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20 November 2000

BOEING

Mr. Jerome Johnson
U.S. Environmental Protection Agency Region VII
901 North Fifth Street
Kansas City, Kansas 66101

Enclosure: Phase 2 Environmental Site Assessment Report for Boeing Fabrication Operations Facility, St. Louis, Missouri (Volume 2)

Dear Mr. Johnson;

Enclosed are two copies of the Phase 2 environmental Site assessment Report, Volume 2. This document addresses areas identified in the Focused Work Plan for the Building 27 naval Weapons Industrial Plant (NWIRP), as requested by MDNR, as well as other areas of the Tract I complex. This document is provided by the corrective Action Conditions of the Hazardous Waste Management Facility Permit # MOD 000 818 963.

Please contact me should you need additional information.

Sincerely,

Joe Haake

Joseph W. Haake, Group Manager
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Phase 2 Environmental Site Assessment Report
for
Boeing Fabrication Operations Facility
St. Louis, Missouri
(Volume 2)

Prepared for:
The Boeing Company
St. Louis, Missouri

Prepared by:
Environmental Science & Engineering, Inc.
St. Louis, Missouri

November 16, 2000

ESE Project No. 510098.0300

STATE OF MISSOURI
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REGISTERED GEOLOGIST

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List of Acronyms and Abbreviations

ARAR	applicable or relevant and appropriate requirement
CALM	Cleanup Levels for Missouri
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CSF	carcinogenic slope factor
CMs	corrective measures
CMS	Corrective Measures Study
COC	constituent of concern
DCE	dichloroethene
DQL	Data Quality Level
DQO	data quality objective
EQ	Ecotoxicity Quotient
ET	Ecotox Threshold
ESA	Environmental Site Assessment
Facility	Boeing Fabrication Operations Facility
ft bls	feet below land surface
FR	Federal Register
HASP	Health and Safety Plan
ID	internal diameter
ITL	investigation threshold level
IWTP	Industrial Wastewater Treatment Plant
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
MDNR	Missouri Department of Natural Resources
MEK	methyl ethyl ketone
mg/kg	milligrams per kilogram
MIBK	methyl isobutyl ketone
MSD	Metropolitan St. Louis Sewer District
NCP	National Contingency Plan
PAH	polynuclear aromatic hydrocarbon
PCE	perchloroethylene
ppb	parts per billion
ppm	parts per million
PRG	Preliminary Remediation Goal
QA	quality assurance

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QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFD	Reference Dose
RFI	RCRA Facility Investigation
SLAPS	St. Louis Airport Site
SSL	Soil Screening Levels
SW	solid waste
SWMU	solid waste management unit
TCE	trichloroethene
UCL95	Upper 95 percent confidence level
UCL_{95}	upper 95 percent confidence levels
USC	Unified Soil Classification
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
VSI	Visual Site Inspection
°C	degrees Celsius
μg/kg	microgram per kilogram
μs/cm	unit of conductivity

1.0 Introduction

This document represents Volume 2 of the Phase 2 Environmental Site Assessment (ESA) Report for investigation activities completed at The Boeing Company's Fabrication Operations Facility in St. Louis, Missouri (Facility). The Facility is located in Hazelwood, Missouri and unincorporated sections of St. Louis County. Figure 1-1 displays the Facility location.

The Facility is subject to the requirements of Corrective Action as outlined in the final RCRA Part B Permit No. MOD000818963. This permit was issued by the Missouri Department of Natural Resources (MDNR) on March 5, 1997 pursuant to Section 3004(u) of RCRA.

1.1 Purpose

The Phase 2 ESA was performed to assess environmental conditions at the Facility as part of a potential property transaction. The Phase 2 ESA Report (Report) documents the field activities, sampling results, data evaluations, and associated conclusions. This Report will serve as a reference document to present the results of the Phase 2 ESA to Boeing senior management and any potential buyers for transactional purposes. It will also be concurrently submitted to MDNR to address any potential corrective actions that may be needed at the Facility.

Since the scope of the Phase 2 ESA activities will evolve over the course of the project, this Report will be prepared/submitted in a series of separate volumes. This document represents Volume 2. Volume 2 summarizes the field investigation tasks completed to date (Phase 2A and Phase 2B), sampling results for both phases, and data comparisons with regulatory action levels.

1.2 Phase 2 ESA Report Organization

This Volume of the Phase 2 ESA Report is divided into nine sections of text plus three appendices. A brief description of each section is presented below.

Section 1.0, **Introduction**, provides background information regarding the regulatory requirements for the Facility, purpose of this Report, and contents of this Report.

Section 2.0, **Facility Background Information**, references background information regarding the Facility and its environmental setting.

Section 3.0, **Phase 2 ESA Objectives and Supporting Data Requirements**, summarizes the site-specific investigation objectives, identifies the target constituents and associated investigation threshold levels (ITLs) for the Phase 2 ESA, and describes the established data quality objectives for the investigation.

Section 4.0, **Phase 2 ESA Field Activities**, summarizes the Phase 2 ESA field activities and describes the procedures that were utilized for all field sampling and laboratory analysis tasks.

Section 5.0, **Phase 2 ESA Results**, summarizes the geological, hydrogeological, and analytical results of the Phase 2 ESA.

Section 6.0, **References**, provides a list of references used within the text of this Phase 2 ESA Report.

Three appendices are also provided to describe associated Phase 2 ESA activities. Appendices to this document are identified below.

Appendix A **Soil Boring, Temporary Piezometer, and Monitoring Well Logs**
Appendix B **Analytical Laboratory Results and Data Validation Reports (Phases 2A and 2B)**
Appendix C **Geotechnical Laboratory Report**

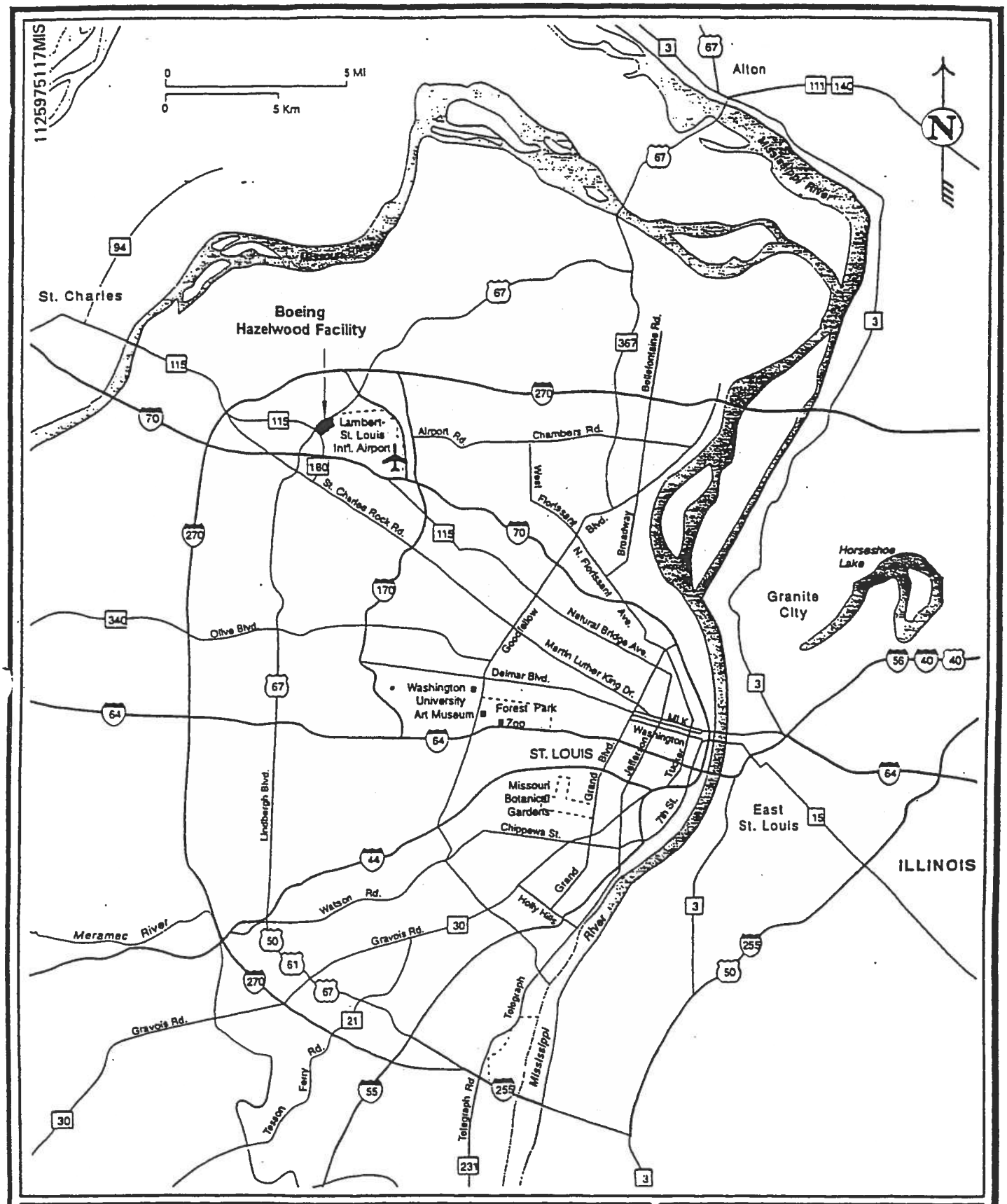


Figure 1-1
FACILITY LOCATION MAP
BOEING FACILITY
HAZELWOOD, MO

ESE
A MACTEC Company

2.0 Facility Background Information

This section of the Phase 2 ESA Report presents background information pertaining to the operational history and environmental setting for the Facility.

2.1 Facility Location

The Boeing Fabrication Operations Facility (Facility) is located at the northeast corner of the intersection of Lindbergh Boulevard and Banshee Road. It is bounded on the west by Lindbergh Boulevard, on the south by Banshee Road, and on the east by Coldwater Creek. With the exception of Building 220, McDonnell Boulevard bounds the northern portion of the Facility. Building 220 is located immediately north of McDonnell Boulevard. The Facility is located in the northwest quarter of Section 5, Township 46 North, Range 6 East, St. Louis County, Missouri.

2.2 Property Ownership

The investigation area is sub-divided between three properties (East Property, West Property, and North Property). The East Property is currently owned by the U.S. Navy and operated by Boeing. The North Property and West Property are currently owned and operated by Boeing.

2.3 Facility Operations

Boeing manufactures combat aircraft, transport aircraft, and space systems/missiles. Part/components are manufactured at the Facility for combat aircraft, including the F-15 Eagle, the F/A-18 Hornet, and the AV-8B Harrier. Other part/components are produced for the T45TS trainer, missile systems, and the C-17 transport plane.

Access to the Facility is strictly controlled. The Facility is surrounded by a chain-link fence and is patrolled by a security force 24 hours a day, 365 days per year. Employees and visitors must pass through security gates at the main entrance to the Facility before entering any building. The security force employs approximately 225 persons, and an on-site fire department employs approximately 30 persons.

Boeing (then McDonnell Douglas Corporation) began operations in 1941 and presently employs approximately 18,000 people. Currently, the Facility operates 24 hours a day, Monday through Friday, as well as periodic weekend shifts. Activities performed in support of Boeing operations include chemical processing, metal cutting, metal forming/grinding, degreasing, and painting.

2.4 Environmental Setting

A preliminary evaluation of the environmental setting at the Facility was prepared in the Phase 2 ESA Work Plan to better understand the framework for migration of any potential constituent releases and the potential effects on human health and the environment. This information is presented below.

2.4.1 General Setting

The Facility is surrounded by other Boeing operations on the south, commercial and industrial facilities on the west and north, and Coldwater Creek on the east. According to information obtained from the MDNR, Division of Geology and Land Survey, no wells are located within a 1½-mile radius of the Facility [RCRA Facility Assessment (RFA), 1995]. Surface water from the Facility drains toward Coldwater Creek which flows along the Facility's eastern boundary.

2.4.2 Geology

Subsurface geologic units in the area of the Facility include wind or lake-deposited sediments (unconsolidated deposits) overlying nearly flat-lying sedimentary bedrock formations. These deposits may be up to 100 feet thick and consist of clay, silty clay, and some sand (Lutzen and Rockaway, 1971).

Unconsolidated deposits in the area of the Facility have been delineated by previous hydrogeologic studies conducted at the Facility and adjoining Boeing operations (ATEC, 1990 and Riedel, 1995), as well as studies conducted at the James River Paper Company (formerly Crown-Zellerbach) located approximately 1,200 feet northwest of the Facility, and the St. Louis Airport Site (SLAPS) which adjoins the Facility to the east along Coldwater Creek. The uppermost unconsolidated deposits consist of interbedded clay, silty clay, and clayey silt with some fine-grained sand and organic matter. A dense, plastic, brown to gray-green clay unit can be present with the interbedded silty deposits. Soil sampling was conducted to a depth of approximately 30 feet at the Boeing Industrial Wastewater Treatment Plant (IWTP) immediately to the southeast of the Facility; results indicated the predominance of clay soils.

In areas at both facilities (Boeing and James River Paper Company), up to 14 feet of clayey silt or silty clay fill material is present over the unconsolidated sequence. The fill material is composed of material either excavated at the site or brought in as clean fill during plant construction and modification activities.

