.1166-20	7440-66-6	Zinc	32.2	mg / Kg	1	6		08/07/00

0007282-03D — **SW846 8330**

GLP7188-001-011	TT.2000.741-2		1,3,5-Trinitrobenzene	ND	ug/kg	1	238	S	08/02/00

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **0007282 MR3R 0000 0000 0000**

GLP7188-001-011	TT.2000.741-2		1,3-DNB	ND	ug/kg	1	238	S	09/02/00
GLP7188-001-011	TT.2000.741-2		2,4,6-Trinitrotoluene	ND	ug/kg	1	238	S	09/02/00
GLP7188-001-011	TT.2000.741-2		2,4-Dinitrotoluene	ND	ug/kg	1	238	S	09/02/00
GLP7188-001-011	TT.2000.741-2		2,6-Dinitrotoluene	ND	ug/kg	1	238	S	09/02/00
GLP7188-001-011	TT.2000.741-2		2-Amino-4,6-Dinitrotoluene	ND	ug/kg	1	238	S	09/02/00
GLP7188-001-011	TT.2000.741-2		4-Amino-2,6-Dinitrotoluene	ND	ug/kg	1	238	S	09/02/00
GLP7188-001-011	TT.2000.741-2		HMX	274	ug/kg	1	476	3S	09/02/00
GLP7188-001-011	TT.2000.741-2		m-Nitrotoluene	ND	ug/kg	1	476	S	09/02/00
GLP7188-001-011	TT.2000.741-2		Nitrobenzene	ND	ug/kg	1	238	S	09/02/00
GLP7188-001-011	TT.2000.741-2		o-Nitrotoluene	ND	ug/kg	1	476	S	09/02/00
GLP7188-001-011	TT.2000.741-2		p-Nitrotoluene	ND	ug/kg	1	476	S	09/02/00
GLP7188-001-011	TT.2000.741-2		RDX	339	ug/kg	1	476	3S	09/02/00
GLP7188-001-011	TT.2000.741-2		Tetryl	ND	ug/kg	1	476	S	09/02/00

Client Sample ID **394-30/3-4'** Sample Matrix **S** Sample Collected 07/28/00 11:55:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007282-04A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00272	XG.2000.823-4		Diesel Range Organics	340	mg / Kg	1	25		08/02/00
0007282-04B		SW846 8260A Purgeable VOCs by GC/MS							
X00274	XG.2000.822-26	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-26	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	2	08/04/00

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Client: LOS ALAMOS NATIONAL LABS

Project: 0007282 MR3R 0000 0000 0000

X00274	XG.2000.822-26	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	67-64-1	Acetone	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-26	107-02-8	Acrolein	ND	mg / Kg	1	0.1	2	08/04/00
X00274	XG.2000.822-26	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	2	08/04/00
X00274	XG.2000.822-26	71-43-2	Benzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	75-25-2	Bromoform	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	67-66-3	Chloroform	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26		Freon 113	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	75-71-8	Freon 12	ND	mg / Kg	1	0.05	2	08/[illegible]
X00274	XG.2000.822-26	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	2	08/0[illegible]
X00274	XG.2000.822-26	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	2	08/04/00
X00274	XG.2000.822-26	91-20-3	Naphthalene	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01	2	08/04/00
X00274	XG.2000.822-26	100-42-5	Styrene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	108-88-3	Toluene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	2	08/04/00
X00274	XG.2000.822-26	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	2	08/04/00
X00274	XG.2000.822-26	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	2	08/04/00

0007282-04C SW846 3050A/6010A ICP

M00875	MW.2000.1166-23	7429-90-5	Aluminum	4590	mg / Kg	1	25		08/07/00
M00875	MW.2000.1166-23	7440-36-0	Antimony	ND	mg / Kg	1	1.5		08/07/00
M00875	MW.2000.1166-23	7440-38-2	Arsenic	8.1	mg / Kg	1	3		08/07/00
M00875	MW.2000.1166-23	7440-39-3	Barium	63.5	mg / Kg	1	0.5		08/07/00
M00875	MW.2000.1166-23	7440-41-7	Beryllium	0.88	mg / Kg	1	0.6		08/07/00
M00875	MW.2000.1166-23	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		08/07/00
M00875	MW.2000.1170-10	7440-70-2	Calcium	1520	mg / Kg	1	15		08/08/00

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M00875	MW.2000.1166-23	7440-47-3	Chromium	4.3	mg / Kg	1	1		08/07/00
M00875	MW.2000.1166-23	7440-48-4	Cobalt	1.8	mg / Kg	1	0.5		08/07/00
M00875	MW.2000.1166-23	7440-50-8	Copper	3.9	mg / Kg	1	0.5		08/07/00
M00875	MW.2000.1170-10	7439-89-6	Iron	8400	mg / Kg	1	15		08/08/00
M00875	MW.2000.1166-23	7439-92-1	Lead	ND	mg / Kg	1	2		08/07/00
M00875	MW.2000.1166-23	7439-95-4	Magnesium	863	mg / Kg	1	10		08/07/00
M00875	MW.2000.1166-23	7439-96-5	Manganese	358	mg / Kg	1	0.25		08/07/00
M00875	MW.2000.1166-23	7440-02-0	Nickel	2.9	mg / Kg	1	2		08/07/00
M00875	MW.2000.1166-23	7440-09-7	Potassium	646	mg / Kg	1	10		08/07/00
M00875	MW.2000.1166-23	7782-49-2	Selenium	ND	mg / Kg	1	2.5		08/07/00
M00875	MW.2000.1166-23	7440-22-4	Silver	ND	mg / Kg	1	1		08/07/00
M00875	MW.2000.1166-23	7440-23-5	Sodium	107	mg / Kg	1	15		08/07/00
M00875	MW.2000.1166-23	7440-28-0	Thallium	ND	mg / Kg	1	20		08/07/00
M00875	MW.2000.1166-23	7440-62-2	Vanadium	8.04	mg / Kg	1	0.15		08/07/00
M00875	MW.2000.1166-23	7440-66-6	Zinc	46.3	mg / Kg	1	5		08/07/00

Client Sample ID: 394-3TB
Sample Matrix: W
Sample Collected: 07/25/00 10:00:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007282-05A		SW846 8260A Purgeable VOCs by GC/MS							
X00279	XG.2000.805-2	75-34-3	1,1 Dichloroethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	75-34-3	1,1 Dichloroethene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	71-55-6	1,1,1 Trichloroethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	630-20-6	1,1,1,2 Tetrachloroethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	79-00-5	1,1,2 Trichloroethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	79-34-5	1,1,2,2 Tetrachloroethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	106-93-4	1,2 Dibromoethane (EDB)	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	95-50-1	1,2 Dichlorobenzene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	107-06-2	1,2 Dichloroethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	78-87-5	1,2 Dichloropropane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	96-18-4	1,2,3 Trichloropropane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	95-63-6	1,2,4-Trimethylbenzene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	541-73-1	1,3 Dichlorobenzene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	108-67-8	1,3,5-Trimethylbenzene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	764-41-0	1,4 Dichloro-2-butene	ND	ug / L	1	10	1	08/01/00
X00279	XG.2000.805-2	106-46-7	1,4 Dichlorobenzene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	78-93-3	2-Butanone (MEK)	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	110-75-8	2-Chloroethylvinylether	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	591-78-6	2-Hexanone (MBK)	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	67-64-1	Acetone	ND	ug / L	1	10	1	08/01/00
X00279	XG.2000.805-2	107-02-8	Acrolein	ND	ug / L	1	20	1	08/01/00
X00279	XG.2000.805-2	107-13-1	Acrylonitrile	ND	ug / L	1	20	1	08/01/00
X00279	XG.2000.805-2	71-43-2	Benzene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	75-27-4	Bromodichloromethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	75-25-2	Bromoform	ND	ug / L	1	1	1	08/01/00

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Project: **0007282 MR3R 0000 0000 0000**

X00279	XG.2000.805-2	74-83-9	Bromomethane	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	75-15-0	Carbon disulfide	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	56-23-5	Carbon tetrachloride	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	108-90-7	Chlorobenzene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	124-48-1	Chlorodibromomethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	75-00-3	Chloroethane	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	67-66-3	Chloroform	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	74-87-3	Chloromethane	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	156-59-2	cis-1,2 dichloroethene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	10061-01-5	cis-1,3 dichloropropene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	74-95-3	Dibromomethane	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	97-63-2	Ethyl methacrylate	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	100-41-4	Ethylbenzene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2		Freon 113	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	75-71-8	Freon 12	ND	ug / L	1	10	1	08/01/00
X00279	XG.2000.805-2	74-88-4	Iodomethane	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	1634-04-4	Methyl t-butyl ether (MTBE)	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	75-09-2	Methylene chloride	ND	ug / L	1	10	1	08/01/00
X00279	XG.2000.805-2	91-20-3	Naphthalene	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	95-47-6	o-Xylene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	108-38-3/106-42	p/m Xylenes	ND	ug / L	1	2	1	08/01/00
X00279	XG.2000.805-2	100-42-5	Styrene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	156-60-5	t-1,2 Dichloroethene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	10061-02-6	t-1,3 Dichloropropene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	127-18-4	Tetrachloroethene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	108-88-3	Toluene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	79-01-6	Trichloroethene	ND	ug / L	1	1	1	08/01/00
X00279	XG.2000.805-2	75-69-4	Trichlorofluoromethane	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	108-05-4	Vinyl acetate	ND	ug / L	1	5	1	08/01/00
X00279	XG.2000.805-2	75-01-4	Vinyl chloride	ND	ug / L	1	5	1	08/01/00

**** Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. ****

**** ND = Not detected: less than the sample specific Detection Limit. Results relate only to the items tested. ****

footnote

1 Sample pH was 5 at the time of analysis, exceeding QA/QC criteria of pH <2.

2 Sample was received with headspace.

3 Value is less than the reporting limit but greater than the MDL.

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ANALYTICAL
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Explanation of codes	
B	analyte detected in Method Blank
E	result is estimated
H	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

LOS ALAMOS NATIONAL LABS
attn: ANN SHERRARD
TA-16 S-SITE
LOS ALAMOS, NM 87544

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS
Project: 0008276 6E20 MR3R 0331 ULM0

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Client Sample ID: *394-50/394 BURN TRAY* | Sample Matrix: *S* | Sample Collected: *08/23/00 10:30:00*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0008276-01A		EPA 418 Modified							
X00334	MW.2000.1275-5		TRPH	ND	mg / Kg	1	25		08/29/00
0008276-01A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00293	XG.2000.927-2		Diesel Range Organics	ND	mg / Kg	1	25		08/29/00
0008276-01B		SW846 8260A Purgeable VOCs by GC/MS							
X00307	XG.2000.917-4	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		08/25/00
X00307	XG.2000.917-4	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		08/25/00

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Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS

Project: 0008276 6E20 MR3R 0331 ULM0

X00307	XG.2000.917-4	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	67-64-1	Acetone	ND	mg / Kg	1	0.05		08/25/00
X00307	XG.2000.917-4	107-02-8	Acrolein	ND	mg / Kg	1	0.1		08/25/00
X00307	XG.2000.917-4	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		08/25/00
X00307	XG.2000.917-4	71-43-2	Benzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	75-25-2	Bromoform	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	67-66-3	Chloroform	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4		Freon 113	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	75-71-8	Freon 12	ND	mg / Kg	1	0.05		08/25/[illegible]
X00307	XG.2000.917-4	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		08/25/[illegible]
X00307	XG.2000.917-4	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		08/25/00
X00307	XG.2000.917-4	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		08/25/00
X00307	XG.2000.917-4	100-42-5	Styrene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	108-88-3	Toluene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-4	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-4	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		08/25/00

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GPL8165	TT.2000.939-1		1,3,5-Trinitrobenzene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-1		1,3-Dinitrobenzene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-1		2,4,6-Trinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-1		2,4-Dinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-1		2,6-Dinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-1		2-Amino-4,6-Dinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-1		4-Amino-2,6-Dinitrotoluene	ND	ug/Kg	1	250	S	09/10/00

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GPL8165	TT.2000.939-1		HMX	ND	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-1		m-Nitrotoluene	ND	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-1		Nitrobenzene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-1		o-Nitrotoluene	ND	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-1		p-Nitrotoluene	ND	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-1		RDX	333	ug/Kg	1	500	2S	09/10/00
GPL8165	TT.2000.939-1		Tetryl	ND	ug/Kg	1	500	S	09/10/00

0008276-01D SW846 3550A/8270B SVOCs by GC/MS

X00326	XG.2000.913-4	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5		08/28/00
X00326	XG.2000.913-4	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67		08/28/00
X00326	XG.2000.913-4	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03		08/28/00
0326	XG.2000.913-4	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4		3+4 Methylphenol	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	100-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6		08/28/00
X00326	XG.2000.913-4	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	62-53-3	Aniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	120-12-7	Anthracene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	56-55-3	Benzo (a) anthracene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	50-32-8	Benzo(a)pyrene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4		Benzo(b & k)fluoranthene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	64-85-0	Benzoic acid	ND	mg / Kg	1	3		08/28/00

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X00326	XG.2000.913-4	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5		08/28/00
X00326	XG.2000.913-4	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	218-01-9	Chrysene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	117-84-0	di-n-Octylpthalate	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	206-44-0	Fluoranthene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	86737	Fluorene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5		08/28/00
X00326	XG.2000.913-4	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	78-59-1	Isophorone	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03		08/2[illegible]
X00326	XG.2000.913-4	91-20-3	Naphthalene	ND	mg / Kg	1	0.03		08/2[illegible]
X00326	XG.2000.913-4	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	85-01-8	Phenanthrene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	108-95-2	Phenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-4	129-00-0	Pyrene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-4	110-86-1	Pyridine	ND	mg / Kg	1	0.3		08/28/00

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M00960	MW.2000.1272-57	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/29/00
M00960	MW.2000.1281-33	7440-39-3	Barium	1.3	mg / L	1	0.1		08/29/00
M00960	MW.2000.1272-57	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/29/00
M00960	MW.2000.1272-57	7440-47-3	Chromium	ND	mg / L	1	0.02		08/29/00
M00960	MW.2000.1272-57	7439-92-1	Lead	ND	mg / L	1	0.05		08/29/00
M00960	MW.2000.1272-57	7782-49-2	Selenium	ND	mg / L	1	0.05		08/29/00
M00960	MW.2000.1272-57	7440-22-4	Silver	ND	mg / L	1	0.04		08/29/00