The uppermost bedrock encountered in the area of the Facility is the undifferentiated Pleasanton, Marmaton, and Cherokee Groups of Pennsylvanian age. Shales, siltstones, sandstones, coal beds, and

thin limestone beds are the dominant lithology of these three groups. Regionally, the Pennsylvanian-age groups have a total thickness ranging from 10-300 feet.

Underlying the Pennsylvanian strata is Mississippian-age limestone. The Ste. Genevieve Formation (0-160 feet thick), St. Louis Limestone (0-180 feet thick), Salem Formation (0 to 180 feet thick), and Warsaw Formation (0-110 feet thick) are all limestone and compose the upper portion of the Mississippian-age bedrock.

2.4.3 Hydrogeology

Water supplies in the St. Louis area are obtained from the Mississippi, Missouri, and Meramec Rivers. Approximately 82 percent of the water supply is pumped from the Mississippi River, while approximately 12 percent is pumped from the Missouri River and Meramec River combined (Miller *et al.*, 1974). Aquifers exist in both the bedrock and unconsolidated deposits along the Mississippi and Missouri Rivers. These aquifers account for approximately 3 percent of the water supply (Miller *et al.*, 1974).

As stated above, the Facility is underlain by 30+ feet of low permeability clay and silt. Because of the low permeability of these units, groundwater quantities are generally low. Previous investigations at the Facility and adjoining Boeing operations indicate that shallow groundwater is generally encountered between 8-15 feet below land surface (ft bls). However, shallow groundwater depths have been variably noted from 2-40 ft bls depending upon the specific Facility location.

The shallow groundwater table may be modified locally at the Facility due to the presence of buildings or parking lots. Overall, the shallow groundwater flow direction is expected to flow to the east toward Coldwater Creek or ditches draining into this creek. Given the low permeability and thickness of the unconsolidated deposits underlying the Facility, a direct connection to deeper bedrock aquifers is not expected.

2.4.4 Surface Water Hydrogeology

General surface water drainage at the Facility is by overland flow to storm sewer intakes located across the Facility or to open drainage ditches that drain to storm sewers. The storm sewers discharge into Coldwater Creek at several locations. Coldwater Creek flows northeast within an underground culvert from the southwest side of Lambert-St. Louis International Airport, across the central portion of the airport, and the easternmost part of Tract I South. The creek flows within an open culvert north of Banshee Road along the eastern boundary of Tract I North. Coldwater Creek then flows northeast within this open culvert for several miles until it rejoins its original channel. The creek eventually discharges into the Missouri River. At its closest point, the Missouri River is approximately 3 miles to the northwest of the Facility.

Presently, approximately 90-95 percent of the surface area is covered with buildings, paved streets, paved parking lots, tank areas, and docks. Several of the aboveground structures associated with discontinued processes have been demolished, although concrete at or below grade remains. An extensive network of utilities including potable and service water lines, storm sewers, sanitary sewers, and other utilities (typical of an industrial facility) is located underground.

2.5 Additional Sources of Background Information

Historic evaluations of the geology and hydrogeology at the Facility and surrounding Boeing operations have been conducted as part of previous investigations to better understand the framework for migration of any potential constituent releases and the potential effects on human health and the environment. A prior report entitled McDonnell Douglas Corporation RCRA Closure Activities, Building 14: Sludge Holding Tank Site (Riedel Environmental Services, Inc., 1995) should be referenced for additional information pertaining to the environmental setting at the Facility.

3.0 Phase 2 ESA Objectives and Supporting Data Requirements

This section describes the objectives of the Phase 2 ESA activities. Specifically, it reviews the objectives of the Phase 2 ESA, identifies data needed to meet these objectives, and describes the overall approach that was followed to obtain these data. An overview and justification of the Phase 2 ESA approach are also provided, as well as a discussion of the role of ITLs in the project. In addition, this section summarizes specific data quality objectives selected for the Phase 2 ESA.

3.1 Project Objectives

Consistent with the Phase 2 ESA Work Plan, the Phase 2 ESA is designed to address the following project objectives:

1) describe the nature and extent of any releases of hazardous constituents/waste associated with the Facility; and
2) gather necessary data to support future investigation, risk assessment, and/or remediation requirements (if necessary).

Completion of critical project elements and achievement of the specific Phase 2 ESA objectives requires the identification, collection, and evaluation of site-specific and other local data. The results of the Phase 2 ESA will be utilized in developing appropriate preliminary soil and groundwater screening levels, where appropriate, for the Facility.

For site locations and depths where soil or groundwater concentrations exceed the appropriate preliminary screening levels and a risk analysis shows a threat being posed to human health or the environment, Boeing will pursue additional investigation, risk assessment, and/or remediation efforts, as needed. For Facility locations and depths where constituent concentrations do not exceed the appropriate preliminary screening levels, Boeing will remove these locations from further investigation requirements, thereby conserving resources which would otherwise have been expended on unnecessary activities. Such an approach will allow Boeing to focus its attention and efforts more rapidly and practically on any significant environmental issues instead of perceived ones.

The investigation scope, upon completion, will adequately characterize releases of hazardous constituents/waste associated with the Facility and achieve the objectives outlined above. Any supplemental investigation activities (e.g. Phase 2C) will be designed to satisfy delineation criteria and provide data necessary for development of appropriate corrective actions, as needed.

3.2 Data Needs and Usage

An investigation to delineate the nature and extent of any releases at the Facility requires various types and amounts of information. Specific investigation approaches, methodologies, and data are required to facilitate the investigation process. This section of the document summarizes the general strategy presented in the Phase 2 ESA Work Plan for collection of the data needed to achieve the investigation objectives at the Facility.

Based on a review of previous investigation results and an evaluation of site-wide conditions, sampling plans were prepared to delineate the nature and extent of any releases. Soil, groundwater, and wipe sampling locations were selected across the Facility where constituents of concern (COCs) were most likely to be found based on historical knowledge, prior investigation results, hazardous constituents/ waste managed at the various areas, and field screening criteria (visual observations and portable instrument screening). In accordance with the approved Phase 2 ESA Work Plan and the Workplan Addendum, selected samples were collected and submitted for laboratory analyses.

In addition, groundwater monitoring activities were conducted for a Facility-wide groundwater monitoring well network to determine groundwater flow direction and gradients. Monitoring results were used to evaluate potential migration of any impacted groundwater at the Facility.

3.3 Data Quality Objectives

The intended use of the various data types was evaluated to establish appropriate data quality objectives (DQOs). A summary of this evaluation is provided below.

The following DQO levels were deemed appropriate:

1) DQO Level I was deemed appropriate to conduct screening and acquire data for basic site characterization (e.g., pH, temperature, specific conductance, water level elevations, physical descriptions, PID readings, and other similar geologic/hydrogeologic information). Specifically, the data acquired under DQO Level I were used to
   - detect changes in groundwater characteristics.
   - develop groundwater elevation contour maps and evaluate groundwater flow gradients,
   - describe basic physical properties of investigated media, and
   - verify adequate purging of monitoring wells.
2) DQO Level III was deemed appropriate for soil, groundwater, and wipe sample analyses. The data acquired under DQO Level III was used to characterize constituent concentrations in various media and delineate the nature/extent of any releases of hazardous wastes/constituents. These data may also be used to determine soil/groundwater clean-up objectives, support a risk

assessment, and support engineering evaluations necessary to select and design corrective measures, if required.

3.4 Investigation Threshold Levels (ITLs)

ITLs are commonly developed and used at various investigation sites to determine whether additional field investigations, site-specific risk assessments, and/or remediation efforts are warranted. In fact, this concept is inherent to both the RCRA Subpart S rule (as well as other proposed rulemakings) and guidance being developed and implemented under the Corrective Action and Superfund programs. ESE and Boeing believe that such a concept is appropriate for the Facility and have incorporated conservative values against which the Phase 2 ESA data have been evaluated.

This section identifies these conservative values (ITLs) that have been used to determine the need for further evaluation or to recommend no further action. ITLs were utilized as a comparative baseline for site-specific analytical results (e.g. to determine whether a release to soil has been delineated or assess whether groundwater impacts are present). These ITLs will be used as a preliminary means of focusing future efforts (field investigations, site-specific risk assessment, and/or remediation) on the relevant constituents and areas of concern.

For the purposes of this Phase 2 ESA, ITLs represent values which incorporate both risk-based action levels and site-specific background levels. As a result, the comparative process for analytical results is simplified.

ITLs were largely derived for soils using Tier 1 levels specified in Cleanup Levels for Missouri (CALM), as of September 1998 and USEPA Soil Screening Levels (SSLs). For use as a preliminary conservative screening tool, the more conservative of the CALM residential exposure value (Scenario A), the CALM "leaching to groundwater" value, and the USEPA SSL value was selected as the ITL. For ubiquitous metals, the background concentration was utilized as the ITL if greater than the CALM criteria. Background values were derived from USGS-based regional background soil concentrations for St. Louis County (Geochemical Survey of Missouri, USGS, 1984). For instances where the CALM, SSL, or background values were unavailable, alternative USEPA Region 5 Data Quality Levels (DQLs) or Region 9 Preliminary Remediation Goal (PRG) values were used.

ITLs for groundwater were derived in a similar manner using CALM values and USEPA drinking water standards (MCLs, MCLGs, or HBLs). For ubiquitous metals, the background concentration was utilized as the ITL if greater than the CALM or MCL-based criteria. Site-specific background groundwater conditions were derived from a prior sampling event for two monitoring wells (MW-A1 and MW-A8) along the western corridor of the Facility. Analytical results for these background wells and associated statistical mean values are summarized in Table 3-1.

For instances where the CALM values, MCL-based criteria, or background values were unavailable, alternative USEPA Region 5 DQLs or Region 9 PRG values were used.

Soil and groundwater ITLs are presented in Tables 3-2 and 3-3, respectively, for the constituents detected in the Phase 2 ESA. These tables also include the relevant CALM-based criteria, SSLs, MCLs, alternative risk-based reference values (e.g. DQLs, PRGs), and regional/site-specific background levels, as appropriate.

TABLE 3-1

Summary of Mean Constituent Concentrations for Groundwater Samples from Background Monitoring Wells Boeing Phase 2 ESA

CONSTITUENT	UNITS	BACKGROUND WELL NO. AND MEAN CONSTITUENT CONCENTRATIONS		
		MW-A1	MW-A8	MEAN
Metals/Inorganics (Total)				
Arsenic	mg/L	0.040	0.229	0.135
Barium	mg/L	1.990	3.050	2.520
Cadmium	mg/L	<0.005	<0.005	<0.005
Chromium	mg/L	0.120	0.360	0.240
Lead	mg/L	0.059	0.349	0.204
Mercury	mg/L	<0.0002	<0.0002	<0.0002
Selenium	mg/L	<0.05	<0.05	<0.05
Metals/Inorganics (Filtered)				
Arsenic	mg/L	0.021	0.020	0.021
Barium	mg/L	0.504	0.383	0.444
Cadmium	mg/L	<0.005	<0.005	<0.005
Chromium	mg/L	<0.01	<0.01	<0.01
Lead	mg/L	<0.005	<0.005	<0.005
Mercury	mg/L	<0.0002	<0.0002	<0.0002
Selenium	mg/L	<0.005	<0.005	<0.005

Footnotes:

1 Background Groundwater Concentrations are represented by the following statistical values:
- For parameters detected within the background groundwater samples, the statistical value is the mean background concentration.
- For parameters NOT detected within the background groundwater samples, the statistical value presented is the detection limit.

Table 3-2
Determination of Investigation Threshold Levels (ITLs) for Soils (values in ug/kg except metals)
Boeing Phase 2 ESA

Constituent	BOEING Investigation Threshold Level (ITL) for Soil (1)	Missouri CALM Residential Scenario A (2)	Missouri CALM Industrial Scenario C (3)	Missouri CALM Leaching to Groundwater (4)	CERCLA Soil Screening Levels (SSLs) (5)	USGS-Based Regional Background Concentration (6)
VOLATILE ORGANIC COMPOUNDS (VOCs)						
Acetone	14,000	2,700,000	8,660,000	14,000	16,000	--
Benzene	30	7,600	16,000	57	30	--
2-Butanone (MEK)	5,200 (7)	--	--	--	--	--
Carbon disulfide	12,000	12,000	21,000	52,000	32,000	--
Chloroform	600	2,700	5,800	864	600	--
1,1-Dichloroethane	23,000	--	--	--	23,000	--
1,1-Dichloroethene	60	60			60	--
1,2-Dichloroethene (total)	400	280,000	910,000	510	400	--
Ethylbenzene	13,000	1,460,000	1,460,000	55,000	13,000	--
4-Methyl 2-pentanone (MIBK)	2,900 (7)	--	--	--	--	--
Methylene chloride	20	51,000	145,000	21	20	--
Tetrachloroethene	60	49,000	160,000	420	60	--
Toluene	5,130	890,000	890,000	5,130	12,000	--
1,1,1-Trichloroethane	2,000	1,520,000	1,520,000	4,670	2,000	--
1,1,2-Trichloroethane	20	5,000	14,000	49	20	--
Trichloroethene	60	37,000	81,000	97	60	--
Vinyl Chloride	10	240	540	16	10	--
Xylenes, Total	55,000	1,510,000	1,510,000	55,000	200,000	--
Volatile Petroleum Hydrocarbons	200,000	200,000	1,000,000	--	--	--
Diesel Petroleum Hydrocarbons	200,000	200,000	1,000,000	--	--	--
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)						
Acenaphthene	570,000	42,000,000	14,000,000	1,190,000	570,000	--
Acenaphthylene	2,300 (9)	--	--	--	--	--
Anthracene	12,000,000	21,000,000	69,000,000	16,700,000	12,000,000	--
Benzo(a)anthracene	900	--	--	--	900	--
Benzo(b)fluoranthene	900	940	3,700	15,000	900	--
Chrysene	36,000	36,000	143,000	470,000	88,000	--
Fluoranthene	600,000	600,000	1.9E+06	4,480,000	3,100,000	--
Fluorene	560,000	2,800,000	9.3E+06	940,000	560,000	--
POLYCHLORINATED BIPHENYLS (PCBs)						
Aroclor 1254	600	600	2,500.00	--	1,000	--
METALS/CYANIDE (mg/kg)						
Arsenic	77	11	14	--	0.4	77.0
Barium	1,750	2,800	9,040	1,650.00	1,600.0	1,750.0
Cadmium	8	87	300	11.00	8.0	ND
Chromium	85	1,300	2,700	38.00	38.0	85.0
Lead	260	260	660	--	400.0	85.0
Mercury	2.00	69	250	3.23	2.0	0.97
Selenium	4.37	300	970	4.37	5.0	2.5
Silver	34	350	1,160	255.00	34.0	NA
Total Cyanide	40	5,480	20,400	--	40.0	--

Listed constituents were detected in the ESA.
-- Applicable value not available.