0008276-01F SW846 1311/7470 CVAA TCLP

M00991	MW.2000.1303-20	7439-97-6	Mercury	ND	mg / L	1	0.0002		09/05/00

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Client Sample ID: 394-51/394 BURN TRAY | Sample Matrix: S | Sample Collected: 08/23/00 11:00:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0008276-02A		EPA 418 Modified							
X00334	MW.2000.1275-6		TRPH	1600	mg / Kg	10	25		08/29/00
0008276-02A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00293	XG.2000.927-3		Diesel Range Organics	580	mg / Kg	1	25		08/29/00
0008276-02B		SW846 8260A Purgeable VOCs by GC/MS							
X00307	XG.2000.917-5	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		08/25/00
X00307	XG.2000.917-5	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	67-64-1	Acetone	ND	mg / Kg	1	0.05		08/25/00
X00307	XG.2000.917-5	107-02-8	Acrolein	ND	mg / Kg	1	0.1		08/25/00
X00307	XG.2000.917-5	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		08/25/00
X00307	XG.2000.917-5	71-43-2	Benzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	75-25-2	Bromoform	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	67-66-3	Chloroform	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		08/25/00

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X00307	XG.2000.917-5	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5		Freon 113	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	75-71-8	Freon 12	ND	mg / Kg	1	0.05		08/25/00
X00307	XG.2000.917-5	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		08/25/00
X00307	XG.2000.917-5	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		08/25/00
X00307	XG.2000.917-5	100-42-5	Styrene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	108-88-3	Toluene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		08/25/00
X00307	XG.2000.917-5	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		08/25/00
X00307	XG.2000.917-5	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		08/25/00

0008276-02C **SW846 8330**

GPL8165	TT.2000.939-2		1,3,5-Trinitrobenzene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-2		1,3-Dinitrobenzene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-2		2,4,6-Trinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-2		2,4-Dinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-2		2,6-Dinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-2		2-Amino-4,6-Dinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-2		4-Amino-2,6-Dinitrotoluene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-2		HMX	599	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-2		m-Nitrotoluene	ND	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-2		Nitrobenzene	ND	ug/Kg	1	250	S	09/10/00
GPL8165	TT.2000.939-2		o-Nitrotoluene	ND	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-2		p-Nitrotoluene	ND	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-2		RDX	1260	ug/Kg	1	500	S	09/10/00
GPL8165	TT.2000.939-2		Tetryl	ND	ug/Kg	1	500	S	09/10/00

0008276-02D **SW846 3550A/8270B SVOCs by GC/MS**

X00326	XG.2000.913-5	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5		08/28/00
X00326	XG.2000.913-5	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03		08/28/00

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X00326	XG.2000.913-5	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67		08/28/00
X00326	XG.2000.913-5	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5		3+4 Methylphenol	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	100-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6		08/28/00
X00326	XG.2000.913-5	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	62-53-3	Aniline	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	120-12-7	Anthracene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	56-55-3	Benzo (a) anthracene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	50-32-8	Benzo(a)pyrene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5		Benzo(b & k)fluoranthene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	64-85-0	Benzoic acid	ND	mg / Kg	1	3		08/28/00
X00326	XG.2000.913-5	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5		08/28/00
X00326	XG.2000.913-5	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	218-01-9	Chrysene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	117-84-0	di-n-Octylpthalate	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	206-44-0	Fluoranthene	0.059	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	86737	Fluorene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5		08/28/00
X00326	XG.2000.913-5	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03		08/28/00

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X00326	XG.2000.913-5	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	78-59-1	Isophorone	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	91-20-3	Naphthalene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	85-01-8	Phenanthrene	ND	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	108-95-2	Phenol	ND	mg / Kg	1	0.3		08/28/00
X00326	XG.2000.913-5	129-00-0	Pyrene	0.068	mg / Kg	1	0.03		08/28/00
X00326	XG.2000.913-5	110-86-1	Pyridine	ND	mg / Kg	1	0.3		08/28/00

0008276-02F SW846 1311/3010A/6010A ICP TCLP

M00960	MW.2000.1272-60	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/29/00
M00960	MW.2000.1281-34	7440-39-3	Barium	0.7	mg / L	1	0.1		08/29/00
M00960	MW.2000.1272-60	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/29/00
M00960	MW.2000.1272-60	7440-47-3	Chromium	ND	mg / L	1	0.02		08/29/00
M00960	MW.2000.1272-60	7439-92-1	Lead	ND	mg / L	1	0.05		08/29/00
M00960	MW.2000.1272-60	7782-49-2	Selenium	ND	mg / L	1	0.05		08/29/00
M00960	MW.2000.1272-60	7440-22-4	Silver	ND	mg / L	1	0.04		08/29/00

0008276-02F SW846 1311/7470 CVAA TCLP

M00991	MW.2000.1303-21	7439-97-6	Mercury	ND	mg / L	1	0.0002		09/05/[illegible]

Client Sample ID **394-TB4/TRIP BLANK** Sample Matrix **W** Sample Collected **08/23/00 09:30:00**

0008276-03A SW846 8260A Purgeable VOCs by GC/MS

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
X00309	XG.2000.914-9	75-34-3	1,1 Dichloroethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	75-34-3	1,1 Dichloroethene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	71-55-6	1,1,1 Trichloroethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	630-20-6	1,1,1,2 Tetrachloroethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	79-00-5	1,1,2 Trichloroethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	79-34-5	1,1,2,2 Tetrachloroethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	106-93-4	1,2 Dibromoethane (EDB)	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	95-50-1	1,2 Dichlorobenzene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	107-06-2	1,2 Dichloroethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	78-87-5	1,2 Dichloropropane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	96-18-4	1,2,3 Trichloropropane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	95-63-6	1,2,4-Trimethylbenzene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	541-73-1	1,3 Dichlorobenzene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	108-67-8	1,3,5-Trimethylbenzene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	764-41-0	1,4 Dichloro-2-butene	ND	ug / L	1	10	1	08/25/00
X00309	XG.2000.914-9	106-46-7	1,4 Dichlorobenzene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	78-93-3	2-Butanone (MEK)	ND	ug / L	1	5	1	08/25/00

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X00309	XG.2000.914-9	110-75-8	2-Chloroethylvinylether	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	591-78-6	2-Hexanone (MBK)	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	67-64-1	Acetone	11	ug / L	1	10	1	08/25/00
X00309	XG.2000.914-9	107-02-8	Acrolein	ND	ug / L	1	20	1	08/25/00
X00309	XG.2000.914-9	107-13-1	Acrylonitrile	ND	ug / L	1	20	1	08/25/00
X00309	XG.2000.914-9	71-43-2	Benzene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	75-27-4	Bromodichloromethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	75-25-2	Bromoform	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	74-83-9	Bromomethane	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	75-15-0	Carbon disulfide	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	56-23-5	Carbon tetrachloride	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	108-90-7	Chlorobenzene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	124-48-1	Chlorodibromomethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	75-00-3	Chloroethane	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	67-66-3	Chloroform	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	74-87-3	Chloromethane	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	156-59-2	cis-1,2 dichloroethene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	10061-01-5	cis-1,3 dichloropropene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	74-95-3	Dibromomethane	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	97-63-2	Ethyl methacrylate	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	100-41-4	Ethylbenzene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9		Freon 113	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	75-71-8	Freon 12	ND	ug / L	1	10	1	08/25/00
.00309	XG.2000.914-9	74-88-4	Iodomethane	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	1634-04-4	Methyl t-butyl ether (MTBE)	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	75-09-2	Methylene chloride	ND	ug / L	1	10	1	08/25/00
X00309	XG.2000.914-9	91-20-3	Naphthalene	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	95-47-6	o-Xylene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	108-38-3/106-42	p/m Xylenes	ND	ug / L	1	2	1	08/25/00
X00309	XG.2000.914-9	100-42-5	Styrene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	156-60-5	t-1,2 Dichloroethene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	10061-02-6	t-1,3 Dichloropropene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	127-18-4	Tetrachloroethene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	108-88-3	Toluene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	79-01-6	Trichloroethene	ND	ug / L	1	1	1	08/25/00
X00309	XG.2000.914-9	75-69-4	Trichlorofluoromethane	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	108-05-4	Vinyl acetate	ND	ug / L	1	5	1	08/25/00
X00309	XG.2000.914-9	75-01-4	Vinyl chloride	ND	ug / L	1	5	1	08/25/00

**** Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. ****

**** ND = Not detected: less than the sample specific Detection Limit. Results relate only to the items tested. ****

footnote

1 Sample pH was 5 at the time of analysis, exceeding QA/QC criteria of pH <2.

2 Value is less than the reporting limit but greater than the MDL.

TA-16-394 PERIMETER DATA

ASSAIGAI
ANALYTICAL
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Explanation of codes	
B	analyte detected in Method Blank
E	result is estimated
H	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

LOS ALAMOS NATIONAL LABS
attn: **ANN SHERRARD**
TA-16 S-SITE
LOS ALAMOS, NM 87544

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**
Project: **0007216 6E20 MR3R 0331 ULM0**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Client Sample ID: ***394-3/ 0-1FT.*** Sample Matrix: ***S*** Sample Collected: ***07/19/00 11:50:00***

Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-01A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-53	7429-90-5	Aluminum	2950	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-53	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-53	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-53	7440-39-3	Barium	282	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-53	7440-41-7	Beryllium	ND	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-53	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-5	7440-70-2	Calcium	1700	mg / Kg	1	15		07/28/00
M00828	MW.2000.1118-16	7440-47-3	Chromium	5.1	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-53	7440-48-4	Cobalt	1.5	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-53	7440-50-8	Copper	7.2	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1118-16	7439-89-6	Iron	5990	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-53	7439-95-4	Magnesium	493	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-53	7439-96-5	Manganese	144	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-16	7440-02-0	Nickel	7.0	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-53	7440-09-7	Potassium	392	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-53	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-53	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-53	7440-23-5	Sodium	112	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-53	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-53	7440-62-2	Vanadium	8.26	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-53	7440-66-6	Zinc	25.3	mg / Kg	1	5		07/27/00

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Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **0007216 6E20 MR3R 0331 ULM0**

0007216-01A **SW846 3050A/7000 series AA-FL**

M00828	MW.2000.1129-24	7439-92-1	Lead	13.7	mg / Kg	1	5		07/31/00

0007216-01A **SW846 7471 CVAA**

M00853	MW.2000.1140-9	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

Client Sample ID ***394-3/ 0-1FT.*** Sample Matrix ***S*** Sample Collected ***07/19/00 11:50:00***

0007216-02A **SW846 8330**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
GPL 7138	TT.2000.782-1		1,3,5-Trinitrobenzene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-1		1,3-DNB	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-1		2,4,6-Trinitrotoluene	745	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-1		2,4-Dinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-1		2,6-Dinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-1		2-Amino-4,6-Dinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-1		4-Amino-2,6-Dinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-2		HMX	795000	ug/Kg	100	50000	HS	09/05/00
GPL 7138	TT.2000.782-1		m-Nitrotoluene	ND	ug/Kg	1	500	HS	09/02/00
GPL 7138	TT.2000.782-1		Nitrobenzene	ND	ug/Kg	1	250	HS	09/0[illegible]
GPL 7138	TT.2000.782-1		o-Nitrotoluene	ND	ug/Kg	1	500	HS	09/0[illegible]
GPL 7138	TT.2000.782-1		p-Nitrotoluene	ND	ug/Kg	1	500	HS	09/02/00
GP78115	TT.2000.982-1		PETN	ND	ug/Kg	1	500	S	09/25/00
GPL 7138	TT.2000.782-2		RDX	1162000	ug/Kg	100	500	HS	09/05/00
GPL 7138	TT.2000.782-1		Tetryl	ND	ug/Kg	1	500	HS	09/02/00

Client Sample ID ***394-3/ 0-1FT.*** Sample Matrix ***S*** Sample Collected ***07/19/00 11:50:00***

0007216-03A **EPA 418 Modified**

X00285	MW.2000.1147-8		TRPH	73	mg / Kg	1	25		08/02/00

0007216-03A **SW846 ME/8015A Diesel Range Organics by GC/FID**

X00267	XG.2000.784-10		Diesel Range Organics	94	mg / Kg	1	25		07/25/00

Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS
Project: 0007216 6E20 MR3R 0331 ULM0

Client Sample ID: 394-7/1-1.5FT. Sample Matrix: S Sample Collected: 07/19/00 11:55:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-04A		SW846 8260A Purgeable VOCs by GC/MS							
X00268	XG.2000.788-5	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		07/25/00
X00268	XG.2000.788-5	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	67-64-1	Acetone	ND	mg / Kg	1	0.05		07/25/00
X00268	XG.2000.788-5	107-02-8	Acrolein	ND	mg / Kg	1	0.1		07/25/00
X00268	XG.2000.788-5	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		07/25/00
X00268	XG.2000.788-5	71-43-2	Benzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	75-25-2	Bromoform	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	67-66-3	Chloroform	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5		Freon 113	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	75-71-8	Freon 12	ND	mg / Kg	1	0.05		07/25/00
X00268	XG.2000.788-5	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		07/25/00

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **0007216 6E20 MR3R 0331 ULM0**

X00268	XG.2000.788-5	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		07/25/00
X00268	XG.2000.788-5	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		07/25/00
X00268	XG.2000.788-5	100-42-5	Styrene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	108-88-3	Toluene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-5	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-5	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		07/25/00

Client Sample ID: ***394-11/3-4FT.*** Sample Matrix: ***S*** Sample Collected: ***07/19/00 12:55:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-05A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-54	7429-90-5	Aluminum	7140	mg / Kg	1	25		07/[illegible]
M00828	MW.2000.1115-54	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/[illegible]
M00828	MW.2000.1115-54	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-54	7440-39-3	Barium	120	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-54	7440-41-7	Beryllium	0.54	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-54	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-6	7440-70-2	Calcium	2020	mg / Kg	1	15		07/28/00
M00828	MW.2000.1118-17	7440-47-3	Chromium	5.6	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-54	7440-48-4	Cobalt	2.1	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-54	7440-50-8	Copper	4.2	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1118-17	7439-89-6	Iron	8890	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-54	7439-95-4	Magnesium	1300	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-54	7439-96-5	Manganese	247	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-17	7440-02-0	Nickel	3.0	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-54	7440-09-7	Potassium	990	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-54	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-54	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-54	7440-23-5	Sodium	158	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-54	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-54	7440-62-2	Vanadium	9.96	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-54	7440-66-6	Zinc	40.5	mg / Kg	1	5		07/27/00
0007216-05A		**SW846 3050A/7000 series AA-FL**							
M00828	MW.2000.1129-25	7439-92-1	Lead	12.3	mg / Kg	1	5		07/31/00

Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS
Project: 0007216 6E20 MR3R 0331 ULM0

0007216-05A SW846 7471 CVAA

M00853	MW.2000.1139-17	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

0007216-05B SW846 8330

GPL 7138	TT.2000.782-3		1,3,5-Trinitrobenzene	ND	ug/Kg	1	227	HS	09/02/00
GPL 7138	TT.2000.782-3		1,3-DNB	ND	ug/Kg	1	227	HS	09/02/00
GPL 7138	TT.2000.782-3		2,4,6-Trinitrotoluene	ND	ug/Kg	1	227	HS	09/02/00
GPL 7138	TT.2000.782-3		2,4-Dinitrotoluene	ND	ug/Kg	1	227	HS	09/02/00
GPL 7138	TT.2000.782-3		2,6-Dinitrotoluene	ND	ug/Kg	1	227	HS	09/02/00
GPL 7138	TT.2000.782-3		2-Amino-4,6-Dinitrotoluene	ND	ug/Kg	1	227	HS	09/02/00
GPL 7138	TT.2000.782-3		4-Amino-2,6-Dinitrotoluene	ND	ug/Kg	1	227	HS	09/02/00
GPL 7138	TT.2000.782-4		HMX	54300	ug/Kg	10	455	HS	09/05/00
GPL 7138	TT.2000.782-3		m-Nitrotoluene	ND	ug/Kg	1	455	HS	09/02/00
GPL 7138	TT.2000.782-3		Nitrobenzene	ND	ug/Kg	1	227	HS	09/02/00
GPL 7138	TT.2000.782-3		o-Nitrotoluene	ND	ug/Kg	1	455	HS	09/02/00
GPL 7138	TT.2000.782-3		p-Nitrotoluene	ND	ug/Kg	1	455	HS	09/02/00
GP78115	TT.2000.982-2		PETN	ND	ug/Kg	1	450	S	09/25/00
GPL 7138	TT.2000.782-4		RDX	50500	ug/Kg	10	455	HS	09/05/00
GPL 7138	TT.2000.782-3		Tetryl	ND	ug/Kg	1	455	HS	09/02/00

Client Sample ID **394-11/3-4 FT.** Sample Matrix **S** Sample Collected **07/19/00 12:55:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-06A		EPA 418 Modified							
X00285	MW.2000.1147-5		TRPH	47	mg / Kg	1	25		08/02/00
0007216-06A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00267	XG.2000.784-11		Diesel Range Organics	ND	mg / Kg	1	25		07/25/00
0007216-06B		SW846 8260A Purgeable VOCs by GC/MS							
X00268	XG.2000.788-6	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		07/25/00

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Client: **LOS ALAMOS NATIONAL LABS**

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X00268	XG.2000.788-6	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	67-64-1	Acetone	ND	mg / Kg	1	0.05		07/25/00
X00268	XG.2000.788-6	107-02-8	Acrolein	ND	mg / Kg	1	0.1		07/25/00
X00268	XG.2000.788-6	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		07/25/00
X00268	XG.2000.788-6	71-43-2	Benzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	75-25-2	Bromoform	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	67-66-3	Chloroform	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		07/2[illegible]
X00268	XG.2000.788-6		Freon 113	ND	mg / Kg	1	0.025		07/2[illegible]
X00268	XG.2000.788-6	75-71-8	Freon 12	ND	mg / Kg	1	0.05		07/25/00
X00268	XG.2000.788-6	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		07/25/00
X00268	XG.2000.788-6	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		07/25/00
X00268	XG.2000.788-6	100-42-5	Styrene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	108-88-3	Toluene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		07/25/00
X00268	XG.2000.788-6	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		07/25/00
X00268	XG.2000.788-6	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		07/25/00

Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS
Project: 0007216 6E20 MR3R 0331 ULM0

Client Sample ID: 394-4/0-1FT. Sample Matrix: S Sample Collected: 07/19/00 13:10:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-07A		SW846 3050A/6010A ICP							
M00828	MW.2000.1115-55	7429-90-5	Aluminum	7090	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-55	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-55	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-55	7440-39-3	Barium	179	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-55	7440-41-7	Beryllium	0.60	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-55	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-7	7440-70-2	Calcium	1820	mg / Kg	1	15		07/28/00
M00828	MW.2000.1118-18	7440-47-3	Chromium	6.0	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-55	7440-48-4	Cobalt	4.6	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-55	7440-50-8	Copper	11.5	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1118-18	7439-89-6	Iron	9050	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-55	7439-95-4	Magnesium	1100	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-55	7439-96-5	Manganese	374	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-18	7440-02-0	Nickel	5.5	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-55	7440-09-7	Potassium	912	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-55	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-55	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-55	7440-23-5	Sodium	116	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-55	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-55	7440-62-2	Vanadium	11.5	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-55	7440-66-6	Zinc	94.0	mg / Kg	1	5		07/27/00
0007216-07A		SW846 3050A/7000 series AA-FL							
M00828	MW.2000.1129-29	7439-92-1	Lead	15.1	mg / Kg	1	5		07/31/00
0007216-07A		SW846 7471 CVAA							
M00853	MW.2000.1139-18	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

Client Sample ID: 394-4/0-1FT. Sample Matrix: S Sample Collected: 07/19/00 13:10:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-08A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00267	XG.2000.784-12		Diesel Range Organics	48	mg / Kg	1	25		07/25/00

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**
Project: **0007216 6E20 MR3R 0331 ULM0**

Client Sample ID: ***394-24/0-1FT.*** Sample Matrix: ***S*** Sample Collected: ***07/19/00 13:10:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-09A		**SW846 3550A/8270B SVOCs by GC/MS**							
X00276	XG.2000.826-1	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-1	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67		08/01/00
X00276	XG.2000.826-1	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1		3+4 Methylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	100-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6		08/01/00
X00276	XG.2000.826-1	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	62-53-3	Aniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	120-12-7	Anthracene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	56-55-3	Benzo (a) anthracene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	50-32-8	Benzo(a)pyrene	0.070	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1		Benzo(b & k)fluoranthene	0.12	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	64-85-0	Benzoic acid	ND	mg / Kg	1	3		08/01/00
X00276	XG.2000.826-1	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-1	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03		08/01/00

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Client: LOS ALAMOS NATIONAL LABS
Project: 0007216 6E20 MR3R 0331 ULM0

X00276	XG.2000.826-1	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	117-81-7	bis(2-Ethylhexyl)phthalate	0.43	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	218-01-9	Chrysene	0.048	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	117-84-0	di-n-Octylpthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	206-44-0	Fluoranthene	0.046	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	86737	Fluorene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-1	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	78-59-1	Isophorone	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	91-20-3	Naphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	85-01-8	Phenanthrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	108-95-2	Phenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-1	129-00-0	Pyrene	0.046	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-1	110-86-1	Pyridine	ND	mg / Kg	1	0.3		08/01/00

0007216-09C **SW846 1311/3010A/6010A ICP TCLP**

M00857	MW.2000.1148-39	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/02/00
M00857	MW.2000.1148-39	7440-39-3	Barium	1.9	mg / L	1	0.1		08/02/00
M00857	MW.2000.1148-39	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/02/00
M00857	MW.2000.1148-39	7440-47-3	Chromium	ND	mg / L	1	0.02		08/02/00
M00857	MW.2000.1148-39	7439-92-1	Lead	ND	mg / L	1	0.05		08/02/00
M00857	MW.2000.1148-39	7782-49-2	Selenium	ND	mg / L	1	0.05		08/02/00
M00857	MW.2000.1148-39	7440-22-4	Silver	ND	mg / L	1	0.04		08/02/00

0007216-09C **SW846 1311/7470 CVAA TCLP**

M00861	MW.2000.1150-17	7439-97-6	Mercury	ND	mg / L	1	0.0002		08/03/00

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**
Project: **0007216 6E20 MR3R 0331 ULM0**

Client Sample ID: ***394-24-/0-1FT.*** Sample Matrix: ***S*** Sample Collected: ***07/19/00 13:10:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-10A		**SW846 8260A Purgeable VOCs by GC/MS**							
X00268	XG.2000.788-7	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	2	07/25/00
X00268	XG.2000.788-7	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	2	07/[illegible]
X00268	XG.2000.788-7	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	67-64-1	Acetone	ND	mg / Kg	1	0.05	2	07/25/00
X00268	XG.2000.788-7	107-02-8	Acrolein	ND	mg / Kg	1	0.1	2	07/25/00
X00268	XG.2000.788-7	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	2	07/25/00
X00268	XG.2000.788-7	71-43-2	Benzene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	75-25-2	Bromoform	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	67-66-3	Chloroform	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7		Freon 113	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	75-71-8	Freon 12	ND	mg / Kg	1	0.05	2	07/25/00
X00268	XG.2000.788-7	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	2	07/25/00

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X00268	XG.2000.788-7	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	2	07/25/00
X00268	XG.2000.788-7	91-20-3	Naphthalene	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01	2	07/25/00
X00268	XG.2000.788-7	100-42-5	Styrene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	108-88-3	Toluene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	2	07/25/00
X00268	XG.2000.788-7	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	2	07/25/00
X00268	XG.2000.788-7	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	2	07/25/00

Client Sample ID: **394-24/1-1.5FT.** Sample Matrix: **S** Sample Collected: **07/19/00 13:20:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-11A		SW846 3550A/8270B SVOCs by GC/MS							
X00276	XG.2000.826-2	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-2	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67		08/01/00
X00276	XG.2000.826-2	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2		3+4 Methylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3		08/01/00

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X00276	XG.2000.826-2	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	100-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6		08/01/00
X00276	XG.2000.826-2	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	62-53-3	Aniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	120-12-7	Anthracene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	56-55-3	Benzo (a) anthracene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	50-32-8	Benzo(a)pyrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2		Benzo(b & k)fluoranthene	0.046	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	64-85-0	Benzoic acid	ND	mg / Kg	1	3		08/01/00
X00276	XG.2000.826-2	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-2	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	218-01-9	Chrysene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	117-84-0	di-n-Octylpthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	1	0.3		08/[illegible]
X00276	XG.2000.826-2	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03		08/[illegible]
X00276	XG.2000.826-2	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	206-44-0	Fluoranthene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	86737	Fluorene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-2	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	78-59-1	Isophorone	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	91-20-3	Naphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	85-01-8	Phenanthrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	108-95-2	Phenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-2	129-00-0	Pyrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-2	110-86-1	Pyridine	ND	mg / Kg	1	0.3		08/01/00

0007216-11C **SW846 1311/3010A/6010A ICP TCLP**

M00857	MW.2000.1148-50	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-50	7440-39-3	Barium	2.0	mg / L	1	0.1		08/03/00

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M00857	MW.2000.1148-50	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-50	7440-47-3	Chromium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-50	7439-92-1	Lead	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-50	7782-49-2	Selenium	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-50	7440-22-4	Silver	ND	mg / L	1	0.04		08/03/00

0007216-11C SW846 1311/7470 CVAA TCLP

M00861	MW.2000.1150-18	7439-97-6	Mercury	ND	mg / L	1	0.0002		08/03/00

Client Sample ID: *394-8-/1-1.5FT.* Sample Matrix: *S* Sample Collected: *07/19/00 13:20:00*

0007216-12A SW846 8260A Purgeable VOCs by GC/MS

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
X00274	XG.2000.822-5	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-5	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	67-64-1	Acetone	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-5	107-02-8	Acrolein	ND	mg / Kg	1	0.1		07/26/00
X00274	XG.2000.822-5	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		07/26/00
X00274	XG.2000.822-5	71-43-2	Benzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	75-25-2	Bromoform	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	67-66-3	Chloroform	ND	mg / Kg	1	0.005		07/26/00

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X00274	XG.2000.822-5	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5		Freon 113	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	75-71-8	Freon 12	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-5	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-5	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		07/26/00
X00274	XG.2000.822-5	100-42-5	Styrene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	108-88-3	Toluene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-5	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-5	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		07/26/00

Client Sample ID **394-12/3-4FT.** Sample Matrix **S** Sample Collected **07/19/00 13:35:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-13A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-56	7429-90-5	Aluminum	5490	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-56	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-56	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-56	7440-39-3	Barium	127	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-56	7440-41-7	Beryllium	0.48	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-56	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-8	7440-70-2	Calcium	1420	mg / Kg	1	15		07/28/00
M00828	MW.2000.1118-19	7440-47-3	Chromium	4.9	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-56	7440-48-4	Cobalt	2.2	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-56	7440-50-8	Copper	8.9	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1118-19	7439-89-6	Iron	6910	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-56	7439-95-4	Magnesium	822	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-56	7439-96-5	Manganese	213	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-19	7440-02-0	Nickel	3.8	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-56	7440-09-7	Potassium	666	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-56	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-56	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00

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M00828	MW.2000.1115-56	7440-23-5	Sodium	68.0	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-56	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-56	7440-62-2	Vanadium	8.76	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-56	7440-66-6	Zinc	77.2	mg / Kg	1	5		07/27/00

0007216-13A SW846 3050A/7000 series AA-FL

M00828	MW.2000.1129-30	7439-92-1	Lead	27.7	mg / Kg	1	5		07/31/00

0007216-13A SW846 7471 CVAA

M00853	MW.2000.1139-19	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

Client Sample ID: *394-12/3-4FT.* Sample Matrix: *S* Sample Collected: *07/19/00 13:35:00*

0007216-14A SW846 ME/8015A Diesel Range Organics by GC/FID

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
X00267	XG.2000.784-13		Diesel Range Organics	49	mg / Kg	1	25		07/25/00

0007216-14B SW846 8260A Purgeable VOCs by GC/MS

X00274	XG.2000.822-6	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-6	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	67-64-1	Acetone	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-6	107-02-8	Acrolein	ND	mg / Kg	1	0.1		07/26/00
X00274	XG.2000.822-6	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		07/26/00
X00274	XG.2000.822-6	71-43-2	Benzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	75-25-2	Bromoform	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		07/26/00

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X00274	XG.2000.822-6	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	67-66-3	Chloroform	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6		Freon 113	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	75-71-8	Freon 12	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-6	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-6	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		07/26/00
X00274	XG.2000.822-6	100-42-5	Styrene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	108-88-3	Toluene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-6	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-6	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		07/26/00

Client Sample ID **394-2TB** Sample Matrix **W** Sample Collected **07/19/00 11:30:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-15A		**SW846 8260A Purgeable VOCs by GC/MS**							
X00250	XG.2000.783-2	75-34-3	1,1 Dichloroethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	75-34-3	1,1 Dichloroethene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	71-55-6	1,1,1 Trichloroethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	630-20-6	1,1,1,2 Tetrachloroethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	79-00-5	1,1,2 Trichloroethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	79-34-5	1,1,2,2 Tetrachloroethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	106-93-4	1,2 Dibromoethane (EDB)	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	95-50-1	1,2 Dichlorobenzene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	107-06-2	1,2 Dichloroethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	78-87-5	1,2 Dichloropropane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	96-18-4	1,2,3 Trichloropropane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	95-63-6	1,2,4-Trimethylbenzene	ND	ug / L	1	1	1	07/25/00