Footnotes:

1 Investigation Threshold Levels (ITLs) for soils were primarily derived from Cleanup Levels for Missouri (September 1998). For ubiquitous PAHs and metals, the background concentration was utilized as the ITL if greater than the CALM criteria. For instances where the CALM or background values were unavailable, alternative USEPA Soil Screening Levels (SSL), alternative USEPA Region V Data Quality Levels, or Region IX Preliminary Remediation Goal (PRG) values were used as referenced below.
2 Cleanup Levels for Missouri, September 1998. Value represents most conservative of 3 exposure pathways (Residential or Scenario "A").
3 Cleanup Levels for Missouri, September 1998. Value represents least conservative of 3 exposure pathways (Industrial or Scenario "C").
4 Cleanup Levels for Missouri, September 1998. Value that is protective of "leaching to groundwater."
5 Soil Screening Levels, July 1996. Value represents most conservative of 3 exposure pathways including ingestion, inhalation, and migration to groundwater (DAF of 20).
6 USGS-Based Regional Background Soil Concentrations (1984) for St. Louis County.
7 Alternative value acquired from USEPA Region V Data Quality Levels, December 1995.
8 Alternative value acquired from EPA Region IX Preliminary Remediation Goals, August 1, 1996.
- Levels for migration to groundwater (GW) pathway based on dilution and attenuation factor of 10
- Levels for metals based on a pH = 8.0
9 Alternative value acquired by using residential value for pyrene as a comparable surrogate.

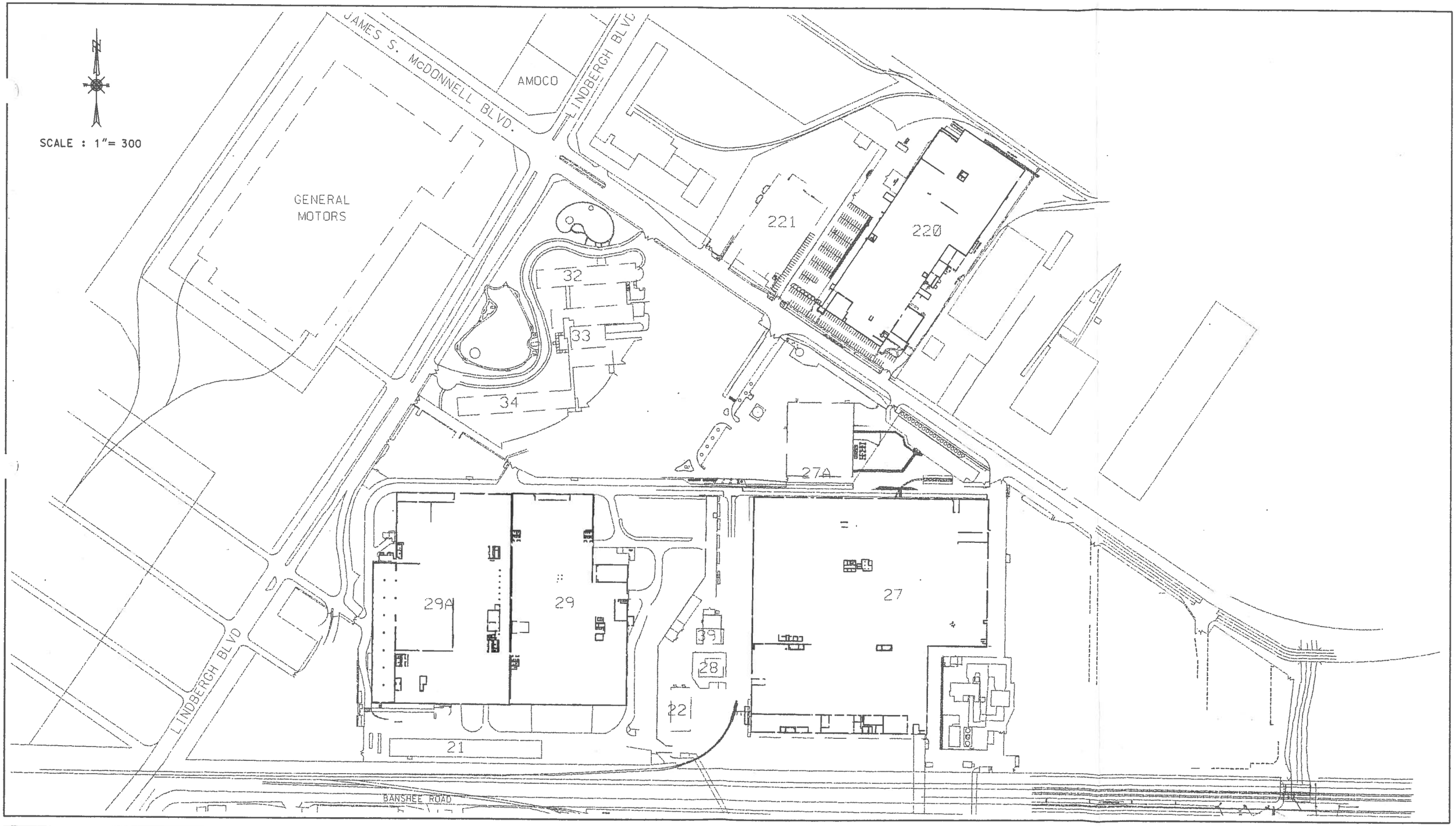
Table 3-3
Determination of Investigation Threshold Levels (ITLs) for Groundwater (ug/l except TPH)
Boeing Phase 2 ESA

Constituent	BOEING Investigation Threshold Level (ITL) for Groundwater (1)	Missouri CALM Groundwater Target Conc (GTARC) (2)	USEPA Drinking Water Standards (MCLs) (3)	EPA Region V Data Quality Levels (4)	Background Groundwater Concentration (5)
VOLATILE ORGANIC COMPOUNDS (VOCs) (ug/l)					
Acetone	4,000	4,000	4,000	9,200,000	--
Benzene	5	5	5	2,700	--
Bromodichloromethane	80	--	80		
Dibromochloromethane	80	100	80		
2-Butanone (MEK)	1,900 (6)	--	--	5,200	--
Carbon disulfide	4,000	4,000	4,000		
Carbon tetrachloride	5	5	5		
Chloroform	80	100	80		
1,1-Dichloroethane	4,000	4,000	4,000	400,000	--
1,1-Dichloroethene	7	7	7	--	--
1,2-Dichloroethene (total)	70	70	70	--	--
Ethylbenzene	700	700	700	58,000	--
2-Hexanone	--	--	--	--	
4-Methyl 2-pentanone (MIBK)	160 (6)	--	--	--	
Methylene chloride	5	5	5	22,000	--
Tetrachloroethene	5	5	5	22,000	--
Toluene	1,000	1,000	1,000	280,000	--
1,1,1-Trichloroethane	200	200	200	--	--
1,1,2-Trichloroethane	5	5	5	--	--
Trichloroethene	5	5	5	7	--
Vinyl chloride	2	2	2	--	--
Xylenes, Total	10,000	10,000	10,000	99,000	--
Volatile Petroleum Hydrocarbons	10	10	--	--	--
Diesel Petroleum Hydrocarbons	10	10	--	--	--
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)					
Benzo(a)anthracene	80	--	80		--
Chrysene	10	10	10		--
POLYCHLORINATED BIPHENYLS (PCBs)					
Aroclor 1254	0.5	0.5	1.0	1.0	--
METALS / CYANIDE					
Arsenic	135	50	5	100	135
Barium	2,520	2,000	2,000	5,500	2,520
Cadmium	5	5	5	39	5
Chromium	240	100	100	940	240
Lead	204	15	15	500	204
Mercury	2	2	2	23	0.2
Selenium	50	50	50	390	50
Silver	100	100	100	100	NA
Total Cyanide	200	200	200	1,600	--

Listed constituents were detected in the ESA.
-- Applicable value not available.

Footnotes:

1 Investigation Threshold Levels (ITLs) for groundwater were primarily derived from Cleanup Levels for Missouri (CALM). For metals, the background concentration was utilized as the ITL if greater than the CALM criteria. For instances where the CALM values were unavailable, alternative USEPA Region V Data Quality Levels or Region IX PRG values were used as referenced below.
2 Cleanup Levels for Missouri, September 1998. Value represents most conservative of 3 exposure pathways (Residential o
3 Maximum Contaminant Levels, Summer 2000, non-zero MCLG, MCL, or HBL.
4 Alternative value acquired from USEPA Region V Data Quality Levels, December 1995.
5 Background Groundwater Concentrations are represented by the following statistical values:
- For parameters detected within the background groundwater samples, the value is the mean background concentration.
- For parameters NOT detected within the background groundwater samples, the value is the detection limit.
6 Alternative value acquired from EPA Region IX Preliminary Remediation Goals, August 1, 1996.



THE BOEING COMPANY

Figure 3-1
Layout of Fabrication Operations Facility

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314-209-5900

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4.0 Phase 2 ESA Field Activities

This section summarizes both the initial Phase 2 ESA field activities in July-August 2000 (Phase 2A) and the supplemental Phase 2 ESA activities in September-October 2000 (Phase 2B) that were conducted to evaluate potential environmental impacts at the Facility. These activities included: soil boring installations, soil sampling and analyses, temporary piezometer/monitoring well completion, groundwater monitoring and analyses (shallow and deep water-bearing units), wipe sampling and analyses. Most of the Phase 2 field activities were completed on a site-specific basis for both soil, groundwater, and surface evaluation purposes. A groundwater monitoring well network was also completed to assess groundwater conditions on a Facility-wide basis.

The following general chronology of field activities was completed to fulfill the Phase 2A scope of work as outlined in the Phase 2 ESA Work Plan:

1) Installation of 40 investigative soil borings to assess geological and hydrogeological conditions beneath the Facility;
2) Installation of 36 temporary piezometers to assess hydrogeological conditions beneath the Facility;
3) Installation of 8 shallow groundwater monitoring wells to assess hydrogeological conditions beneath the Facility;
4) Sampling of subsurface soils utilizing continuous collection methods;
5) Collection of subsurface soil samples for field screening and laboratory analyses;
6) Collection of groundwater samples for field screening and laboratory analyses;
7) Collection of wipe samples for laboratory analyses; and
8) Monitoring of groundwater surface.

The following general chronology of supplemental field activities was completed to fulfill the Phase 2B scope of work as outlined in the Workplan Addendum for the Phase 2 ESA:

1) Installation of 19 investigative soil borings to assess geological and hydrogeological conditions beneath the Facility;
2) Installation of 3 piezometers to assess hydrogeological conditions beneath the Facility;
3) Installation of 15 temporary piezometers to assess hydrogeological conditions beneath the Facility;
4) Installation of 9 groundwater monitoring wells (4 shallow monitoring wells and 5 deep monitoring wells) to assess hydrogeological conditions beneath the Facility;
5) Sampling of subsurface soils utilizing continuous collection methods;
6) Collection of subsurface soil samples for field screening and laboratory analyses;
7) Collection of groundwater samples for field screening and laboratory analyses; and
8) Monitoring of groundwater surface.

All Phase 2 ESA field activities were conducted in accordance with the protocols described in the QAPP and the HASP.

4.1 Installation of Soil Borings

Soil borings were installed at various locations to evaluate the nature and extent of any hazardous constituent or hazardous waste releases to soils at the Facility. The soil boring activities were also completed to further evaluate the geological and hydrogeological systems at the Facility.

Under the supervision of ESE field personnel, drilling activities were conducted by Roberts Environmental Drilling, Inc. Site-specific activities were completed using a Bobcat-mounted hydraulic GeoProbe rig and a truck-mounted CME 75 drilling rig.