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X00250	XG.2000.783-2	541-73-1	1,3 Dichlorobenzene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	108-67-8	1,3,5-Trimethylbenzene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	764-41-0	1,4 Dichloro-2-butene	ND	ug / L	1	10	1	07/25/00
X00250	XG.2000.783-2	106-46-7	1,4 Dichlorobenzene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	78-93-3	2-Butanone (MEK)	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	110-75-8	2-Chloroethylvinylether	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	591-78-6	2-Hexanone (MBK)	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	67-64-1	Acetone	ND	ug / L	1	10	1	07/25/00
X00250	XG.2000.783-2	107-02-8	Acrolein	ND	ug / L	1	20	1	07/25/00
X00250	XG.2000.783-2	107-13-1	Acrylonitrile	ND	ug / L	1	20	1	07/25/00
X00250	XG.2000.783-2	71-43-2	Benzene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	75-27-4	Bromodichloromethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	75-25-2	Bromoform	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	74-83-9	Bromomethane	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	75-15-0	Carbon disulfide	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	56-23-5	Carbon tetrachloride	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	108-90-7	Chlorobenzene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	124-48-1	Chlorodibromomethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	75-00-3	Chloroethane	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	67-66-3	Chloroform	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	74-87-3	Chloromethane	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	156-59-2	cis-1,2 dichloroethene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	10061-01-5	cis-1,3 dichloropropene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	74-95-3	Dibromomethane	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	97-63-2	Ethyl methacrylate	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	100-41-4	Ethylbenzene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2		Freon 113	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	75-71-8	Freon 12	ND	ug / L	1	10	1	07/25/00
X00250	XG.2000.783-2	74-88-4	Iodomethane	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	1634-04-4	Methyl t-butyl ether (MTBE)	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	75-09-2	Methylene chloride	ND	ug / L	1	10	1	07/25/00
X00250	XG.2000.783-2	91-20-3	Naphthalene	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	95-47-6	o-Xylene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	108-38-3/106-42	p/m Xylenes	ND	ug / L	1	2	1	07/25/00
X00250	XG.2000.783-2	100-42-5	Styrene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	156-60-5	t-1,2 Dichloroethene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	10061-02-6	t-1,3 Dichloropropene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	127-18-4	Tetrachloroethene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	108-88-3	Toluene	ND	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	79-01-6	Trichloroethene	1.8	ug / L	1	1	1	07/25/00
X00250	XG.2000.783-2	75-69-4	Trichlorofluoromethane	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	108-05-4	Vinyl acetate	ND	ug / L	1	5	1	07/25/00
X00250	XG.2000.783-2	75-01-4	Vinyl chloride	ND	ug / L	1	5	1	07/25/00

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Client: **LOS ALAMOS NATIONAL LABS**
Project: **0007216 6E20 MR3R 0331 ULM0**

Client Sample ID: ***394-5/0-1'*** Sample Matrix: ***S*** Sample Collected: ***07/20/00 07:20:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-16A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-57	7429-90-5	Aluminum	6220	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-57	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-57	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-57	7440-39-3	Barium	112	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-57	7440-41-7	Beryllium	0.48	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-57	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-9	7440-70-2	Calcium	1380	mg / Kg	1	15		07/28/00
M00828	MW.2000.1118-20	7440-47-3	Chromium	5.1	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-57	7440-48-4	Cobalt	2.2	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-57	7440-50-8	Copper	6.2	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1118-20	7439-89-6	Iron	7650	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-57	7439-95-4	Magnesium	987	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-57	7439-96-5	Manganese	276	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1115-57	7440-02-0	Nickel	ND	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-57	7440-09-7	Potassium	791	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-57	7782-49-2	Selenium	4.1	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-57	7440-22-4	Silver	ND	mg / Kg	1	1		07/[illegible]
M00828	MW.2000.1115-57	7440-23-5	Sodium	57.6	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-57	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-57	7440-62-2	Vanadium	9.50	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-57	7440-66-6	Zinc	69.4	mg / Kg	1	5		07/27/00
0007216-16A		**SW846 3050A/7000 series AA-FL**							
M00828	MW.2000.1129-31	7439-92-1	Lead	19.6	mg / Kg	1	5		07/31/00
0007216-16A		**SW846 7471 CVAA**							
M00853	MW.2000.1139-20	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00
0007216-16B		**SW846 8330**							
GPL 7138	TT.2000.782-5		1,3,5-Trinitrobenzene	ND	ug/Kg	1	200	HS	09/02/00
GPL 7138	TT.2000.782-5		1,3-DNB	ND	ug/Kg	1	200	HS	09/02/00
GPL 7138	TT.2000.782-5		2,4,6-Trinitrotoluene	ND	ug/Kg	1	200	HS	09/02/00
GPL 7138	TT.2000.782-5		2,4-Dinitrotoluene	ND	ug/Kg	1	200	HS	09/02/00
GPL 7138	TT.2000.782-5		2,6-Dinitrotoluene	ND	ug/Kg	1	200	HS	09/02/00
GPL 7138	TT.2000.782-5		2-Amino-4,6-Dinitrotoluene	ND	ug/Kg	1	200	HS	09/02/00
GPL 7138	TT.2000.782-5		4-Amino-2,6-Dinitrotoluene	ND	ug/Kg	1	200	HS	09/02/00
GPL 7138	TT.2000.782-6		HMX	50300	ug/Kg	10	400	HS	09/05/00
GPL 7138	TT.2000.782-5		m-Nitrotoluene	ND	ug/Kg	1	400	HS	09/02/00
GPL 7138	TT.2000.782-5		Nitrobenzene	ND	ug/Kg	1	200	HS	09/02/00
GPL 7138	TT.2000.782-5		o-Nitrotoluene	ND	ug/Kg	1	400	HS	09/02/00
GPL 7138	TT.2000.782-5		p-Nitrotoluene	ND	ug/Kg	1	400	HS	09/02/00
GPL 7138	TT.2000.782-5		RDX	1050	ug/Kg	1	400	HS	09/[illegible]

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GPL 7138	TT.2000.782-5		Tetryl	ND	ug/Kg	1	400	HS	09/02/00

Client Sample ID: 394-5/0-1' Sample Matrix: S Sample Collected: 07/20/00 07:20:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-17A		EPA 418 Modified							
X00285	MW.2000.1147-9		TRPH	170	mg / Kg	1	25		08/02/00
0007216-17A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00267	XG.2000.784-14		Diesel Range Organics	44	mg / Kg	1	25		07/25/00

Client Sample ID: 394-9/1-1.5' Sample Matrix: S Sample Collected: 07/20/00 07:30:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-18A		SW846 8260A Purgeable VOCs by GC/MS							
X00274	XG.2000.822-7	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-7	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	67-64-1	Acetone	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-7	107-02-8	Acrolein	ND	mg / Kg	1	0.1		07/26/00
X00274	XG.2000.822-7	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		07/26/00
X00274	XG.2000.822-7	71-43-2	Benzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	75-25-2	Bromoform	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		07/26/00

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X00274	XG.2000.822-7	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	67-66-3	Chloroform	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7		Freon 113	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	75-71-8	Freon 12	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-7	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-7	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		07/26/00
X00274	XG.2000.822-7	100-42-5	Styrene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	108-88-3	Toluene	0.006	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-7	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-7	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		07/26/00

Client Sample ID **394-13/3-4'** Sample Matrix **S** Sample Collected **07/20/00 07:40:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-19A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-58	7429-90-5	Aluminum	4620	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-58	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-58	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-58	7440-39-3	Barium	116	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-58	7440-41-7	Beryllium	ND	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-58	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-10	7440-70-2	Calcium	1560	mg / Kg	1	15		07/28/00
M00828	MW.2000.1118-21	7440-47-3	Chromium	5.3	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-58	7440-48-4	Cobalt	2.2	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-58	7440-50-8	Copper	7.0	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1118-21	7439-89-6	Iron	6760	mg / Kg	1	15		07/27/00

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M00828	MW.2000.1115-58	7439-95-4	Magnesium	723	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-58	7439-96-5	Manganese	165	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-21	7440-02-0	Nickel	3.2	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-58	7440-09-7	Potassium	582	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-58	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-58	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-58	7440-23-5	Sodium	47.6	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-58	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-58	7440-62-2	Vanadium	8.32	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-58	7440-66-6	Zinc	79.4	mg / Kg	1	5		07/27/00

0007216-19A SW846 3050A/7000 series AA-FL

M00828	MW.2000.1129-32	7439-92-1	Lead	19.7	mg / Kg	1	5		07/31/00

0007216-19A SW846 7471 CVAA

M00853	MW.2000.1139-21	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

0007216-19B SW846 8330

GPL 7138	TT.2000.782-7		1,3,5-Trinitrobenzene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-7		1,3-DNB	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-7		2,4,6-Trinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-7		2,4-Dinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-7		2,6-Dinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-7		2-Amino-4,6-Dinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-7		4-Amino-2,6-Dinitrotoluene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-7		HMX	47500	ug/Kg	1	500	HS	09/02/00
GPL 7138	TT.2000.782-7		m-Nitrotoluene	ND	ug/Kg	1	500	HS	09/02/00
GPL 7138	TT.2000.782-7		Nitrobenzene	ND	ug/Kg	1	250	HS	09/02/00
GPL 7138	TT.2000.782-7		o-Nitrotoluene	ND	ug/Kg	1	500	HS	09/02/00
GPL 7138	TT.2000.782-7		p-Nitrotoluene	ND	ug/Kg	1	500	HS	09/02/00
GP78115	TT.2000.982-4		PETN	ND	ug/Kg	1	500	S	09/25/00
GPL 7138	TT.2000.782-7		RDX	4390	ug/Kg	1	500	HS	09/02/00
GPL 7138	TT.2000.782-7		Tetryl	ND	ug/Kg	1	500	HS	09/02/00

Client Sample ID **394-13/3-4'** Sample Matrix **S** Sample Collected **07/20/00 07:40:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-20A		EPA 418 Modified							
X00285	MW.2000.1147-10		TRPH	230	mg / Kg	1	25		08/02/00
0007216-20A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00267	XG.2000.784-15		Diesel Range Organics	80	mg / Kg	1	25		07/25/00
0007216-20B		SW846 8260A Purgeable VOCs by GC/MS							
X00274	XG.2000.822-8	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		07/26/00

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X00274	XG.2000.822-8	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-8	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	67-64-1	Acetone	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-8	107-02-8	Acrolein	ND	mg / Kg	1	0.1		07/26/00
X00274	XG.2000.822-8	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		07/26/00
X00274	XG.2000.822-8	71-43-2	Benzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	75-25-2	Bromoform	ND	mg / Kg	1	0.005		07/[illegible]
X00274	XG.2000.822-8	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		07/[illegible]
X00274	XG.2000.822-8	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	67-66-3	Chloroform	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8		Freon 113	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	75-71-8	Freon 12	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-8	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		07/26/00
X00274	XG.2000.822-8	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		07/26/00
X00274	XG.2000.822-8	100-42-5	Styrene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		07/26/00

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X00274	XG.2000.822-8	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	108-88-3	Toluene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		07/26/00
X00274	XG.2000.822-8	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		07/26/00
X00274	XG.2000.822-8	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		07/26/00

Client Sample ID: ***394-6/0-1'*** Sample Matrix: ***S*** Sample Collected: ***07/20/00 08:25:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-21A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-59	7429-90-5	Aluminum	7100	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-59	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-59	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-59	7440-39-3	Barium	591	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-59	7440-41-7	Beryllium	ND	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-59	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-11	7440-70-2	Calcium	2770	mg / Kg	1	15		07/28/00
M00828	MW.2000.1118-22	7440-47-3	Chromium	6.1	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-59	7440-48-4	Cobalt	4.4	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-59	7440-50-8	Copper	4.0	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1118-22	7439-89-6	Iron	7040	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-59	7439-95-4	Magnesium	921	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-59	7439-96-5	Manganese	207	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-22	7440-02-0	Nickel	4.3	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-59	7440-09-7	Potassium	1030	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-59	7782-49-2	Selenium	3.0	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-59	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-59	7440-23-5	Sodium	153	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-59	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-59	7440-62-2	Vanadium	14.2	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-59	7440-66-6	Zinc	15.4	mg / Kg	1	5		07/27/00
0007216-21A		**SW846 3050A/7000 series AA-FL**							
M00828	MW.2000.1129-33	7439-92-1	Lead	11.7	mg / Kg	1	5		07/31/00
0007216-21A		**SW846 7471 CVAA**							
M00853	MW.2000.1140-12	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

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Client Sample ID: ***394-6/0-1'*** Sample Matrix: ***S*** Sample Collected: ***07/20/00 08:25:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-22A		**SW846 ME/8015A Diesel Range Organics by GC/FID**							
X00267	XG.2000.784-16		Diesel Range Organics	48	mg / Kg	1	25		07/25/00

Client Sample ID: ***394-25/0-1'*** Sample Matrix: ***S*** Sample Collected: ***07/20/00 08:25:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-23A		**SW846 3550A/8270B SVOCs by GC/MS**							
X00276	XG.2000.826-3	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-3	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67		08/01/00
X00276	XG.2000.826-3	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3		3+4 Methylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	100-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6		08/01/00
X00276	XG.2000.826-3	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	62-53-3	Aniline	ND	mg / Kg	1	0.3		08/01/00

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X00276	XG.2000.826-3	120-12-7	Anthracene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	56-55-3	Benzo (a) anthracene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	50-32-8	Benzo(a)pyrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3		Benzo(b & k)fluoranthene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	64-85-0	Benzoic acid	ND	mg / Kg	1	3		08/01/00
X00276	XG.2000.826-3	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-3	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	218-01-9	Chrysene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	117-84-0	di-n-Octylpthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	206-44-0	Fluoranthene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	86737	Fluorene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-3	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	78-59-1	Isophorone	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	91-20-3	Naphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	85-01-8	Phenanthrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	108-95-2	Phenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-3	129-00-0	Pyrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-3	110-86-1	Pyridine	ND	mg / Kg	1	0.3		08/01/00

0007216-23C **SW846 1311/3010A/6010A ICP TCLP**

M00857	MW.2000.1148-51	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-51	7440-39-3	Barium	5.3	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-51	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-51	7440-47-3	Chromium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-51	7439-92-1	Lead	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-51	7782-49-2	Selenium	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-51	7440-22-4	Silver	ND	mg / L	1	0.04		08/03/00

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0007216-23C **SW846 1311/7470 CVAA TCLP**

M00861	MW.2000.1150-19	7439-97-6	Mercury	0.0006	mg / L	1	0.0002		08/03/00

Client Sample ID ***394-25/0-1'*** Sample Matrix ***S*** Sample Collected ***07/20/00 08:25:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-24A		**SW846 8260A Purgeable VOCs by GC/MS**							
X00274	XG.2000.822-17	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.867-3	95-50-1	1,2 Dichlorobenzene	0.024	mg / Kg	1	0.005	6B	08/02/00
X00274	XG.2000.822-17	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.867-3	106-46-7	1,4 Dichlorobenzene	0.008	mg / Kg	1	0.005	6B	08/02/00
X00274	XG.2000.822-17	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	67-64-1	Acetone	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-17	107-02-8	Acrolein	ND	mg / Kg	1	0.1		08/02/00
X00274	XG.2000.822-17	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		08/02/00
X00274	XG.2000.822-17	71-43-2	Benzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	75-25-2	Bromoform	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	67-66-3	Chloroform	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		08/02/00