For the majority of the sampling locations, soil borings were installed using standard direct push soil probe and hollow-stem auger (HSA) drilling methodologies. Direct push soil borings completed with the Geoprobe rig were advanced using a 2.0-inch outside diameter (OD) macro-core sampler and 1.25-inch OD steel probing rods. Soil borings completed with the CME 75 drilling rig were advanced using 4.25-inch internal diameter hollow-stem augers and a 2.5-inch ID CME continuous soil sampler.

Specialized Geoprobe sampling equipment was used to evaluate soil and groundwater conditions for 3 locations beneath the shallow water-bearing unit in the Recycling and Hazardous Waste Storage Areas. A Dual Tube sampler was used to eliminate potential cross-contamination between the shallow water-bearing unit and the underlying Clay Unit. Two sets of probe rods were used to collect continuous soil samples as follows:

1) The outer set of 2.125-inch OD rods was initially driven into the ground as a protective casing. These rods provide a sealed hole that eliminates the potential of any side slough and enables the collection of soil samples across a perched water table.

2) The second smaller set of 1.0-inch OD rods were then placed inside of the outer casing. The smaller rods hold a sample liner in place as the outer casing is driven one sampling interval.

3) The smaller rods were then retracted to collect the soil sample from the filled liner.

Prior to drilling at the initial and all subsequent borings, ancillary rig equipment were cleaned to eliminate cross-contamination between successive drilling locations. The soil sampling rods and samplers were cleaned/detergent washed between sampling locations.

Continuous soil samples were collected from each boring for field screening, lithographic description, and subsequent chemical analysis. Each disposable sampling tube liner (or CME sampler) was opened and immediately scanned with a PID to identify potential presence of VOCs. To maintain lithographic descriptive consistency, each soil sample was described and classified in accordance with the Unified Soil Classification System (USCS).

Upon completion of drilling and groundwater sampling, each Geoprobe boring was grouted with a bentonite slurry that was tremied to the bottom of the boring. The surface asphalt or concrete was repaired. During Phase 2A field activities, generated soil cuttings were containerized in 55-gallon DOT-approved drums for subsequent management by Boeing. For Phase 2B field activities, portable roll-off containers were used to accumulate soil cuttings for subsequent transfer into larger roll-off units and management by Boeing.

Phase 2 ESA field activities were completed on a location-specific basis in accordance with the guidelines specified in the Phase 2 ESA Work Plan and the supplemental Workplan Addendum. A biased sampling approach was used to locate soil sampling locations at each of the designated areas. The approximate locations, number of samples, and analyses were determined using the following criteria:

- guidelines specified in the Phase 2 ESA Work Plan and the Workplan Addendum;
- historic operations performed at a specified area;
- soil boring and analytical results from prior site investigations;
- soil boring and analytical results from Phase 2A ESA field activities;
- hazardous wastes or hazardous constituents managed; and
- field conditions (e.g., staining, PID readings, obstructions, etc.).

4.2 Soil Sampling and Analysis

Soil samples were collected from each boring to evaluate the nature and extent of any hazardous constituent or hazardous waste releases to soils at the Facility. Soil sampling activities were also completed to further evaluate the geological and hydrogeological systems beneath the Facility. Continuous soil samples were collected from selected borings for field screening, lithographic description, and subsequent chemical analysis.

Each soil sample was screened in the field with a PID for total organic vapors by the headspace method. This process involved placing a portion of the soil sample into a resealable plastic bag and allowing time for volatilization, if any, to occur. The PID probe was then inserted into the plastic bag. The highest PID reading measured for the initial 10-second period was recorded on the boring log form in units of parts per million (ppm).

All field screening equipment was calibrated at a minimum of once per day during Phase 2 ESA field efforts. Instrument calibration was performed in accordance with the manufacturers' recommended procedures using commercially available calibration standards. All calibration data were recorded in the field notebooks.

Selected soil samples collected during the Phase 2 ESA field activities were submitted for laboratory analysis. Samples were collected per the specifications in the approved Phase 2 ESA Work Plan and the supplemental Workplan Addendum.

Duplicate and trip blank samples were collected and analyzed in accordance with the QAPP specifications. The soil duplicate samples were analyzed for location-specific parameters. Trip blank samples were analyzed for VOCs only.

Upon collection, each soil sample was managed according to the procedures described below. These procedures were established in accordance with the QAPP. Appropriate USEPA analytical methods, sample preservation techniques, sample volumes, and holding times are also presented in the QAPP.

Samples were collected into sample containers which were pre-cleaned and assembled to USEPA's Protocol "B". The volume of sample collected and the type of container used was determined by the suggested volumes described in SW-846 for the particular analysis.

Immediately upon collection, each sample was properly labeled to prevent misidentification. The sample labels were made of waterproof material and filled out with waterproof ink. The sample labels included the sample number, sample location, sample depth, date sampled, time sampled, analyses to be performed, and sample collector's name.

After labeling, the samples were placed into an appropriate storage container. Samples collected for organic analysis were placed into a storage container with sufficient ice or ice packs to preserve samples during transport to the laboratory. The samples were appropriately packaged in the storage container to minimize the potential for damage during transport. A completed chain-of-custody form was placed in each storage container to accompany the samples to the laboratory.

The sample containers were transported to Severn Trent Laboratories (STL) in Earth City, Missouri. Samples were transported so that the laboratory received the samples within 24 hours from the time of collection. Strict chain-of-custody procedures were maintained during sample handling.

A chain-of-custody program was followed to track the possession and handling of individual samples from time of collection through completion of laboratory analysis. Copies of the chain-of-custody

record were retained in the permanent file for proper documentation. The chain-of-custody forms included:

- Sample number;
- Date and time of collection;
- Sample type (e.g., soil, groundwater, etc.);
- Number of containers;
- Parameters requested for analysis;
- Signature of person(s) involved in the chain of possession; and
- Inclusive dates of possession.

Soil sampling was performed to (1) delineate the horizontal and vertical extent of any potential releases at the Facility and (2) define the geological and hydrogeological systems beneath the Facility. Subsequent soil analyses were conducted to provide a quantitative evaluation of constituent impacts to soil at the Facility.

Soil samples were analyzed for location-specific parameters in accordance with the guidelines specified in the Phase 2 ESA Work Plan and the Workplan Addendum. Laboratory analyses were conducted in accordance with appropriate USEPA methodologies as prescribed in the QAPP. Analytical results for the soil samples are provided in Section 5.0.

4.3 Installation of Temporary Piezometers and Monitoring Wells

A total of 51 temporary piezometers, three (3) piezometers, and seventeen (17) groundwater monitoring wells were installed during the Phase 2 field investigation to facilitate characterization of groundwater conditions beneath the Facility. Thirty six (36) temporary piezometers and eight (8) monitoring wells (MW1 thru MW8) were installed during the Phase 2A field investigation. As part of the Phase 2B activities, fifteen (15) additional temporary piezometers, three (3) piezometers, and nine (9) monitoring wells (MW5A-S, MW5A-D, MW6D, MW8A-S, MW8A-D, MW9-S, MW9-D, MW10-S, and MW10-D) were installed. The piezometers and monitoring wells were also installed to evaluate the groundwater surface.

Under the supervision of ESE field personnel, piezometer and monitoring well installation activities were completed by Roberts Environmental Drilling. Temporary piezometers and monitoring wells installed within the shallow groundwater unit (generally 10-20 ft bls) were completed in accordance with the Phase 2 ESA Work Plan and the Workplan Addendum using the following general protocols:

1) Prior to installation of each piezometer/monitoring well, each screen and riser pipe were inspected to ensure that no oils, greases, waxes, or other contaminants were present.
2) Each temporary piezometer was constructed of 1-inch diameter, PVC with flush-threaded joints. Five-foot screen sections were utilized at the bottom of each installation.

3) Each monitoring well was similarly was constructed of 2-inch diameter, PVC with flush-threaded joints. With the exception of MW6 and MW7, 10-ft screen sections were utilized at the bottom of each monitoring well installation. Fifteen (15) feet of screen were used for MW6 and 5 feet of screen were used for MW7.
4) The artificial sand pack consisted of chemically inert, rounded, silica sand and was placed to a height of approximately 2 feet above the top of the screen.
5) A bentonite chip seal (2-ft minimum thickness) was placed above the sand pack material.
6) The annular space above the bentonite seal was sealed with cement/bentonite grout by the tremie method.
7) Each monitoring well was completed with a flush-mounted water-tight protective casing.
8) Well construction details were recorded on standard field forms.

Special installation procedures were utilized for all deep monitoring wells to ensure that cross-contamination did not occur between the shallow and deep water-bearing units. Each deep well was constructed using 8-1/4" I.D. hollow stem augers to set a 10-inch casing at approximate depths ranging from 45-53 ft bls. The open boring was filled with a high early strength cement grout and the casing was floated/centered in the boring, assuring a complete seal around the casing. After the concrete had set, each boring was advanced to total depth using 4-1/4" I.D. hollow stem augers.

4.4 Groundwater Monitoring

Groundwater monitoring activities were subsequently performed to acquire groundwater quality/elevation data for each of the piezometers and monitoring wells.

Water level measurements were performed using an electronic water level probe and measured to the nearest 1/100 foot. Data were recorded on a standard monitoring form.

Prior to the collection of groundwater samples, each piezometer was purged using a disposable polyethylene bailer or a peristaltic pump using dedicated polyethylene tubing. Each piezometer was purged by removing a minimum of one well casing volume of groundwater. Samples were then collected using a disposable polyethylene bottom-loading bailer or peristaltic pump using appropriate collection procedures as specified in the Phase 2 ESA Work Plan and the Workplan Addendum.

Shallow groundwater monitoring wells were purged using a disposable polyethylene bailer. Each shallow well was purged by removing a minimum of three well volumes and obtaining stabilized field parameter readings. Samples were then collected using a disposable polyethylene bottom-loading bailer and using appropriate collection procedures as specified in the Phase 2 ESA Work Plan and the Workplan Addendum.

Deep groundwater monitoring wells were purged using a Grundfos Rediflow 2 electric submersible pump and dedicated food grade vinyl tubing. Each deep well was purged by removing a minimum of three well volumes and obtaining stabilized field parameter readings. Samples were then collected using a disposable polyethylene bottom-loading bailer and using appropriate collection procedures as specified in the Phase 2 ESA Work Plan and the Workplan Addendum. The pump and motor leads were deconned between each sampling location using a thorough wash in a liquid soap solution, followed by potable water and distilled water rinses.

Duplicate and trip blank samples were collected and analyzed in accordance with the QAPP specifications. The duplicate samples were analyzed for location-specific parameters. Trip blank samples were analyzed for VOCs only.

Upon collection, each groundwater sample was managed in accordance with QAPP-specified protocols. Appropriate USEPA analytical methods, sample preservation techniques, sample volumes, and holding times are also presented in the QAPP. Each sample was collected and placed in an appropriate sample container and submitted for laboratory analysis.

Groundwater samples were analyzed for location-specific VOCs, PAHs, PCBs, TPH, RCRA metals (total), cyanide (total and reactive), and radioactive parameters (alpha and beta) as specified in the Phase 2 ESA Work Plan and Workplan Addendum. Selected samples from the Phase 2B field investigation were also filtered to analyze for dissolved metal concentrations. Laboratory analyses were conducted in accordance with appropriate USEPA methodologies as prescribed in the QAPP.

5.0 Phase 2 ESA Results

This section discusses the geological, hydrogeological, and chemical analysis results of the ESA which served to characterize the nature and extent of hazardous waste/constituent releases at the Facility.

Section 5.1 summarizes the geological and hydrogeological results acquired from the Phase 2 ESA activities. Based on the general similarities of the geological/hydrogeological conditions across the site, these results are presented on a facility-wide perspective. Copies of the soil boring and temporary piezometer/monitoring well logs are provided in Appendix A.

Sections 5.2 - 5.18 present the majority of the Phase 2 ESA results on a location-specific basis. Applicable soil and/or groundwater analytical concentrations were compared with ITLs to characterize the nature and delineate the extent of any potential releases at each location. Analytical laboratory data were assessed and validated based upon a review of standard quality control criteria. Copies of the analytical reports and data validation summaries for the Phase 2A and 2B field activities are provided in Appendix B. A copy of the geotechnical laboratory report is provided in Appendix C.

5.1 Geological and Hydrogeological Results

Geological and hydrogeological information was acquired through an evaluation of the soil boring logs, associated geological cross-sections, geotechnical laboratory results, and groundwater elevation measurements that were conducted at the Facility. Results are summarized below.

5.1.1 Geological Results

Facility soil borings were completed as part of the Phase 2 ESA to provide site-specific stratigraphic and hydrogeologic data. Soil samples from selected borings were also submitted for testing at a geotechnical laboratory. Soil boring data indicate the presence of four general soil stratigraphic units overlying the bedrock surface at the Facility. These four general units are defined in descending order as the (1) Fill Unit, (2) Silty Clay Unit, (3) Silt Unit, and (4) Clay Unit.

Geotechnical lab results indicate that vertical hydraulic conductivity decreases with depth. Values ranged from 3.1×10^{-4} cm/sec for a sample collected from 10-12 ft bls (Silty Clay Unit) to 1.2×10^{-8} cm/sec for a sample collected from 75-76 ft bls (Clay Unit).

Fill Unit

Soil boring data indicate that a heterogeneous Fill Unit overlies the native materials at some portions of the Facility. Fill generally consisted of a mixture of materials either excavated at the site or brought in as clean fill during Facility construction/modification activities. Unit thickness varied between the buildings, but was typically less than 3 feet in thickness. For the majority of the Facility evaluated in this Phase 2 ESA, buildings and concrete/asphalt pavement overlie the Fill Unit.

Silty Clay Unit

Soil boring data indicate the presence of a Silty Clay Unit beneath the surface or the previously defined Fill Unit. These native materials generally consisted of olive-gray to reddish-brown, soft to stiff, silty clay. The silty clay often contained iron oxidation discoloration and numerous open, discontinuous channels, which are likely vertical root scars. Unit thickness generally ranged from 6-12 feet. Shallow groundwater in the Silty Clay Unit was typically perched on the underlying units, although depths varied dramatically (e.g. 3-5 ft bls at Building 22, 9-10 ft bls at East Parking Lot, 6-12 ft bls inside of Building 27, and not encountered from 0-16 ft bls for one location inside of Building 27).

Silt Unit

Soil boring data indicate the presence of a Silt Unit underlying the Silty Clay Unit. The native materials appear to be Lacustrine (lake-formed) in origin and are very thinly bedded with abundant organic debris (wood fragments and twigs). The silt is dark reddish-brown, medium stiff, and slightly moist. Unit thickness was generally between 1-3 feet. Due to the low moisture content of the silt and the presence of perched groundwater in the overlying Silty Clay Unit, the Silt Unit and underlying Clay Unit appear to act as an aquitard.

Clay Unit

Soil boring data from the deep groundwater monitoring wells indicate the presence of a Clay Unit underlying the Silt Unit. These native materials generally consisted of light to dark gray, stiff to very stiff, plastic clay. This unit was generally encountered between 15-20 ft bls and extended to a depth of approximately 80 ft bls. Within 2-4 ft above the top of the bedrock surface, the Clay Unit graded into a silty clay to clayey silt with coarse gravel intermixed in the clay matrix.

Based on interpretations from Phase 2 ESA boring results, previous investigations, and regional geological information, the Silt Unit and the Clay Unit are expected to be relatively uniform and continuous beneath the Facility and immediately surrounding area. As such, the units serve as an aquitard beneath the Facility, effectively limiting any vertical migration of groundwater.

5.1.2 Hydrogeological Results

Phase 2 ESA soil boring data also yielded information about the hydrogeological system beneath the Facility. As previously indicated, shallow groundwater was typically encountered in the Silty Clay Unit. However, this material has little potential to produce water as exemplified by the difficulties in acquiring sufficient sample volumes from temporary piezometers at Building Nos. 21, 27, and 29.

Shallow groundwater was encountered at a range of depths for the various borings as summarized below for representative locations:

- Building 220 – 2-6 ft bls;
- Building 22 – 3-5 ft bls;
- Recycling and Haz Waste Areas – 5-6 ft bls;
- Building 220 interior – 9 ft bls;
- East Parking Lot – 9-10 ft bls;
- Building 27 interior – 6-12 ft bls;
- Building 29 interior – 13 ft bls; and
- Boring B27I3 – Not encountered from 0-16 ft bls.

Water was encountered in the deep wells near the top of bedrock in a clayey silt to silty clay that contained coarse gravel. Water levels recorded in the deep wells installed in the Clay Unit at approximately 70-80 ft bls indicate that the deep water-bearing unit is under artesian conditions. Artesian conditions exist when the water level in a well rises above the top of the unit and are indicative of a confined water-bearing unit. Water elevations in the deep wells are higher than the elevations in the adjacent shallow wells at all locations except the MW-10 cluster, thus demonstrating that artesian conditions are present at the Facility. The deep unit at MW-9D is under flowing artesian conditions, with the water elevation rising to 1.4 feet above the ground surface. Prior to purging MW-9D for sampling on September 28, 2000, groundwater flowrate out of the well was measured using a standpipe approximately 1 ft above the ground surface. Groundwater flow out of MW-9D was measured at approximately 0.13 gpm.

5.2 Results of Facility-Wide Groundwater Evaluation

Analytical groundwater data and field measurements were utilized to characterize the nature and extent of constituent concentrations in groundwater beneath the Facility.

5.2.1 Analytical Groundwater Data for Shallow Water-Bearing Unit

Groundwater samples were collected from twelve (12) Phase 2-related shallow network monitoring wells for chemical analysis. Analytical results for groundwater samples collected from the 12 shallow monitoring wells are summarized in Table 5-1. Groundwater sampling locations and the associated analytical results are displayed in Figures 5-1 and 5-2.

Twelve VOCs were detected in groundwater samples collected from the shallow network monitoring wells. The two sampling locations which exhibited the highest VOC concentrations were situated along the northwest and southeast corners of Building 27 (MW-3 and MW-5, respectively). Groundwater samples from MW-3 and MW-5 exhibited the highest total VOC concentrations of 3.8 ppm and 0.04 ppm, respectively. (The field duplicate sample for MW-3 exhibited a total VOC concentration of 11.3 ppm.) Upgradient boundaries were established along the western and northern sides of the Facility where no VOCs were detected from MW-1, MW-2 (< 1 ppb total VOCs), and MW-4.

Trichloroethene (TCE) and several degradation products including cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-DCE, vinyl chloride, and 1,1-DCE were detected at the highest concentrations. Groundwater samples from MW-3 and MW-5 exhibited the highest TCE concentrations of 5,400 ppb (field duplicate) and 29 ppb, respectively. Located near the Recycling Area, groundwater samples from MW-3 also contained the highest 1,2-DCE, vinyl chloride, and 1,1-DCE levels of 5,900 ppb, 32 ppb, and 7 ppb, respectively. The groundwater sample from MW-5AS to the east of Building 27 contained 71 ppb cis-1,2-DCE, 14 ppb TCE, and 6.1J ppb vinyl chloride. Located along the eastern property boundary, the groundwater sample from MW-6 exhibited a tetrachloroethene concentration of 7.7 ppb.

Other VOC constituents including carbon disulfide, chloroform, 1,1-dichloroethane, methylene chloride, toluene, and 1,1,1-trichloroethane were generally detected at low concentrations [e.g. 4 ppb or less, and/or on an isolated basis]. Detected levels for methylene chloride in particular are likely to be laboratory artifacts.

PAHs, PCBs, and cyanide were not detected in any of the groundwater samples collected from the monitoring well network. The groundwater sample from MW-3 exhibited the only detected petroleum hydrocarbon concentration of 1.7 ppm TPH (volatile fraction).

Six metals (arsenic, barium, chromium, lead, mercury, and selenium) were detected in the groundwater samples collected from the shallow monitoring well network. Metals concentrations were consistent across the entire Facility. The groundwater sample from MW-9AS contained metals concentrations that exceeded ITLs including 261 ppb arsenic, 10,900 ppb barium, 858 ppb chromium,

and 399 ppb lead. The field duplicate groundwater sample from MW-4 exhibited the only other concentration (254 ppb chromium) that exceeded a metals ITL for the shallow monitoring well network.

Radioactivity (alpha and beta parameters) was also evaluated in the groundwater samples collected from the monitoring well network. The highest values were obtained for MW-4 (alpha level of 59 pCi/l and beta level of 180 pCi/l) and MW-6 (alpha level of 71 pCi/l and beta level of 111 pCi/l). However, there was no statistically significant deviation between the radiological levels detected at the downgradient monitoring wells (MW-3 thru MW-8) and the two upgradient wells (MW-1 and MW-2).

The concentrations for each of the 12 shallow monitoring wells were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-1 displays a comparison of the sample and ITL values for shallow groundwater samples from the monitoring well network.

As a result, the following groundwater-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (6): 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, tetrachloroethene, TCE, and vinyl chloride; and
- Metals (4): arsenic, barium, chromium, and lead.

5.2.2 Analytical Groundwater Data for Deep Water-Bearing Unit

Groundwater samples were collected from five (5) Phase 2-related deep network monitoring wells for chemical analysis. Analytical results for groundwater samples collected from the 5 deep monitoring wells are summarized in Table 5-2. Groundwater sampling locations and the associated analytical results are displayed in Figure 5-1 and Figure 5-2.

No VOCs were detected in any of the groundwater samples collected from the 5 deep monitoring wells. Similarly, no TPH constituents were detected in these groundwater samples.

Six metals (arsenic, barium, chromium, lead, mercury, and selenium) were detected in the groundwater samples collected from the deep monitoring well network. Metals concentrations were consistent across the entire Facility. Groundwater samples from MW-4D and MW-9AD exhibited concentrations (MW-4D: 274 ppb chromium and MW-9AD: 177 ppb arsenic, 5,220 ppb barium, 923 ppb chromium, and 269 ppb lead) that exceeded metals ITLs. Due to the thickness and impermeable nature of the Clay Unit at the Facility, these metal concentrations are likely to be associated with the turbidity of specific samples (e.g. particulate metal content of soil matrix vs.

dissolved metal content in groundwater matrix) and/or naturally-occurring levels in the deep water-bearing unit.

The concentrations for each of the 5 deep monitoring wells were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-2 displays a comparison of the sample and ITL values for groundwater samples from the deep monitoring well network.

As previously indicated, elevated metal concentrations are associated with sample turbidity and/or naturally-occurring levels. The four metal constituents will be removed from further consideration with respect to the deep water-bearing unit. As a result of this evaluation, none of the detected constituents will be retained for further evaluation in Volume 3.

5.2.3 Groundwater Elevation Data

Groundwater level measurements were acquired to evaluate the direction and gradient of shallow groundwater beneath the Facility. Static water level data were collected from the monitoring well network during the sampling event conducted on July 27 and July 28, 2000. A groundwater elevation surface map for this monitoring event is displayed in Figure 5-3. Groundwater level measurements for the July 2000 monitoring event are provided in Table 5-3.

Static water level data were also collected from the Phase 2B monitoring wells and 4 previously installed monitoring wells during the sampling event conducted on October 2 and October 3, 2000. Groundwater elevation surface maps for this monitoring event are displayed in Figure 5-4 (shallow water-bearing unit) and Figure 5-5 (deep water-bearing unit). Groundwater level measurements for the October 2000 monitoring event are provided in Table 5-4.

Both groundwater elevation surface maps demonstrate general flow of groundwater toward the east and Coldwater Creek. Very low flow gradients are also indicated.

5.3 Results for Hazardous Waste Storage Area

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the Hazardous Waste Storage Area.

5.3.1 Analytical Results for Soil Samples from Hazardous Waste Storage Area

Analytical results for soil samples from the Hazardous Waste Storage Area were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Four soil borings (HW1, B27W1, B27W2, and B27W3) were advanced to assess the extent of any potential releases from this area. Soil samples were collected from each of the borings and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from this area are summarized in Table 5-5.

Eleven VOC constituents including cis-1,2-DCE; trans-1,2-DCE; vinyl chloride; TCE; tetrachloroethene; 1,1-DCE; toluene; xylenes; ethylbenzene; methylene chloride; and acetone were detected in the samples acquired from this area. The shallow soil sample from B27W3 (8 ft bls) exhibited the highest VOC concentrations including 1,800 ppb cis-1,2-DCE, 600 E ppb vinyl chloride, 390 E ppb TCE, and 160 ppb trans-1,2-DCE. Cis-1,2-DCE was the only VOC detected in the deeper soil sample from the same boring location (18 ppb at 25 ft bls). The soil sample from HW1 contained VOC concentrations of 55 ppb 1,2-DCE, 43 ppb tetrachloroethene, and 18 ppb vinyl chloride. TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride exceeded their respective VOC ITLs within the Hazardous Waste Storage Area.

PAHs, PCBs, TPH, and cyanide (total) were not detected in the soil sample from HW1.

Six of eight heavy metal constituents were detected for the soil samples from this area. Concentrations were comparable to background values. The highest metals concentrations for any of the five samples analyzed from this area included 130 ppm arsenic, 187 ppm barium, 1.4 ppm cadmium, 14 ppm chromium, 24.9 ppm lead, and 0.032 B ppm mercury. The arsenic concentration in the sample from B27W1 was the only value that exceeded its respective metals ITL.

The detected values for these soil samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-5 displays a comparison of the soil sample and ITL values. As a result, the following soil-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (4): cis-1,2-DCE, vinyl chloride, TCE, and trans-1,2-DCE; and
- Metals (1): arsenic.

5.3.2 Analytical Results for Groundwater Samples from Hazardous Waste Storage Area

Analytical for groundwater samples from the Hazardous Waste Storage Area were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

Groundwater samples were collected from 8 temporary piezometers and 3 previously installed monitoring wells for chemical analysis. Analytical results for these groundwater sample collected from the groundwater samples are summarized in Table 5-6. The groundwater sampling locations and associated analytical results are displayed in Figures 5-1 and 5-2.