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X00274	XG.2000.822-17	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17		Freon 113	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	75-71-8	Freon 12	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-17	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-17	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		08/02/00
X00274	XG.2000.822-17	100-42-5	Styrene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	108-88-3	Toluene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-17	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-17	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		08/02/00

Client Sample ID: ***394-25/1-1.5'*** Sample Matrix: ***S*** Sample Collected: ***07/20/00 08:40:00***

Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-25A		**SW846 3550A/8270B SVOCs by GC/MS**							
X00276	XG.2000.826-9	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5	4	08/01/00
X00276	XG.2000.826-9	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	105-67-9	2,4-Dimethylphenol	1.3	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67	4	08/01/00
X00276	XG.2000.826-9	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	95-48-7	2-Methylphenol	0.14	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9		3+4 Methylphenol	1.2	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-4	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	8	0.3		08/01/00
X00276	XG.2000.826-9	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3	4	08/01/00

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X00276	XG.2000.826-9	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	100-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6	4	08/01/00
X00276	XG.2000.826-9	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	62-53-3	Aniline	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	120-12-7	Anthracene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-4	56-55-3	Benzo (a) anthracene	ND	mg / Kg	8	0.03		08/01/00
X00276	XG.2000.826-4	50-32-8	Benzo(a)pyrene	ND	mg / Kg	8	0.03		08/01/00
X00276	XG.2000.826-4		Benzo(b & k)fluoranthene	0.56	mg / Kg	8	0.03		08/01/00
X00276	XG.2000.826-4	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	8	0.3		08/01/00
X00276	XG.2000.826-9	64-85-0	Benzoic acid	ND	mg / Kg	1	3	4	08/01/00
X00276	XG.2000.826-9	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5	4	08/01/00
X00276	XG.2000.826-9	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-4	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	8	0.3		08/01/00
X00276	XG.2000.826-4	85-68-7	Butylbenzylphthalate	ND	mg / Kg	8	0.03		08/[illegible]
X00276	XG.2000.826-4	218-01-9	Chrysene	ND	mg / Kg	8	0.03		08/[illegible]
X00276	XG.2000.826-9	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-4	117-84-0	di-n-Octylpthalate	ND	mg / Kg	8	0.3		08/01/00
X00276	XG.2000.826-4	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	8	0.3		08/01/00
X00276	XG.2000.826-9	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	206-44-0	Fluoranthene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	86737	Fluorene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5	4	08/01/00
X00276	XG.2000.826-9	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-4	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	8	0.3		08/01/00
X00276	XG.2000.826-9	78-59-1	Isophorone	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	91-20-3	Naphthalene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-9	85-01-8	Phenanthrene	ND	mg / Kg	1	0.03	4	08/01/00
X00276	XG.2000.826-9	108-95-2	Phenol	ND	mg / Kg	1	0.3	4	08/01/00
X00276	XG.2000.826-4	129-00-0	Pyrene	ND	mg / Kg	8	0.03		08/01/00
X00276	XG.2000.826-9	110-86-1	Pyridine	ND	mg / Kg	1	0.3	4	08/01/00

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0007216-25C **SW846 1311/3010A/6010A ICP TCLP**

M00857	MW.2000.1148-55	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-55	7440-39-3	Barium	8.6	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-55	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-55	7440-47-3	Chromium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-55	7439-92-1	Lead	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-55	7782-49-2	Selenium	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-55	7440-22-4	Silver	ND	mg / L	1	0.04		08/03/00

0007216-25C **SW846 1311/7470 CVAA TCLP**

M00861	MW.2000.1150-20	7439-97-6	Mercury	ND	mg / L	1	0.0002		08/03/00

Client Sample ID ***394-25/10/1-1.5'*** Sample Matrix ***S*** Sample Collected ***07/20/00 08:40:00***

0007216-26A **SW846 8260A Purgeable VOCs by GC/MS**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
X00274	XG.2000.822-18	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	79-34-5	1,1,2,2 Tetrachloroethane	0.022	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.867-4	95-50-1	1,2 Dichlorobenzene	0.034	mg / Kg	1	0.005	6B	08/02/00
X00274	XG.2000.822-18	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.867-4	106-46-7	1,4 Dichlorobenzene	0.012	mg / Kg	1	0.005	6B	08/02/00
X00274	XG.2000.822-18	78-93-3	2-Butanone (MEK)	0.031	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	67-64-1	Acetone	0.16	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-18	107-02-8	Acrolein	ND	mg / Kg	1	0.1		08/02/00
X00274	XG.2000.822-18	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		08/02/00
X00274	XG.2000.822-18	71-43-2	Benzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	75-25-2	Bromoform	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		08/02/00

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X00274	XG.2000.822-18	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	67-66-3	Chloroform	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18		Freon 113	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	75-71-8	Freon 12	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-18	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-18	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		08/02/00
X00274	XG.2000.822-18	100-42-5	Styrene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	127-18-4	Tetrachloroethene	0.071	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	108-88-3	Toluene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-18	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		08/[illegible]
X00274	XG.2000.822-18	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-18	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		08/02/00

Client Sample ID **394-15/0-1'** Sample Matrix **S** Sample Collected **07/20/00 08:00:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-27A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-60	7429-90-5	Aluminum	3140	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-60	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-60	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-60	7440-39-3	Barium	110	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-60	7440-41-7	Beryllium	ND	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-60	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-12	7440-70-2	Calcium	1710	mg / Kg	1	15		07/28/00
M00828	MW.2000.1118-23	7440-47-3	Chromium	3.7	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-60	7440-48-4	Cobalt	1.4	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-60	7440-50-8	Copper	26.4	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1118-23	7439-89-6	Iron	4310	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-60	7439-95-4	Magnesium	696	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-60	7439-96-5	Manganese	96.3	mg / Kg	1	0.25		07/27/00

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M00828	MW.2000.1118-23	7440-02-0	Nickel	2.9	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-60	7440-09-7	Potassium	488	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-60	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-60	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-60	7440-23-5	Sodium	36.2	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-60	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-60	7440-62-2	Vanadium	6.42	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-60	7440-66-6	Zinc	33.5	mg / Kg	1	5		07/27/00

0007216-27A SW846 3050A/7000 series AA-FL

M00828	MW.2000.1129-34	7439-92-1	Lead	10.9	mg / Kg	1	5		07/31/00

0007216-27A SW846 7471 CVAA

M00853	MW.2000.1140-13	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

Client Sample ID **394-15/0-1'** Sample Matrix **S** Sample Collected **07/20/00 08:00:00**

0007216-28A SW846 ME/8015A Diesel Range Organics by GC/FID

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
X00267	XG.2000.784-17		Diesel Range Organics	ND	mg / Kg	1	25		07/25/00

Client Sample ID **394-18/1-1.5'** Sample Matrix **S** Sample Collected **07/20/00 08:15:00**

0007216-29A SW846 8260A Purgeable VOCs by GC/MS

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
X00274	XG.2000.822-12	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-12	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	2	08/02/00

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X00274	XG.2000.822-12	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	67-64-1	Acetone	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-12	107-02-8	Acrolein	ND	mg / Kg	1	0.1	2	08/02/00
X00274	XG.2000.822-12	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	2	08/02/00
X00274	XG.2000.822-12	71-43-2	Benzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	75-25-2	Bromoform	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	67-66-3	Chloroform	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12		Freon 113	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	75-71-8	Freon 12	ND	mg / Kg	1	0.05	2	08/[illegible]
X00274	XG.2000.822-12	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-12	91-20-3	Naphthalene	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01	2	08/02/00
X00274	XG.2000.822-12	100-42-5	Styrene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	108-88-3	Toluene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-12	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-12	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	2	08/02/00

Client Sample ID **394-16/0-1'** Sample Matrix **S** Sample Collected **07/20/00 09:55:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-30A		**SW846 ME/8015A Diesel Range Organics by GC/FID**							
X00272	XG.2000.784-21		Diesel Range Organics	ND	mg / Kg	1	25		07/25/00

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Client Sample ID: 394-16/0-1' | Sample Matrix: S | Sample Collected: 07/20/00 09:55:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-31A		SW846 3050A/6010A ICP							
M00828	MW.2000.1115-63	7429-90-5	Aluminum	4680	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-63	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-63	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-63	7440-39-3	Barium	200	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-63	7440-41-7	Beryllium	ND	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-63	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-13	7440-70-2	Calcium	1340	mg / Kg	1	15		07/28/00
M00828	MW.2000.1115-63	7440-47-3	Chromium	4.5	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-63	7440-48-4	Cobalt	3.2	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-63	7440-50-8	Copper	6.1	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-63	7439-89-6	Iron	6590	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-63	7439-95-4	Magnesium	777	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-63	7439-96-5	Manganese	228	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-24	7440-02-0	Nickel	3.5	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-63	7440-09-7	Potassium	651	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-63	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-63	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-63	7440-23-5	Sodium	43.1	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-63	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-63	7440-62-2	Vanadium	11.3	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-63	7440-66-6	Zinc	42.8	mg / Kg	1	5		07/27/00
0007216-31A		SW846 3050A/7000 series AA-FL							
M00828	MW.2000.1129-35	7439-92-1	Lead	33.2	mg / Kg	1	5		07/31/00
0007216-31A		SW846 7471 CVAA							
M00853	MW.2000.1140-14	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00
0007216-31B		SW846 8330							
GPL 7138	TT.2000.782-8		1,3,5-Trinitrobenzene	ND	ug/Kg	1	217	HS	09/02/00
GPL 7138	TT.2000.782-8		1,3-DNB	ND	ug/Kg	1	217	HS	09/02/00
GPL 7138	TT.2000.782-8		2,4,6-Trinitrotoluene	ND	ug/Kg	1	217	HS	09/02/00
GPL 7138	TT.2000.782-8		2,4-Dinitrotoluene	ND	ug/Kg	1	217	HS	09/02/00
GPL 7138	TT.2000.782-8		2,6-Dinitrotoluene	ND	ug/Kg	1	217	HS	09/02/00
GPL 7138	TT.2000.782-8		2-Amino-4,6-Dinitrotoluene	ND	ug/Kg	1	217	HS	09/02/00
GPL 7138	TT.2000.782-8		4-Amino-2,6-Dinitrotoluene	ND	ug/Kg	1	217	HS	09/02/00
GPL 7138	TT.2000.782-8		HMX	32500	ug/Kg	1	435	HS	09/02/00
GPL 7138	TT.2000.782-8		m-Nitrotoluene	ND	ug/Kg	1	435	HS	09/02/00
GPL 7138	TT.2000.782-8		Nitrobenzene	ND	ug/Kg	1	217	HS	09/02/00
GPL 7138	TT.2000.782-8		o-Nitrotoluene	ND	ug/Kg	1	435	HS	09/02/00
GPL 7138	TT.2000.782-8		p-Nitrotoluene	ND	ug/Kg	1	435	HS	09/02/00

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GP78115	TT.2000.982-5		PETN	ND	ug/Kg	1	430	S	09/25/00
GPL 7138	TT.2000.782-8		RDX	223	ug/Kg	1	435	5HS	09/02/00
GPL 7138	TT.2000.782-8		Tetryl	ND	ug/Kg	1	435	HS	09/02/00

Client Sample ID **394-26/0-1'** Sample Matrix **S** Sample Collected **07/20/00 09:55:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-32A		**EPA 418 Modified**							
X00285	MW.2000.1187-4		TRPH	45	mg / Kg	1	25		08/09/00
0007216-32A		**SW846 3550A/8270B SVOCs by GC/MS**							
X00276	XG.2000.826-10	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-10	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3		08/[illegible]
X00276	XG.2000.826-10	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03		08/[illegible]
X00276	XG.2000.826-10	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67		08/01/00
X00276	XG.2000.826-10	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10		3+4 Methylphenol	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	100-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6		08/01/00
X00276	XG.2000.826-10	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	62-53-3	Aniline	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	120-12-7	Anthracene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03		08/01/00

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X00276	XG.2000.826-10	56-55-3	Benzo (a) anthracene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-5	50-32-8	Benzo(a)pyrene	ND	mg / Kg	9	0.03		08/01/00
X00276	XG.2000.826-5		Benzo(b & k)fluoranthene	ND	mg / Kg	9	0.03		08/01/00
X00276	XG.2000.826-5	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	9	0.3		08/01/00
X00276	XG.2000.826-10	64-85-0	Benzoic acid	ND	mg / Kg	1	3		08/01/00
X00276	XG.2000.826-10	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-10	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	117-81-7	bis(2-Ethylhexyl)phthalate	0.33	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	218-01-9	Chrysene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-5	117-84-0	di-n-Octylpthalate	ND	mg / Kg	9	0.3		08/01/00
X00276	XG.2000.826-5	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	9	0.3		08/01/00
X00276	XG.2000.826-10	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	206-44-0	Fluoranthene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	86737	Fluorene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5		08/01/00
X00276	XG.2000.826-10	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-5	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	9	0.3		08/01/00
X00276	XG.2000.826-10	78-59-1	Isophorone	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	91-20-3	Naphthalene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	85-01-8	Phenanthrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	108-95-2	Phenol	ND	mg / Kg	1	0.3		08/01/00
X00276	XG.2000.826-10	129-00-0	Pyrene	ND	mg / Kg	1	0.03		08/01/00
X00276	XG.2000.826-10	110-86-1	Pyridine	ND	mg / Kg	1	0.3		08/01/00

0007216-32C **SW846 1311/3010A/6010A ICP TCLP**

M00857	MW.2000.1148-56	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-56	7440-39-3	Barium	3.2	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-56	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-56	7440-47-3	Chromium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-56	7439-92-1	Lead	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-56	7782-49-2	Selenium	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-56	7440-22-4	Silver	ND	mg / L	1	0.04		08/03/00

0007216-32C **SW846 1311/7470 CVAA TCLP**

M00861	MW.2000.1150-21	7439-97-6	Mercury	ND	mg / L	1	0.0002		08/03/00

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **0007216** **6E20 MR3R 0331 ULM0**

Client Sample ID: ***394-26/0-1'*** Sample Matrix: ***S*** Sample Collected: ***07/20/00 09:55:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-33A		**SW846 8260A Purgeable VOCs by GC/MS**							
X00274	XG.2000.822-13	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.867-1	95-50-1	1,2 Dichlorobenzene	0.006	mg / Kg	1	0.005	2B	08/02/00
X00274	XG.2000.822-13	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-13	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/[illegible]
X00274	XG.2000.822-13	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	2	08/[illegible]
X00274	XG.2000.822-13	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	67-64-1	Acetone	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-13	107-02-8	Acrolein	ND	mg / Kg	1	0.1	2	08/02/00
X00274	XG.2000.822-13	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	2	08/02/00
X00274	XG.2000.822-13	71-43-2	Benzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	75-25-2	Bromoform	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	67-66-3	Chloroform	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13		Freon 113	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	75-71-8	Freon 12	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-13	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	2	08/[illegible]