Tetrachloroethene, TCE, and several degradation products including 1,2-DCE and vinyl chloride were detected at the highest concentrations. Constituent concentrations of 260 D ppb tetrachloroethene, 7,200 D ppb cis-1,2-DCE, 2,600 D ppb vinyl chloride, 510 D ppb TCE, and 410 D ppb trans-1,2-DCE exceeded their respective ITL values. BTEX constituents were also detected in the groundwater sample from B27W3; the benzene level of 7.3 ppb exceeded its ITL. The deeper groundwater sample collected from B27W3D did not contain any detectable VOCs and supports the assertion that the Clay Unit serves as an effective aquitard between the shallow and deep water-bearing units.

Other VOC constituents including 1,1-DCE, acetone, toluene, xylenes, benzene, ethylbenzene, and methylene chloride were generally detected at low concentrations [e.g., 4 parts per billion (ppb) or less, and/or on an isolated basis]. Detected levels for methylene chloride in particular are likely to be laboratory artifacts.

PAHs and PCBs were not detected in the groundwater sample collected from HW1. The groundwater sample from HW1 exhibited a volatile petroleum hydrocarbon concentration of 0.18 ppm.

Six metals (arsenic, barium, chromium, lead, mercury, and selenium) were detected in the groundwater sample collected from the Hazardous Waste Storage Area. The groundwater sample from HW1 exhibited the highest "total" levels of arsenic (499 ppb), barium (19,000 ppb), chromium (906 ppb), lead (798 ppb), mercury (2 B ppb), and selenium (32.6 ppb). Constituent concentrations for arsenic, barium, chromium, and lead exceeded their respective ITLs. These metal concentrations are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels.

Total cyanide was not detected in the groundwater sample collected from HW1. The reactive cyanide concentration of 0.11 mg/kg represents a laboratory artifact that is associated with the batch analysis of multiple samples as allowed by the analytical method.

The concentration values for the groundwater samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-6 displays a comparison of the sample and ITL values for the groundwater samples from this area.

As previously indicated, elevated metal concentrations are associated with sample turbidity and/or naturally-occurring levels. The four metal constituents will be removed from further consideration with respect to this area.

As a result, the following groundwater-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (6): cis-1,2-DCE, vinyl chloride, TCE, tetrachloroethene, trans-1,2-DCE, and benzene.

5.4 Results for Recycling Area

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the Recycling Area.

5.4.1 Analytical Results for Soil Samples from Recycling Area

Analytical results for soil samples from the Recycling Area were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Nine soil borings (RC1 - RC8; MW9S) were advanced to assess the extent of any potential releases from this area. Soil samples were collected from each of the borings and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from the Recycling Area are summarized in Table 5-7.

Seven VOC constituents including TCE; cis-1,2-DCE; vinyl chloride; acetone; methylene chloride; trans-1,2-DCE, and 1,1-DCA were detected in the samples acquired from this area. The soil field duplicate from RC3 exhibited the highest VOC concentrations including 200 ppb acetone, 180 D ppb 1,2-DCE, and 120 D ppb TCE. The soil sample from RC1 exhibited detectable concentrations of the same VOCs in addition to a vinyl chloride concentration of 51 ppb. The shallow soil sample from RC8 (8 ft bls) exhibited detectable concentrations of the same VOCs including a cis-1,2-DCE concentration of 130 ppb. TCE, cis-1,2-DCE, and vinyl chloride exceeded their respective VOC ITLs.

Benzo(a)anthracene and chrysene were detected in soil samples from RC2 and RC3 at concentrations of 29 ppb and 140 ppb, respectively. PCBs were detected at a concentration of 100 ppb Aroclor 1254 for the soil sample from RC2. None of these levels exceeded their respective ITLs.

Six of eight heavy metal constituents were detected for the soil samples from the Recycling Area. Concentrations were comparable to background values. Maximum metals concentrations for the samples included 9.7 ppm arsenic, 188 ppm barium, 1.1 ppm cadmium, 20 ppm chromium, 11.5 ppm lead, and 0.015 B ppm mercury. None of the metal constituent concentrations exceeded an ITL.

The detected values for these soil samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-7 displays a comparison of the soil sample and ITL values. As a result of this evaluation, the following soil-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (3): TCE, cis-1,2-DCE, and vinyl chloride.

5.4.2 Analytical Results for Groundwater Samples from Recycling Area

Analytical results for groundwater samples from the Recycling Area were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

Groundwater samples were collected from 9 temporary piezometers for chemical analysis. Analytical results for the groundwater samples are summarized in Table 5-8. The groundwater sampling locations and associated analytical results are displayed in Figures 5-1 and 5-2.

TCE and several degradation products including 1,2-DCE, vinyl chloride, and 1,1-dichloroethane were detected at the highest concentrations. Maximum constituent concentrations of 250 D ppb 1,2-DCE, 120 ppb TCE, and 59 ppb vinyl chloride exceeded their respective ITL values.

Other VOC constituents including 1,1-DCE, acetone, toluene, xylenes, benzene, ethylbenzene, and methylene chloride were generally detected at low concentrations [e.g., 4 parts per billion (ppb) or less, and/or on an isolated basis]. Detected levels for methylene chloride in particular are likely to be laboratory artifacts.

Benzo(a)anthracene and chrysene were detected in groundwater samples from RC2 at concentrations of 250 ppb and 86 ppb, respectively. Both constituent concentrations exceeded the associated ITLs.

PCBs were detected in the groundwater samples from RC2 and RC1 at concentrations of 580 ppb Aroclor 1254 and 11 ppb Aroclor 1254, respectively. Both of these concentrations exceed the ITL.

Additional samples will be collected in the vicinity of RC1 and RC2 during the Phase 2C activities to evaluate the validity of these groundwater results.

Petroleum hydrocarbons were detected in each of the three Phase 2A groundwater samples (and field duplicate) collected from the Recycling Area. The groundwater sample from RC2 exhibited the highest extractable and volatile petroleum hydrocarbon concentrations of 340 ppm and 2.1 ppm, respectively. The extractable petroleum hydrocarbon concentration for the sample from RC2 exceeded the ITL.

Six metals (arsenic, barium, cadmium, chromium, lead, and mercury) were detected in the groundwater samples collected from the Recycling Area. The groundwater sample from RC4 exhibited the highest detectable "total" levels of barium (2,540 ppb), chromium (490 ppb), and lead (220 ppb), and mercury (0.61 ppb). The groundwater sample from RC2 exhibited the highest detectable "total" levels of arsenic (549 ppb) and cadmium (24.2 ppb). Constituent concentrations for arsenic, barium, cadmium, chromium, and lead exceeded their respective ITLs. These metal concentrations are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels. As a result, these 5 metal constituents will be removed from further consideration with respect to this area.

The concentration values for the groundwater samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-8 displays a comparison of the sample and ITLs for the groundwater samples from the Recycling Area. As a result, the following groundwater-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (4): cis-1,2-DCE, TCE, vinyl chloride, and trans-1,2-DCE;
- PAHs (2): benzo(a)anthracene and chrysene;
- PCBs (1): Aroclor 1254; and
- Petroleum hydrocarbons (extractable fraction).

5.5 Results for Building 27 (Interior)

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the interior of Building 27.

5.5.1 Analytical Results for Soil Samples from Building 27 (Interior)

Analytical results for soil samples from the interior of Building 27 were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Nine soil borings were advanced to assess the extent of any potential releases from this area. Soil samples were collected from each of the borings and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from the interior of Building 27 are summarized in Table 5-9.

Six VOC constituents including TCE; acetone; 2-butanone (MEK); 1,2-DCE; 4-methyl 2-pentanone; and chloroform were detected in the samples acquired from this area. The highest VOC concentrations detected for these samples included 290 D ppb TCE and 82 ppb acetone. Eight of the 9 soil borings from the interior of Building 27 exhibited low VOC concentrations. The soil sample from B27I1 exhibited the only VOC concentration that exceed an ITL (290 D ppb TCE).

Chrysene and extractable petroleum hydrocarbons were detected in the soil sample from B27I9 at concentrations of 740 ppb and 1,400 ppm, respectively. The extractable petroleum hydrocarbon concentration exceeded its associated ITL. Additional samples will be collected in the vicinity of B27I9 during the Phase 2C activities to delineate the extent of these impacts.

PCBs were not detected in any of the soil samples from interior of Building 27.

Six of eight metal constituents were detected for the soil samples from the interior of Building 27. Concentrations were comparable to background values. Maximum metals concentrations for these samples included 13.8 ppm arsenic, 295 ppm barium, 0.18 B ppm cadmium, 114 ppm chromium, 16.2 ppm lead, and 0.032 B ppm mercury. The field duplicate soil sample from B27I6 exhibited the only metal constituent concentration (114 ppm chromium) that exceeded an ITL.

The detected values for these soil samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-9 displays a comparison of the soil samples and ITL values. As a result of this evaluation, the following soil-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (1): TCE;
- Petroleum hydrocarbons (extractable fraction); and
- Metals (1): chromium.

5.5.2 Analytical Results for Groundwater Samples from Building 27 (Interior)

Analytical results for groundwater samples from the interior of Building 27 were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

Groundwater samples were collected from 9 temporary piezometers for chemical analysis. Analytical results for the groundwater samples are summarized in Table 5-10. The groundwater sampling location and associated analytical results are displayed in Figures 5-1 and 5-2.

TCE and several degradation products including 1,2-DCE, vinyl chloride, and 1,1-dichloroethane were detected at the highest concentrations. Constituent concentrations of 620 D ppb TCE, 290 D ppb 1,2-DCE, and 31 ppb vinyl chloride exceeded their respective ITL values. These concentrations were detected for the samples collected from the north side of Building 27 (B27I1 and B27I2). The groundwater sample from B27I9 along the south side of the building exhibited constituent concentrations of 36 ppb acetone, 16 ppb 2-hexanone, and 16 ppb MEK.

Other VOC constituents including 1,1-DCE, 4-methyl 2-pentanone, carbon disulfide, chloroform, toluene, benzene, and methylene chloride were generally detected at low concentrations [e.g., 3 ppb or less, and/or on an isolated basis]. Detected levels for methylene chloride in particular are likely to be laboratory artifacts.

PAHs and PCBs were not detected in any of the groundwater samples collected from the interior of Building 27.

Petroleum hydrocarbons were detected in four of the groundwater samples (and field duplicate) collected from the interior of Building 27. The groundwater sample from B27I9 exhibited the highest extractable petroleum hydrocarbon concentration of 120 ppm, while the samples from B27I1 contained the highest volatile petroleum hydrocarbon concentration of 0.57 ppm. The extractable petroleum hydrocarbon concentration for the sample from B27I9 exceeded the ITL. As described in the previous section, additional samples will be collected in the vicinity of B27I9 during the Phase 2C activities to delineate the extent of any petroleum hydrocarbon impacts.

Seven metals (arsenic, barium, cadmium, chromium, lead, mercury, and selenium) were detected in the groundwater samples collected from the interior of Building 27. The groundwater sample from B27I7 exhibited the highest detectable levels of arsenic (255 ppb), barium (5,460 ppb), cadmium (11.3 ppb), lead (327 ppb), and mercury (2.6 ppb). The groundwater sample from B27I6 exhibited the highest level of chromium (994 ppb). Constituent concentrations for arsenic, barium, cadmium, chromium, lead, and mercury exceeded their respective ITLs.

The concentration values for the groundwater samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-10 displays a comparison of the sample and ITL values for the groundwater samples from the interior of Building 27.

As a result, the following groundwater-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (3): TCE, 1,2-DCE, and vinyl chloride;
- Petroleum hydrocarbons (extractable fraction); and
- Metals (7): arsenic, barium, cadmium, chromium, lead, mercury, and selenium.

5.6 Results for Building 27 (East)

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts along the east side of Building 27.

5.6.1 Analytical Results for Soil Samples from Building 27 (East)

Analytical results for soil samples from the east side of Building 27 were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Seven soil borings (B27E1 - B27E6; Boring MW-8AS) were advanced to assess the extent of any potential releases from this area. Soil samples were collected from each boring and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from this area are summarized in Table 5-11.

Two VOC constituents (11 ppb TCE and 2.4 J ppb 1,2-DCE) were detected in the soil sample from B27E1. Similarly, TCE and cis-1,2-DCE were also detected in the soil sample from B27E4 at concentrations of 37 ppb and 7 ppb, respectively. VOCs were not detected in any of the other five soil samples collected from this area. None of the detected VOCs exceeded the associated ITL.

Benzo(a)anthracene, fluoranthene, and benzo(b)fluoranthene were detected in the soil sample from B27E2 at concentrations of 94 ppb, 44 ppb, and 39 ppb, respectively. Extractable and volatile petroleum hydrocarbons were detected in this sample at concentrations of 4,500 ppm and 0.24 ppm, respectively. The extractable petroleum hydrocarbon concentration exceeded its associated ITL.

PCBs were not detected in the soil samples collected from the east side of Building 27.

Six of eight heavy metal constituents were detected in soil samples from the east side of Building 27. Concentrations were comparable to background values. Maximum metals concentrations for these samples included 9.4 ppm arsenic, 176 ppm barium, 1.2 ppm cadmium, 69.8 ppm chromium, 14.1 ppm lead, and 0.047 ppm mercury. None of the metal constituent concentrations exceeded an ITL.

The detected values for these soil samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-10 displays a comparison of the soil sample and ITL values. As a result of this evaluation, extractable petroleum hydrocarbons will be retained for further evaluation in Volume 3.