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X00274	XG.2000.822-13	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-13	91-20-3	Naphthalene	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01	2	08/02/00
X00274	XG.2000.822-13	100-42-5	Styrene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	108-88-3	Toluene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-13	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-13	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	2	08/02/00

Client Sample ID: *394-26/1-1.5'* Sample Matrix: *S* Sample Collected: *07/20/00 09:45:00*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-34A		SW846 3550A/8270B SVOCs by GC/MS							
X00276	XG.2000.826-11	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5	3	08/01/00
X00276	XG.2000.826-11	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67	3	08/01/00
X00276	XG.2000.826-11	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11		3+4 Methylphenol	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3	3	08/01/00

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X00276	XG.2000.826-11	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	1[illegible]-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6	3	08/01/00
X00276	XG.2000.826-11	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	62-53-3	Aniline	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	120-12-7	Anthracene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	56-55-3	Benzo (a) anthracene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-6	50-32-8	Benzo(a)pyrene	ND	mg / Kg	7	0.03	3	08/01/00
X00276	XG.2000.826-6		Benzo(b & k)fluoranthene	ND	mg / Kg	7	0.03	3	08/01/00
X00276	XG.2000.826-6	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	7	0.3	3	08/01/00
X00276	XG.2000.826-11	64-85-0	Benzoic acid	ND	mg / Kg	1	3	3	08/01/00
X00276	XG.2000.826-11	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5	3	08/01/00
X00276	XG.2000.826-11	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	218-01-9	Chrysene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-6	117-84-0	di-n-Octylpthalate	ND	mg / Kg	7	0.3	3	08/01/00
X00276	XG.2000.826-6	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	7	0.3	3	08/[illegible]
X00276	XG.2000.826-11	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03	3	08/[illegible]
X00276	XG.2000.826-11	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	206-44-0	Fluoranthene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	86737	Fluorene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5	3	08/01/00
X00276	XG.2000.826-11	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-6	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	7	0.3	3	08/01/00
X00276	XG.2000.826-11	78-59-1	Isophorone	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	91-20-3	Naphthalene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	85-01-8	Phenanthrene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	108-95-2	Phenol	ND	mg / Kg	1	0.3	3	08/01/00
X00276	XG.2000.826-11	129-00-0	Pyrene	ND	mg / Kg	1	0.03	3	08/01/00
X00276	XG.2000.826-11	110-86-1	Pyridine	ND	mg / Kg	1	0.3	3	08/01/00

0007216-34C **SW846 1311/3010A/6010A ICP TCLP**

M00857	MW.2000.1148-57	7440-38-2	Arsenic	ND	mg / L	1	0.1		08/03/00
M00857	MW.2000.1148-57	7440-39-3	Barium	2.9	mg / L	1	0.1		08/03/00

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M00857	MW.2000.1148-57	7440-43-9	Cadmium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-57	7440-47-3	Chromium	ND	mg / L	1	0.02		08/03/00
M00857	MW.2000.1148-57	7439-92-1	Lead	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-57	7782-49-2	Selenium	ND	mg / L	1	0.05		08/03/00
M00857	MW.2000.1148-57	7440-22-4	Silver	ND	mg / L	1	0.04		08/03/00

0007216-34C SW846 1311/7470 CVAA TCLP

M00861	MW.2000.1150-22	7439-97-6	Mercury	ND	mg / L	1	0.0002		08/03/00

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0007216-35A SW846 8260A Purgeable VOCs by GC/MS

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
X00274	XG.2000.822-16	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.867-2	95-50-1	1,2 Dichlorobenzene	0.010	mg / Kg	1	0.005	6B	08/02/00
X00274	XG.2000.822-16	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-16	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	67-64-1	Acetone	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-16	107-02-8	Acrolein	ND	mg / Kg	1	0.1		08/02/00
X00274	XG.2000.822-16	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		08/02/00
X00274	XG.2000.822-16	71-43-2	Benzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	75-25-2	Bromoform	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	67-66-3	Chloroform	ND	mg / Kg	1	0.005		08/02/00

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X00274	XG.2000.822-16	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16		Freon 113	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	75-71-8	Freon 12	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-16	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-16	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		08/02/00
X00274	XG.2000.822-16	100-42-5	Styrene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	108-88-3	Toluene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-16	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-16	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		08/[illegible]

Client Sample ID **394-22/2.5** Sample Matrix **S** Sample Collected **07/20/00 10:00:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-36A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-64	7429-90-5	Aluminum	6160	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-64	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-64	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-64	7440-39-3	Barium	72.8	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-64	7440-41-7	Beryllium	0.55	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-64	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-14	7440-70-2	Calcium	1150	mg / Kg	1	15		07/28/00
M00828	MW.2000.1115-64	7440-47-3	Chromium	4.8	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-64	7440-48-4	Cobalt	2.0	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-64	7440-50-8	Copper	4.2	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-64	7439-89-6	Iron	8280	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-64	7439-95-4	Magnesium	1060	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-64	7439-96-5	Manganese	249	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-25	7440-02-0	Nickel	2.7	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-64	7440-09-7	Potassium	748	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-64	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-64	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00

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M00828	MW.2000.1115-64	7440-23-5	Sodium	77.7	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-64	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-64	7440-62-2	Vanadium	8.19	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-64	7440-66-6	Zinc	33.9	mg / Kg	1	5		07/27/00
0007216-36A		**SW846 3050A/7000 series AA-FL**							
M00828	MW.2000.1129-36	7439-92-1	Lead	9.4	mg / Kg	1	5		07/31/00
0007216-36A		**SW846 7471 CVAA**							
M00853	MW.2000.1140-15	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00
0007216-36B		**SW846 8330**							
GPL 7138	TT.2000.782-9		1,3,5-Trinitrobenzene	ND	ug/Kg	1	185	HS	09/02/00
GPL 7138	TT.2000.782-9		1,3-DNB	ND	ug/Kg	1	185	HS	09/02/00
GPL 7138	TT.2000.782-9		2,4,6-Trinitrotoluene	ND	ug/Kg	1	185	HS	09/02/00
GPL 7138	TT.2000.782-9		2,4-Dinitrotoluene	ND	ug/Kg	1	185	HS	09/02/00
GPL 7138	TT.2000.782-9		2,6-Dinitrotoluene	ND	ug/Kg	1	185	HS	09/02/00
GPL 7138	TT.2000.782-9		2-Amino-4,6-Dinitrotoluene	ND	ug/Kg	1	185	HS	09/02/00
GPL 7138	TT.2000.782-9		4-Amino-2,6-Dinitrotoluene	ND	ug/Kg	1	185	HS	09/02/00
GPL 7138	TT.2000.782-9		HMX	5190	ug/Kg	1	370	HS	09/02/00
GPL 7138	TT.2000.782-9		m-Nitrotoluene	ND	ug/Kg	1	370	HS	09/02/00
GPL 7138	TT.2000.782-9		Nitrobenzene	ND	ug/Kg	1	185	HS	09/02/00
GPL 7138	TT.2000.782-9		o-Nitrotoluene	ND	ug/Kg	1	370	HS	09/02/00
[illegible].7138	TT.2000.782-9		p-Nitrotoluene	ND	ug/Kg	1	370	HS	09/02/00
[illegible]78115	TT.2000.982-6		PETN	ND	ug/Kg	1	370	S	09/25/00
GPL 7138	TT.2000.782-9		RDX	244	ug/Kg	1	370	5HS	09/02/00
GPL 7138	TT.2000.782-9		Tetryl	ND	ug/Kg	1	370	HS	09/02/00

Client Sample ID: **394-22/2.5'** Sample Matrix: **S** Sample Collected: **07/20/00 10:00:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-37A		**EPA 418 Modified**							
X00285	MW.2000.1147-11		TRPH	ND	mg / Kg	1	25		08/02/00
0007216-37A		**SW846 ME/8015A Diesel Range Organics by GC/FID**							
X00272	XG.2000.784-24		Diesel Range Organics	ND	mg / Kg	1	25		07/25/00
0007216-37B		**SW846 8260A Purgeable VOCs by GC/MS**							
X00274	XG.2000.822-20	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.867-5	95-50-1	1,2 Dichlorobenzene	0.022	mg / Kg	1	0.005	2	08/03/00

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X00274	XG.2000.822-20	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	2	08/03/00
X00274	XG.2000.867-5	106-46-7	1,4 Dichlorobenzene	0.010	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	67-64-1	Acetone	ND	mg / Kg	1	0.05	2	08/03/00
X00274	XG.2000.822-20	107-02-8	Acrolein	ND	mg / Kg	1	0.1	2	08/03/00
X00274	XG.2000.822-20	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	2	08/03/00
X00274	XG.2000.822-20	71-43-2	Benzene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	75-25-2	Bromoform	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	2	08[illegible]
X00274	XG.2000.822-20	67-66-3	Chloroform	ND	mg / Kg	1	0.005	2	08[illegible]
X00274	XG.2000.822-20	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20		Freon 113	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	75-71-8	Freon 12	ND	mg / Kg	1	0.05	2	08/03/00
X00274	XG.2000.822-20	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	2	08/03/00
X00274	XG.2000.822-20	91-20-3	Naphthalene	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01	2	08/03/00
X00274	XG.2000.822-20	100-42-5	Styrene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	108-88-3	Toluene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	2	08/03/00
X00274	XG.2000.822-20	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	2	08/03/00
X00274	XG.2000.822-20	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	2	08/03/00

Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS
Project: 0007216 6E20 MR3R 0331 ULM0

Client Sample ID: 394-17/0-1' | Sample Matrix: S | Sample Collected: 07/20/00 10:15:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-38A		SW846 3050A/6010A ICP							
M00828	MW.2000.1115-65	7429-90-5	Aluminum	10500	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-65	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-65	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-65	7440-39-3	Barium	160	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-65	7440-41-7	Beryllium	0.64	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-65	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-17	7440-70-2	Calcium	2480	mg / Kg	1	15		07/28/00
M00828	MW.2000.1115-65	7440-47-3	Chromium	5.2	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-65	7440-48-4	Cobalt	3.4	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-65	7440-50-8	Copper	5.8	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-65	7439-89-6	Iron	8140	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-65	7439-95-4	Magnesium	1180	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-65	7439-96-5	Manganese	184	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1125-17	7440-02-0	Nickel	5.6	mg / Kg	1	2		07/28/00
M00828	MW.2000.1115-65	7440-09-7	Potassium	1180	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-65	7782-49-2	Selenium	3.1	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-65	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-65	7440-23-5	Sodium	95.8	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-65	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-65	7440-62-2	Vanadium	10.4	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-65	7440-66-6	Zinc	21.3	mg / Kg	1	5		07/27/00
0007216-38A		SW846 3050A/7000 series AA-FL							
M00828	MW.2000.1129-37	7439-92-1	Lead	18.9	mg / Kg	1	5		07/31/00
0007216-38A		SW846 7471 CVAA							
M00853	MW.2000.1140-16	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

Client Sample ID: 394-17/0-1' | Sample Matrix: S | Sample Collected: 07/20/00 10:15:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-39A		SW846 ME/8015A Diesel Range Organics by GC/FID							
X00272	XG.2000.784-25		Diesel Range Organics	ND	mg / Kg	1	25		07/25/00

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **0007216 6E20 MR3R 0331 ULM0**

Client Sample ID: ***394-20/1-1.5'*** Sample Matrix: ***S*** Sample Collected: ***07/20/00 10:20:00***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-40A		**SW846 8260A Purgeable VOCs by GC/MS**							
X00274	XG.2000.822-14	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-14	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	2	08/[illegible]
X00274	XG.2000.822-14	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	67-64-1	Acetone	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-14	107-02-8	Acrolein	ND	mg / Kg	1	0.1	2	08/02/00
X00274	XG.2000.822-14	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	2	08/02/00
X00274	XG.2000.822-14	71-43-2	Benzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	75-25-2	Bromoform	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	67-66-3	Chloroform	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14		Freon 113	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	75-71-8	Freon 12	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-14	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	2	08/02/00

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X00274	XG.2000.822-14	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	2	08/02/00
X00274	XG.2000.822-14	91-20-3	Naphthalene	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01	2	08/02/00
X00274	XG.2000.822-14	100-42-5	Styrene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	108-88-3	Toluene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	2	08/02/00
X00274	XG.2000.822-14	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	2	08/02/00
X00274	XG.2000.822-14	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	2	08/02/00

Client Sample ID: *394-23/2'* Sample Matrix: *S* Sample Collected: *07/20/00 10:25:00*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-41A		**SW846 3050A/6010A ICP**							
M00828	MW.2000.1115-66	7429-90-5	Aluminum	6100	mg / Kg	1	25		07/27/00
M00828	MW.2000.1115-66	7440-36-0	Antimony	ND	mg / Kg	1	1.5		07/27/00
M00828	MW.2000.1115-66	7440-38-2	Arsenic	ND	mg / Kg	1	3		07/27/00
M00828	MW.2000.1115-66	7440-39-3	Barium	150	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-66	7440-41-7	Beryllium	0.60	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-66	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		07/27/00
M00828	MW.2000.1125-18	7440-70-2	Calcium	2810	mg / Kg	1	15		07/28/00
M00828	MW.2000.1115-66	7440-47-3	Chromium	4.4	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-66	7440-48-4	Cobalt	2.4	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-66	7440-50-8	Copper	3.9	mg / Kg	1	0.5		07/27/00
M00828	MW.2000.1115-66	7439-89-6	Iron	7970	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-66	7439-95-4	Magnesium	1000	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-66	7439-96-5	Manganese	228	mg / Kg	1	0.25		07/27/00
M00828	MW.2000.1118-28	7440-02-0	Nickel	2.6	mg / Kg	1	2		07/27/00
M00828	MW.2000.1115-66	7440-09-7	Potassium	819	mg / Kg	1	10		07/27/00
M00828	MW.2000.1115-66	7782-49-2	Selenium	ND	mg / Kg	1	2.5		07/27/00
M00828	MW.2000.1115-66	7440-22-4	Silver	ND	mg / Kg	1	1		07/27/00
M00828	MW.2000.1115-66	7440-23-5	Sodium	83.8	mg / Kg	1	15		07/27/00
M00828	MW.2000.1115-66	7440-28-0	Thallium	ND	mg / Kg	1	20		07/27/00
M00828	MW.2000.1115-66	7440-62-2	Vanadium	9.67	mg / Kg	1	0.15		07/27/00
M00828	MW.2000.1115-66	7440-66-6	Zinc	23.9	mg / Kg	1	5		07/27/00
0007216-41A		**SW846 3050A/7000 series AA-FL**							
M00828	MW.2000.1129-40	7439-92-1	Lead	19.0	mg / Kg	1	5		07/31/00