5.6.2 Analytical Results for Groundwater Samples from Building 27 (East)

Analytical results for groundwater samples from the east side of Building 27 were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

Groundwater samples were collected from 6 temporary piezometers and 2 existing monitoring wells for chemical analysis. Analytical results for the groundwater samples are summarized in Table 5-12. The groundwater sampling locations and associated results are displayed in Figures 5-1 and 5-2.

TCE, and several degradation products including 1,2-DCE, vinyl chloride, and 1,1-DCE were detected at the highest concentrations. Constituent concentrations of 2,700 D ppb TCE and 740 D ppb 1,2-DCE exceeded their respective ITL values. These concentrations were detected for the sample collected near the dock area along the east side of Building 27 (B27E1). Borings for 2 consecutive "step-out" locations to the east of B27E1 (B27E4 and B27E5) exhibited steadily decreasing TCE and 1,2-DCE concentrations. In fact, no VOCs were detected for the groundwater sample collected from the temporary piezometer at B27E5. However, as previously described in Section 5.2.1, the groundwater sample from monitoring well MW-5AS (immediately adjacent to B27E5) contained 71 ppb cis-1,2-DCE, 14 ppb TCE, and 6.1J ppb vinyl chloride. As a result, an additional step-out and groundwater monitoring well will be completed to the east of MW-5AS during the Phase 2C activities to delineate the extent of VOC impacts in this area.

The groundwater sample from B27E2 along the southeast side of the building exhibited low constituent concentrations of 5.9 J ppb acetone and 0.91 J ppb benzene. Neither of the detected VOCs at this location exceeded the associated ITL.

PAHs and PCBs were not detected in the groundwater samples collected from the east side of Building 27 (B27E1 and B27E2).

Petroleum hydrocarbons were detected in 3 groundwater samples collected from the east side of Building 27. The groundwater samples from B27E2 and B25MW4 exhibited extractable petroleum hydrocarbon concentrations of 11 ppm and 8 ppm, respectively. The sample from B27E1 contained a volatile petroleum hydrocarbon concentration of 0.45 ppm. The extractable petroleum hydrocarbon concentration for the sample from B27E2 exceeded the ITL.

Seven metals (arsenic, barium, cadmium, chromium, lead, mercury, and selenium) were detected in the groundwater samples collected from the east side of Building 27. The groundwater sample from B27E1 exhibited the highest detectable level of chromium (49,000 ppb). Groundwater samples from 2 consecutive "step-out" locations to the east of B27E1 (B27E4 and B27E5) exhibited steadily decreasing chromium concentrations (12,000 ppb and 46.7 ppb, respectively). The chromium concentration for the groundwater sample from B27E5 does not exceed the ITL. The groundwater sample from pre-existing monitoring well B25MW4 to the south of these borings exhibited the highest detectable levels of arsenic (277 ppb), barium (6,400 ppb), lead (261 ppb, and mercury (0.75 ppb). As a result, additional step-outs and 2 additional groundwater monitoring wells will be completed to the east southeast of Building 27 during the Phase 2C activities to delineate the extent of chromium impacts in this area. None of the metal constituents for the groundwater sample from B27E2 exceeded ITLs.

Total and dissolved metal concentrations were evaluated for the groundwater sample collected from B27E4. Although chromium concentrations were not significantly different, the total barium and lead levels (885 ppb and 71.5 ppb, respectively) were entirely attributable to particulate metal content (e.g. no detectable dissolved concentrations for either parameter). Arsenic, cadmium, and mercury were not detected in the unfiltered or filtered samples. These comparative results indicate that metal concentrations are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels.

The concentration values for the groundwater samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-12 displays a comparison of the sample and ITL values for the groundwater samples from the east side of Building 27.

Constituent concentrations for chromium, arsenic, barium, and lead exceeded their respective ITL. However, as previously described, metal concentrations for arsenic, barium, and lead are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels. As a result, these three metal constituents will be removed from further consideration with respect to this area.

As a result, the following groundwater-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (3): TCE, cis-1,2-DCE, and trans-1,2-DCE;
- Petroleum hydrocarbons (extractable fraction); and
- Metals (1): chromium.

5.7 Results for Building 21

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from Building 21.

5.7.1 Analytical Results for Soil Samples from Building 21

Analytical results for soil samples from Building 21 were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Soil boring B21S1 was advanced to assess the extent of any potential releases from this area. One soil sample was collected from a depth of 12 ft bls and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring location is displayed in Figure 5-1. Analytical results for constituents detected in the soil sample from Building 21 are summarized in Table 5-13.

No VOC or TPH constituents were detected in the soil sample acquired from this area.

Five of eight heavy metal constituents were detected for the soil sample from B21S1. Concentrations were comparable to background values. Metals concentrations for the sample included 3.1 ppm arsenic, 68.3 ppm barium, 12.4 ppm chromium, 8.1 ppm lead, and 0.152 B ppm mercury. None of the metal constituent concentrations exceeded an ITL.

The detected values for this soil sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-13 displays a comparison of the soil sample and ITL values. As a result of this evaluation, none of the detected constituents will be retained for further evaluation in Volume 3.

5.7.2 Analytical Results for Groundwater Samples from Building 21

Analytical results for groundwater samples from Building 21 were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

One groundwater sample was collected from this area for chemical analysis. Analytical results for the groundwater sample collected from the temporary piezometer at B21S1 are summarized in Table 5-14. The groundwater sampling location and associated results are displayed in Figures 5-1 and 5-2.

Carbon disulfide was the only VOC detected at a concentration of 0.52 J ppb. This concentration did not exceed the associated ITL.

TPH was not detected in the groundwater sample collected from Building 21.

Seven metals (arsenic, barium, cadmium, chromium, lead, mercury, and selenium) were detected in the groundwater sample collected from Building 21. The groundwater sample exhibited detectable levels of arsenic (196 ppb), barium (22,900 ppb), cadmium (13.4 ppb), chromium (1,060 ppb), lead (388 ppb), mercury (1.3 B ppb), and selenium (7 ppb). Constituent concentrations for arsenic, barium, cadmium, chromium, and lead exceeded their respective ITLs. These metal concentrations are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels. As a result, these five metal constituents will be removed from further consideration with respect to this area.

The concentration values for the groundwater sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-14 displays a comparison of the sample and ITL values for the groundwater sample from Building 21. As a result of this evaluation, none of the groundwater-associated COCs from this area will be retained for further evaluation in Volume 3.

5.8 Results for Building 220 (Interior and East)

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the interior of Building 220.

5.8.1 Analytical Results for Soil Samples from Building 220 (Interior and East)

Analytical results for soil samples from the interior and east of Building 220 were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Two soil borings (B220I1 and MW-10S) were advanced to assess the extent of any potential releases from this area. Soil samples were collected from each boring and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from Building 220 (interior and east) are summarized in Table 5-15.

Three VOC constituents including 1,2-DCE (75 ppb), TCE (48 ppb), and methylene chloride (11 ppb) were detected in the groundwater sample collected from B220I1 in this area. Two other VOC constituents including acetone (130 J ppb) and MEK (110 J ppb) were detected in the soil sample acquired from the boring for MW-10S. However, matrix interferences were noted for this sample due to surrogate recoveries which fell outside of the acceptable range. None of the constituent concentrations exceeded an ITL.

PAHs were not detected in either of the soil samples collected from this area.

The detected values for this soil sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-15 displays a comparison of the soil sample and ITL values. As a result of this evaluation, none of the constituents will be retained for further evaluation in Volume 3.

5.8.2 Analytical Results for Groundwater Samples from Building 220 (Interior and East)

Analytical results for groundwater samples from the interior and east of Building 220 were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

Three groundwater samples was collected from this area for chemical analysis. Analytical results for the groundwater sample from the temporary piezometer at B220I1 are summarized in Table 5-16. Results for the shallow and deep groundwater monitoring wells in this area were previously described in Sections 5.2.1 and 5.2.2, respectively. The groundwater sampling locations and associated analytical results are displayed in Figure 5-1.

Three VOCs including TCE (220 ppb), 1,2-DCE (54 D ppb), and 1,1-DCE (0.88 J ppb) were detected in the groundwater sample from the interior of Building 220. The TCE concentration exceeded the associated ITL. As previously described in Sections 5.2.1 and 5.2.2, none of the VOC concentrations for the groundwater samples from MW-10S or MW-10D exceeded ITLs.

The concentration values for the groundwater sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-16 displays a comparison of the sample and ITL values for the groundwater sample from the interior of Building 220. Tables 5-1 and 5-2 display similar comparisons for the groundwater samples collected to the east of Building 220. As a result of this evaluation, TCE will be retained for further evaluation in Volume 3.

5.9 Results for Building 220 (North)

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the north side of Building 220 near the compactor.

5.9.1 Analytical Results for Soil Samples from Building 220 (North)

Analytical results for soil samples from the north side of Building 220 were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Three soil borings were advanced to assess the extent of any potential releases from this area. Soil samples were collected from each boring and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in these soil samples are summarized in Table 5-17.

TPH was not detected in any of the soil samples collected to the north of Building 220. Although 5 metal constituents were detected in B220N2 and B220N3, none of the levels exceeded an ITL. As a result, none of the soil-associated COCs will be retained for further evaluation in Volume 3.

5.9.2 Analytical Results for Groundwater Samples from Building 220 (North)

Analytical results for groundwater sample from the north side of Building 220 were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

Three groundwater samples were collected from this area for chemical analysis. Analytical results for the groundwater samples collected from the temporary piezometers are summarized in Table 5-18. The groundwater sampling locations and associated analytical results are displayed in Figures 5-1 and 5-2.

Extractable petroleum hydrocarbons were detected in the groundwater sample from B220N1. The extractable petroleum hydrocarbon concentration of 35 ppm exceeded the ITL. TPH was not detected in the other 2 groundwater samples from the north side of Building 220. As a result, extractable petroleum hydrocarbons will be retained for further evaluation in Volume 3.

5.10 Results for Oil/Water Separator Areas

Phase 2A analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the Oil/Water Separator Areas.

5.10.1 Analytical Results for Soil Samples from Oil/Water Separator Areas

Analytical results for soil samples from the Oil/Water Separator Areas were utilized to assess the horizontal and vertical extent of any impacted soils at these locations.

Soil borings were advanced to assess the extent of any potential releases from each area. Soil samples were collected from each of the borings and submitted for chemical analysis to evaluate any potential impacts to soil at these locations. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from these areas are summarized in Table 5-19.

Three VOC constituents including acetone, ethylbenzene, and methylene chloride were detected in the samples acquired from these areas. The highest VOC concentrations detected for these samples included 61 ppb acetone, 30 ppb ethylbenzene, and 17 ppb methylene chloride. None of the VOC constituent concentrations exceeded an ITL.

Seven PAHs (acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(b)fluoranthene, chrysene, fluoranthene, and fluorene) were detected in the soil samples collected from the three oil/water

separator areas. The soil sample from B22N1 exhibited the highest detectable levels of acenaphthene (6,800 ppb), acenaphthylene (74 ppb), benzo(a)anthracene (42 ppb), benzo(b)fluoranthene (42 ppb), chrysene (300 ppb), fluoranthene (110 ppb), and fluorene (62 ppb). With the exception of a chrysene level of 110 ppb for the soil sample from B28N1, no other PAHs were detected for the soil samples from B28N1 and B28E1.

Volatile petroleum hydrocarbons were detected for the soil samples from B28N1 (16 ppm) and B22N1 (1.4 ppm). Neither of these constituent concentrations exceeded its respective ITL.

PCBs were not detected in any of the soil samples from these three areas.

Five of eight heavy metal constituents were detected for the soil samples from the Oil/Water Separator Areas. Concentrations were comparable to background values. Maximum metals concentrations for the samples included 6.1 ppm arsenic, 118 ppm barium, 13 ppm chromium, 8 ppm lead, and 0.043 ppm mercury. None of the metal constituent concentrations exceeded an ITL.

The detected values for these soil samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-19 displays a comparison of the soil sample and ITL values. As a result of this evaluation, none of the soil-associated constituents will be retained for further evaluation in Volume 3.

5.10.2 Analytical Results for Groundwater Samples from Oil/Water Separator Areas

Phase 2A analytical results for groundwater samples from the Oil/Water Separator Areas were utilized to characterize the nature of any potential constituent releases to groundwater beneath these areas.

Groundwater samples were collected from these areas for chemical analysis. Analytical results for the groundwater samples collected from the 3 temporary piezometers are summarized in Table 5-20. The groundwater sampling locations and associated analytical results are displayed in Figure 5-1 and 5-2.

Analytical Results for Groundwater Sample from B28N1

Four VOC constituents including 1,2-DCE (1,900 ppb), vinyl chloride (260 ppb), benzene (44 J ppb), and methylene chloride (43 J,B ppb) were detected in the groundwater sample from B28N1. Each of these VOCs exceeded the ITL. These constituents are likely to be associated with other sources in the vicinity of Building 28 rather than any potential release from the oil/water separator.

PAHs and PCBs were not detected in the groundwater sample from B28N1.

Volatile petroleum hydrocarbons were detected in the groundwater sample. The volatile petroleum hydrocarbon concentration of 1 ppm did not exceed the ITL.