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0007216-41A **SW846 7471 CVAA**

M00853	MW.2000.1140-17	7439-97-6	Mercury	ND	mg / Kg	1	0.05		08/02/00

Client Sample ID: *394-23/2'* Sample Matrix: *S* Sample Collected: *07/20/00 10:25:00*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0007216-42A		**SW846 ME/8015A Diesel Range Organics by GC/FID**							
X00272	XG.2000.784-26		Diesel Range Organics	ND	mg / Kg	1	25		07/25/00
0007216-42B		**SW846 8260A Purgeable VOCs by GC/MS**							
X00274	XG.2000.822-15	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	75-34-3	1,1 Dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005		08/[illegible]
X00274	XG.2000.822-15	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005		08/[illegible]
X00274	XG.2000.822-15	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-15	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	67-64-1	Acetone	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-15	107-02-8	Acrolein	ND	mg / Kg	1	0.1		08/02/00
X00274	XG.2000.822-15	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1		08/02/00
X00274	XG.2000.822-15	71-43-2	Benzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	75-25-2	Bromoform	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	74-83-9	Bromomethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	75-00-3	Chloroethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	67-66-3	Chloroform	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	74-87-3	Chloromethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005		08/02/00

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Project: 0007216 6E20 MR3R 0331 ULM0

X00274	XG.2000.822-15	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15		Freon 113	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	75-71-8	Freon 12	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-15	74-88-4	Iodomethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05		08/02/00
X00274	XG.2000.822-15	91-20-3	Naphthalene	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	108-38-3/106-42	p/m Xylenes	ND	mg / Kg	1	0.01		08/02/00
X00274	XG.2000.822-15	100-42-5	Styrene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	108-88-3	Toluene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005		08/02/00
X00274	XG.2000.822-15	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025		08/02/00
X00274	XG.2000.822-15	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025		08/02/00

**** Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. ****

**** ND = Not detected: less than the sample specific Detection Limit. Results relate only to the items tested. ****

footnote

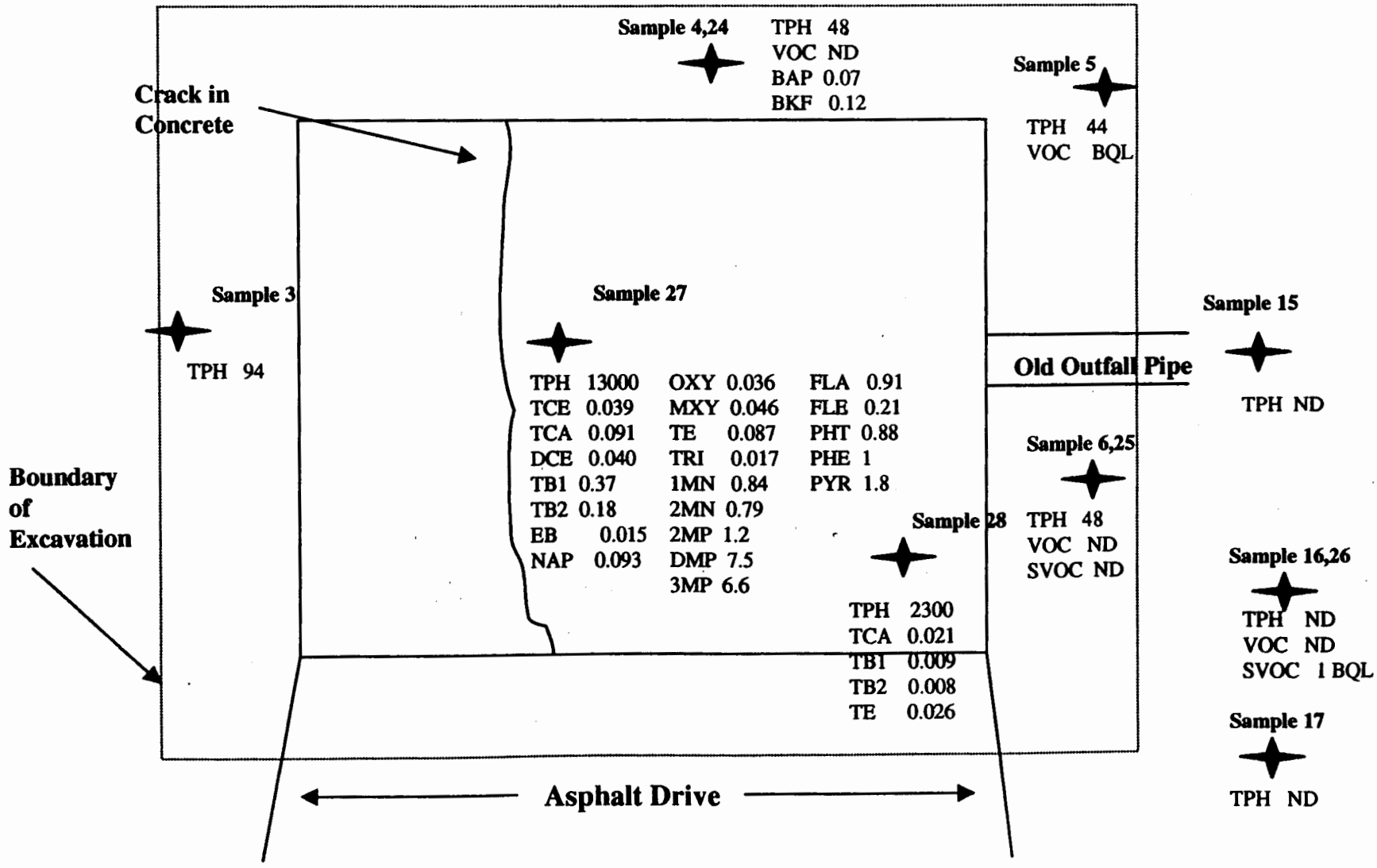
1. Sample pH was 5 at the time of analysis, exceeding QA/QC criteria of pH <2.
2. Sample was received with headspace.
3. This sample was utilized for matrix spike and spike duplicate analysis. Please note that some of the spike recoveries were out of criteria, suggesting matrix interference. This should be taken into consideration when reviewing the data.
4. Please note that a surrogate recovery was higher than QC criteria suggesting matrix interference.
5. Value is less than the reporting limit but greater than the MDL.
6. The sample had headspace at the time of analysis.

ATTACHMENT B

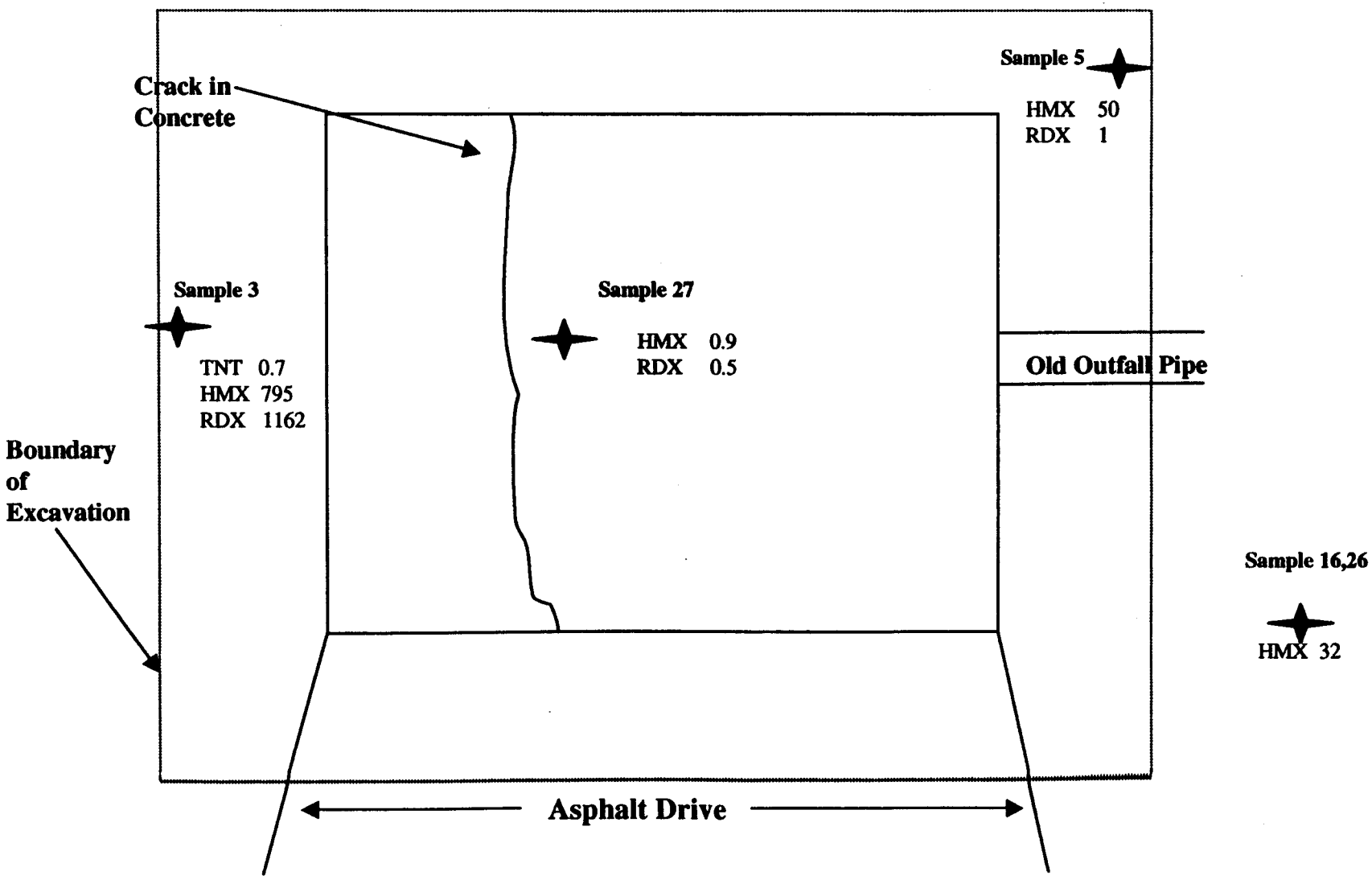
SCHEMATICS SHOWING SAMPLES COLLECTED

AT TA-16-394 BURN TRAY

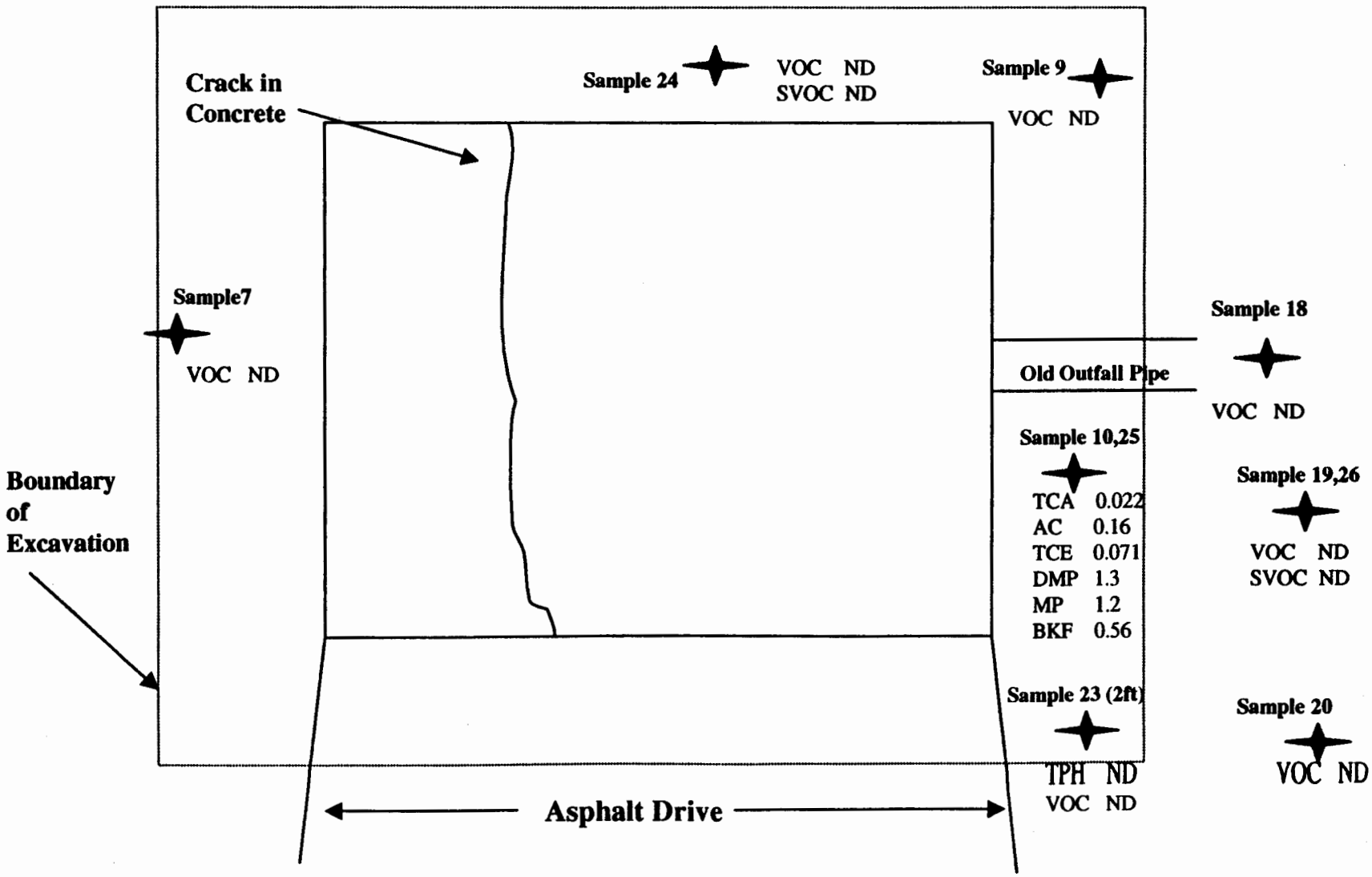
TA-16-394 Burn Tray
Preliminary Data from 0-1 ft
TPH, VOC and Semi-VOC (mg/kg)



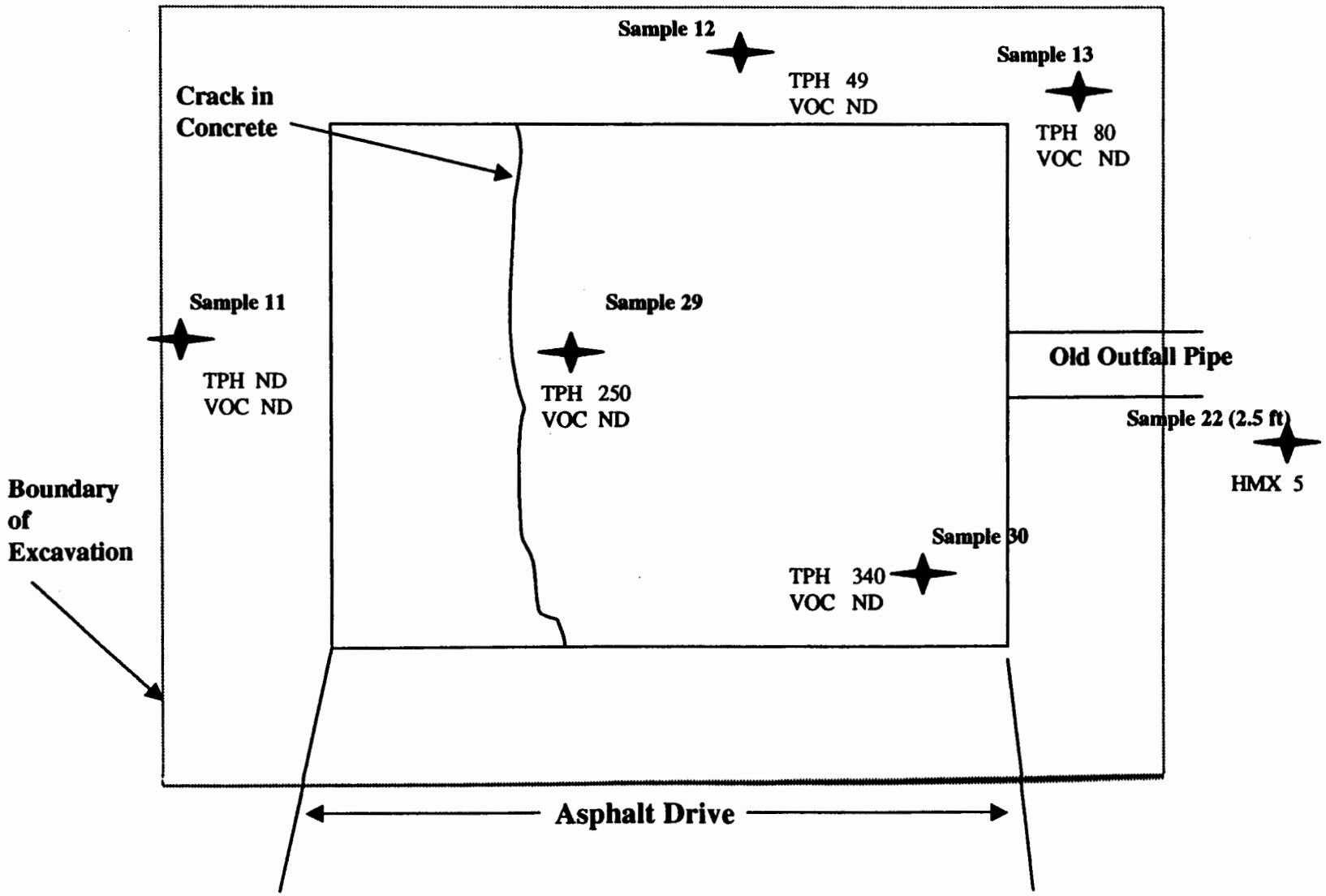
TA-16-394 Burn Tray
Preliminary Data from 0-1 ft
High Explosives (mg/kg)



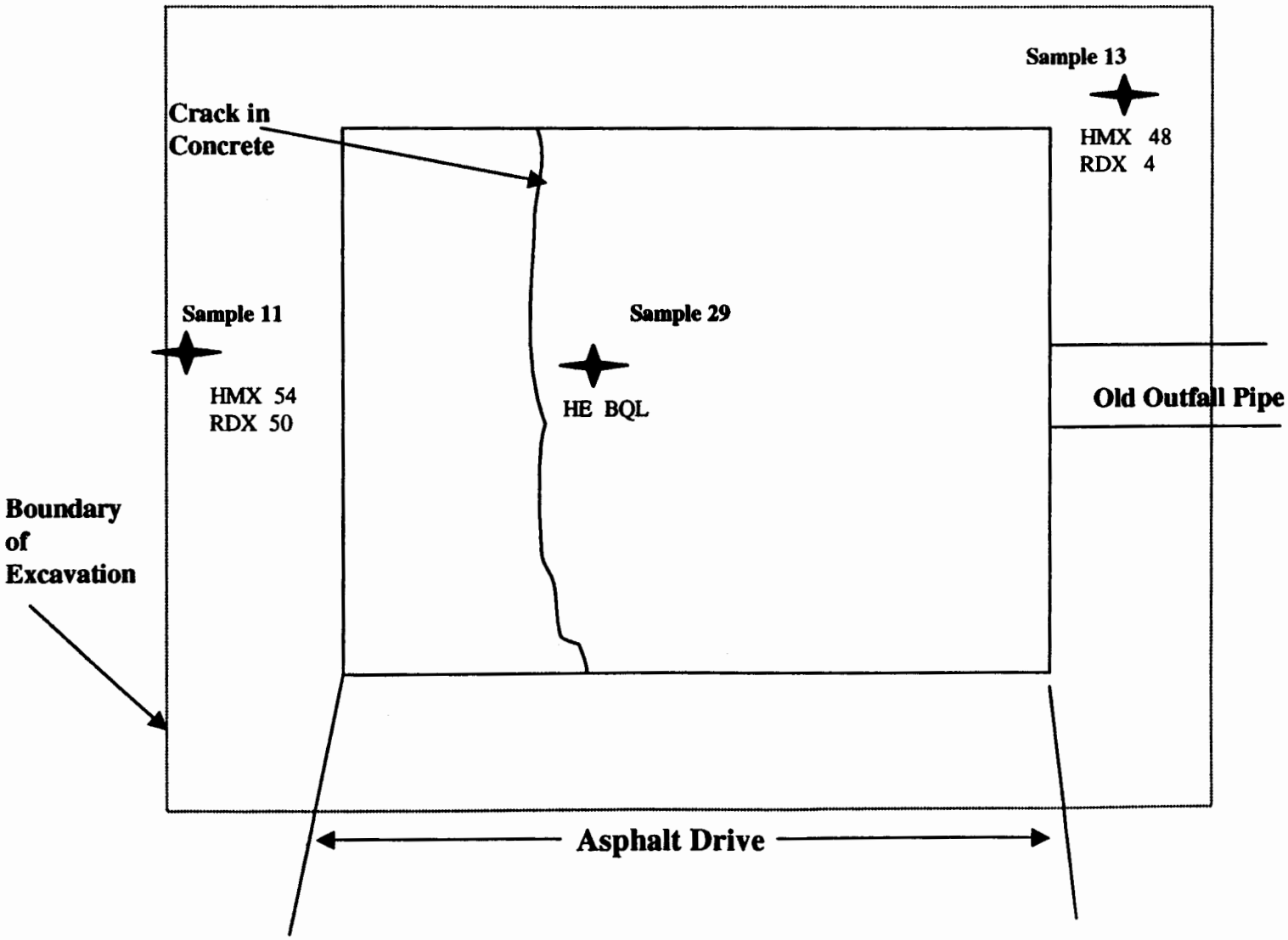
TA-16-394 Burn Tray
Preliminary Data from 1-1.5 ft
TPH, VOC and Semi-VOC (mg/kg)



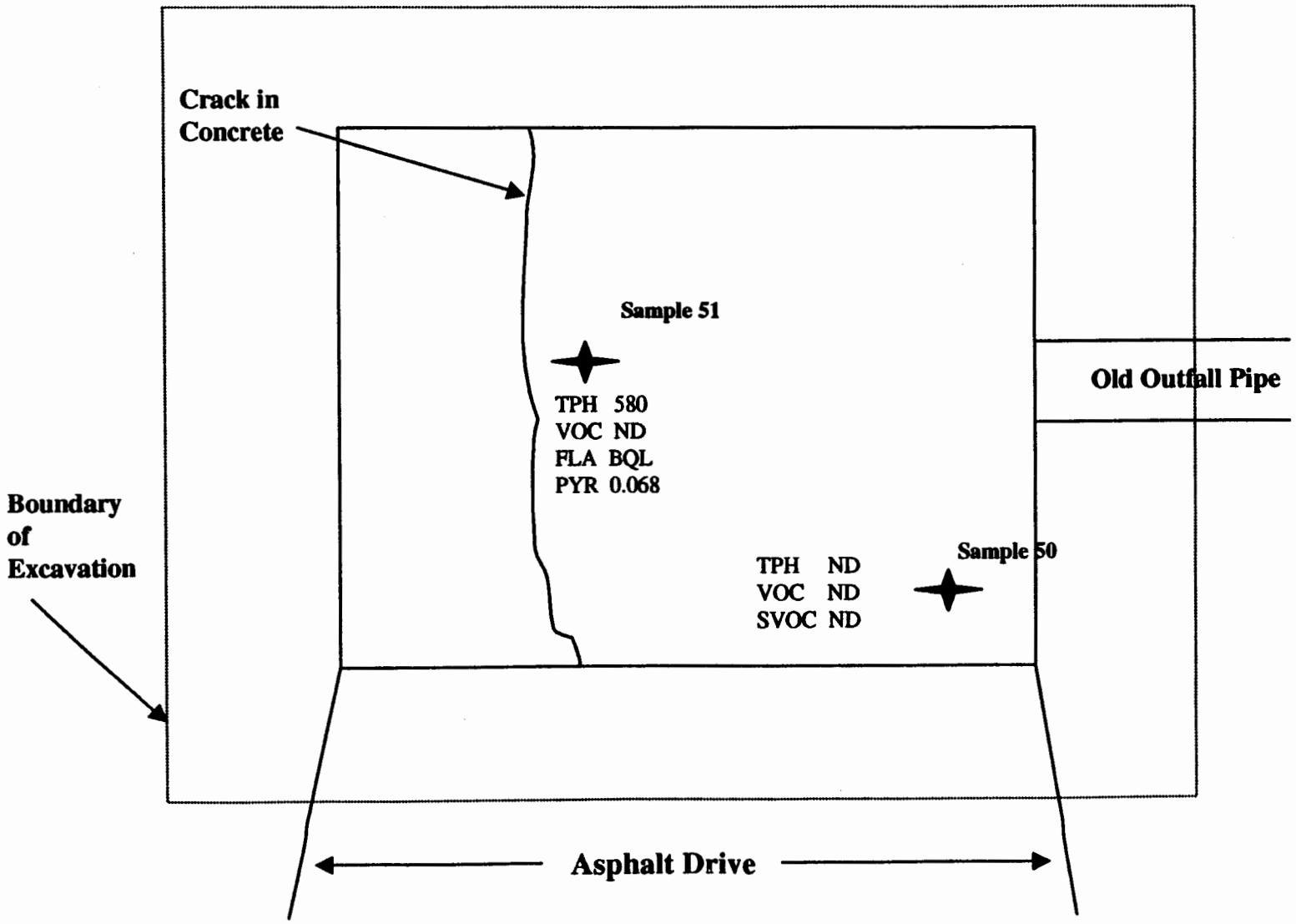
TA-16-394 Burn Tray
Preliminary Data from 3-4 ft
TPH, VOC and Semi-VOC (mg/kg)



TA-16-394 Burn Tray
Preliminary Data from 3-4 ft
High Explosives (mg/kg)



TA-16-394 Burn Tray
Preliminary Data from 5 ft
TPH, VOC and Semi-VOC (mg/kg)



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Date: October 31, 2000
Refer to: ER2000-0629

Mr. John Young, Corrective Action Project Leader
Permits Management Program
NMED – Hazardous Waste Bureau
2044 A Galisteo
Santa Fe, NM 87502

SUBJECT: REQUEST FOR "NO LONGER CONTAINED IN" DETERMINATION FOR THE TECHNICAL AREA (TA)-16-394 BURN TRAY

Dear Mr. Young:

The purpose of this letter is to request that the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) use their discretionary authority to determine that environmental media generated during partial closure activities at the TA-16-394 Burn Tray do not warrant management as F-listed hazardous waste. Partial closure activities for this waste management structure are presented in Closure Plan for the TA-16-394 Burn Tray (LA-UR-99-6216), which was submitted to your office on December 2,1999 (cover letter referenced by E/ER:99-343).

Partial closure activities completed to date include the removal of the burn tray, the concrete structure and associated gravel and sand, and environmental media (soil/tuff) surrounding and beneath the structure. The burn tray has been flashed and will be recycled while the concrete structure and gravel and sand have been appropriately characterized for disposal as hazardous waste. Approximately 120 cubic yards of environmental media (soil/tuff) removed adjacent to and beneath the structure are currently being managed and stored in a less than 90-day accumulation area. Recently received analytical sample results associated with the environmental media indicate the presence of low levels of 1,1,2,2-tetrachloroethane, tetrachloroethylene, trichloroethylene, toluene, and acetone that are known or believed to have originated from processes for which listed wastes are identified.

The Los Alamos National Laboratory proposes to use the Environmental Protection Agency Region 6 Human Health Medium-Specific Screening Levels (MSSLs) for comparison to as-found concentrations to determine whether any of the organic constituents detected in excavated environmental media from the TA-16-394 Burn Tray warrant management as F-listed hazardous waste. The proposed MSSLs are based on the industrial receptor using direct exposure routes (inhalation, ingestion, and dermal contact) and are derived using conservative exposure parameters for reasonable maximum exposure. These MSSLs, based on an industrial receptor, are appropriate because the environmental media excavated as part of partial closure activities will be properly disposed in a Subtitle D engineered facility.

The organic constituents, maximum concentrations, and the proposed MSSLs are shown in the table below:

Organic Constituent	Maximum Concentration (mg/kg)	MSSL (mg/kg)
1,1,2,2-tetrachlorethane	0.022	0.84
tetrachloroethylene	0.071	13
2-butanone	0.031	26000
toluene	0.006	520
acetone	0.16	5800

All of the as-found concentrations of the organic constituents in the excavated environmental media are below the MSSLs. If and when NMED determines that the environmental media generated during partial closure activities at the TA-16-394 Burn Tray do not warrant management as F-listed hazardous waste, the material will be managed and disposed appropriately as solid waste.

The LANL believes that a "no longer contained in" determination for the organic constituents listed above would expedite completion of the partial closure of the TA-16-394 Burn Tray and reduce overall project costs. If you have any questions, please contact Dave McInroy at (505) 667-0819 or Gene Turner at (505) 667-.5794.

Sincerely,

for Julie A. Canepa, Program Manager
Los Alamos National Laboratory
Environmental Restoration

Sincerely,

Theodore J. Taylor, Project Manager
Department of Energy
Los Alamos Area Office

JC/TT/VR/vn

ER2000-0629
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