Five of eight heavy metal constituents were detected for the groundwater sample from B28N1. Concentrations were comparable to background values. Metal concentrations for the sample included 23.2 ppb arsenic, 637 ppb barium, 54.6 ppb chromium, 19.2 ppb lead, and 0.077 B ppb mercury. None of the metal constituent concentrations exceeded an ITL.

The concentration values for the groundwater sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-20 displays a comparison of the sample and ITL values for the groundwater sample from B28N1.

As a result, the following groundwater-associated COCs will be retained for further evaluation in Volume 3:

- VOCs (4): 1,2-DCE, vinyl chloride, benzene, and methylene chloride.

Analytical Results for Groundwater Sample from B28E1

Two VOC constituents (0.39 J,B ppb methylene chloride and 0.37 J ppb toluene) were detected in the groundwater sample from B28E1. Neither one of these VOCs exceeded the ITL.

PAHs, TPH, and PCBs were not detected in the groundwater sample from B28E1.

Five of eight heavy metal constituents were detected for the groundwater sample from B28E1. Concentrations were comparable to background values. Metal concentrations for the sample included 82.8 ppb arsenic, 1,620 ppb barium, 301 ppb chromium, 105 ppb lead, and 0.43 ppb mercury. The chromium concentration exceeded its respective ITL. As a result, only chromium will be retained for further evaluation in Volume 3.

Analytical Results for Groundwater Sample from B22N1

Three VOC constituents including acetone (11 ppb), carbon disulfide (0.51 J ppb), and methylene chloride (0.38 J,B ppb) were detected in the groundwater sample from B22N1. None of these VOCs exceeded its respective ITL.

Two PAHs (43 ppb acenaphthene and 25 ppb chrysene) were detected in the groundwater sample collected from B22N1. The chrysene concentration exceeded the ITL.

Petroleum hydrocarbons were detected in the groundwater sample. The sample exhibited a extractable petroleum hydrocarbon concentration of 2.9 ppm and a volatile concentration of 3.6 ppm. Neither value exceeded the ITL.

PCBs were not detected in the groundwater sample from B28N1.

Eight heavy metal constituents were detected for the groundwater sample from B22N1. Metal concentrations for the sample included 70.9 ppb arsenic, 5,770 ppb barium, 14.9 ppb cadmium, 426 ppb chromium, 542 ppb lead, 0.42 ppb mercury, 36.4 ppb selenium, and 1.2 B ppb silver. Constituent concentrations for arsenic, barium, cadmium, chromium, and lead exceeded their respective ITLs. These metal concentrations are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels. As a result, these five metal constituents will be removed from further consideration with respect to this area.

The concentration values for the groundwater sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-20 displays a comparison of the sample and ITL values for the groundwater sample from B22N1.

As a result, the following groundwater-associated COCs will be retained for further evaluation in Volume 3:

- PAHs (1): chrysene.

5.11 Results for Building 27 (South)

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the south side of Building 27.

5.11.1 Analytical Results for Soil Samples from Building 27 (South)

Analytical results for soil samples from the south side of Building 27 were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Three soil borings were advanced to assess the extent of any potential releases from this area. Soil samples were collected from each of the borings and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from the south of Building 27 are summarized in Table 5-21.

Acetone was the only VOC constituent detected in any of the soil samples acquired from this area. The acetone concentration of 58 ppb for the sample from B27S3 did not exceed the ITL.

Chrysene was the only PAH constituent detected in any of the soil samples acquired from this area. The chrysene concentration of 160 ppb for the sample from B27S3 did not exceed the ITL.

PCBs and TPH were not detected in any of the soil samples from the south side of Building 27.

Six of eight heavy metal constituents were detected for the soil samples from this area. Concentrations were comparable to background values. Maximum metals concentrations for the samples included 7.5 ppm arsenic, 108 ppm barium, 0.05 b ppm cadmium, 16 ppm chromium, 10.5 ppm lead, and 0.029 B ppm mercury. None of the metal constituent concentrations exceeded an ITL.

The detected values for these soil samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-19 displays a comparison of the soil sample and ITL values. As a result of this evaluation, none of the soil-associated COCs will be retained for further evaluation in Volume 3.

5.11.2 Analytical Results for Groundwater Samples from Building 27 (South)

Analytical results for groundwater samples from the south side of Building 27 were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

Groundwater samples were collected from 4 temporary piezometers for chemical analysis. Analytical results for the groundwater samples are summarized in Table 5-22. The groundwater sampling locations and associated analytical results are displayed in Figures 5-1 and 5-2.

Three VOCs including 1,2-DCE, acetone, and carbon tetrachloride were detected in the groundwater samples from this area. The sample collected from B27S3 exhibited constituent concentrations of 3.4 ppb 1,2-DCE and 4.4 J ppb acetone, while the sample from B27S2 exhibited a carbon tetrachloride concentration of 0.32 J ppb. None of these constituent concentrations exceeded their respective ITLs.

PAHs, TPH, and PCBs were not detected in any of the groundwater samples collected from the south side of Building 27.

Five metals (arsenic, barium, chromium, lead, and mercury) were detected in the groundwater samples collected from the south side of Building 27. The groundwater sample from B27S2 exhibited the highest detectable levels of arsenic (93.5 ppb), chromium (290 ppb), and lead (158 ppb). The groundwater sample from B27S1 exhibited the highest level of barium (2,010 ppb). The constituent concentration for chromium exceeded the respective ITL.

Total and dissolved metal concentrations were evaluated for the groundwater sample collected from boring RR5. The total chromium, arsenic, barium and lead levels (91.1 ppb, 37.7 ppb, 1,630 ppb, and 33.5 ppb, respectively) were largely attributable to particulate metal content (e.g. dissolved concentrations were approximately 30-50% of the unfiltered levels). These comparative results indicate that metal concentrations are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels.

The concentration values for the groundwater samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-20 displays a comparison of the sample and ITL values for the groundwater samples from the south side of Building 27. As a result of this evaluation, none of the groundwater-associated COCs from this area will be retained for further evaluation in Volume 3.

5.12 Results for Building 22 Maintenance Area

Phase 2A analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the Building 22 Maintenance Area.

5.12.1 Analytical Results for Soil Samples from Building 22 Maintenance Area

Analytical results for soil samples from the Building 22 Maintenance Area were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Soil boring B22W1 was advanced to assess the extent of any potential releases from this area. One soil sample was collected from a depth of 6 ft bls and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring location is displayed in Figure 5-1. Analytical results for constituents detected in the soil sample from B22W1 are summarized in Table 5-23.

Three VOC constituents including MEK (25 J ppb), acetone (21 J ppb), and methylene chloride (13 ppb) were detected in the sample acquired from this area. None of these constituent concentrations exceeded their respective ITLs.

Volatile petroleum hydrocarbons were detected in the soil sample. The volatile petroleum hydrocarbon concentration of 0.27 ppm did not exceed the ITL.

Five of eight heavy metal constituents were detected for the soil sample from B22W1. Concentrations were comparable to background values. Metals concentrations for the sample included 1.1 B ppm

arsenic, 70 ppm barium, 13.1 ppm chromium, 8.8 ppm lead, and 0.032 B ppm mercury. None of the metal constituent concentrations exceeded an ITL.

The detected values for this soil sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-23 displays a comparison of the soil sample and ITL values. As a result of this evaluation, none of the soil-associated constituents will be retained for further evaluation in Volume 3.

5.12.2 Analytical Results for Groundwater Samples from Building 22 Maintenance Area

Analytical results for groundwater samples from the Building 22 Maintenance Area were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

One groundwater sample was collected from this area for chemical analysis. Analytical results for the groundwater sample collected from the temporary piezometer at B22W1 are summarized in Table 5-24. The groundwater sampling location and associated analytical results are displayed in Figures 5-1 and 5-2.

Two VOC constituents (3.6 ppb 1,2-DCE and 2.2 ppb TCE) were detected in the groundwater sample from B22W1. Neither one of these VOCs exceeded their respective ITLs.

TPH was not detected in the groundwater sample from B22W1.

Six of eight heavy metal constituents were detected for the groundwater sample from B22W1. Metal concentrations for the sample included 47.5 ppb arsenic; 23,400 ppb barium; 23.4 ppb cadmium; 2,560 ppb chromium; 1,180 ppb lead; and 2.1 ppb mercury. The barium, cadmium, chromium, lead, and mercury concentrations exceeded their respective ITLs. These metal concentrations are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels. As a result, these five metal constituents will be removed from further consideration with respect to this area.

As a result of this evaluation, none of the groundwater-associated constituents will be retained for further evaluation in Volume 3.

5.13 Results for PCB Wipe Samples

Analytical wipe sample data were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from designated stained areas in Buildings 27, 29, and 220.

Analytical results for the five PCB wipe samples are summarized in Table 5-25. The wipe sampling locations are displayed in Figure 5-1.

All three wipe samples acquired from Building 27 exhibited detectable concentrations of PCBs. Wipe samples B27-P1, B27-P2, and B27-P3 contained Aroclor 1254 concentrations of 1.5 ug/g, 1.6 ug/g, and 71 ug/g, respectively. Neither of the wipes samples from Buildings 29 or 220 exhibited any detectable PCB levels.

Aroclor 1254 at Building 27 will be retained for further evaluation in Volume 3.

5.14 Results for UST-Related Areas

Analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the UST Areas.

5.14.1 Analytical Results for Soil Samples from UST-Related Areas

Analytical results for soil samples from the UST Areas were utilized to assess the horizontal and vertical extent of any impacted soils at these locations.

Soil borings were advanced to assess the extent of any potential releases from each of the 5 UST areas. Soil samples were collected from each of the borings and submitted for chemical analysis to evaluate any potential impacts to soil at these locations. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from these areas are summarized in Table 5-26.

Six VOC constituents including ethylbenzene, xylenes, acetone, MEK, methylene chloride, and tetrachloroethene were detected in the 11 samples acquired from these areas. The soil sample from B20E1 exhibited the highest VOC concentrations including 3,200 ppb ethylbenzene and 1,200 ppb xylenes. Low concentrations of acetone (ND - 71 ppb), MEK (ND - 11 J,B ppb), methylene chloride (ND-16 ppb), and tetrachloroethene (detected in one sample at 2.1 J,D ppb) in the remainder of these soil samples. None of the VOC constituent concentrations exceeded an ITL.

No PAHs or PCBs were detected in the soil sample that was analyzed for these parameters (B29E1).

Extractable petroleum hydrocarbons were only detected in the soil samples from Building 20 (170 ppm in B20E1 and 490 ppm in B20E2) and Building 221 (1,200 ppm in B221E1 [7 ft bls] and 330 ppm in B221E1 [12 ft bls]). Similarly, volatile petroleum hydrocarbons were only detected in the soil samples

from Building 20 (320 ppm in B20E2) and Building 221 (2.9 ppm in B221E1 [7 ft bls], 5.2 ppm in B221E1 [12 ft bls], and 0.22 ppm in B221E3 [7 ft bls]). The extractable petroleum hydrocarbon concentration in the soil sample from B221E1 (7 ft bls) was the only constituent concentration that exceeded its respective ITL. The extractable concentration from the underlying soil sample B221E1 (12 ft bls) was less than the ITL.

Five of eight heavy metal constituents were detected for the soil samples collected from B29E1. Concentrations were comparable to background values. Maximum metals concentrations for the samples included 9.5 ppm arsenic, 213 ppm barium, 20.3 ppm chromium, 11.2 ppm lead, and 0.026B ppm mercury. None of the metal constituent concentrations exceeded an ITL.

The detected values for these soil samples were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-26 displays a comparison of the soil sample and ITL values. As a result, only extractable petroleum hydrocarbons will be retained as part of any further evaluation in Volume 3 for soils at the UST area adjacent to Building 221.

5.14.2 Analytical Results for Groundwater Samples from UST-Related Areas

Analytical results for groundwater samples from the UST Areas were utilized to characterize the nature of any potential constituent releases to groundwater beneath these areas.

Groundwater samples were collected from these areas for chemical analysis. Analytical results for the groundwater samples collected from the 8 temporary piezometers are summarized in Table 5-27. The groundwater sampling locations and associated analytical results are displayed in Figures 5-1 and 5-2.

<u>Analytical Results for Groundwater Samples Associated with the UST at Building 22</u>
Toluene was the only VOC constituent detected in two of the three groundwater samples collected from this area (0.5J ppb at B22E2 and 0.38J ppb at B22E3). Neither of these concentrations exceeded the ITL for toluene.

Volatile petroleum hydrocarbons were only detected in the groundwater sample from B22E3. The volatile petroleum hydrocarbon concentration of 0.13 ppm did not exceed the ITL.

Five of eight heavy metal constituents were detected for the groundwater samples from B22E2 and B22E3. Maximum metals concentrations for the samples included 577 ppb arsenic, 57,000 ppb barium, 2,390 ppb chromium, 802 ppb lead, and 2.2 ppb mercury. Constituent concentrations for arsenic, barium, chromium, lead, and mercury exceeded their respective ITLs. These metal concentrations are likely to be associated with sample turbidity (e.g. particulate metal content of soil matrix vs. dissolved metal content in groundwater matrix) and/or naturally-occurring levels rather than

any potential release from the adjacent UST. As a result, these five metal constituents will be removed from further consideration with respect to this area.

The concentration values for the groundwater sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-27 displays a comparison of the samples and ITL values for the groundwater samples from Building 22 (B22E1, B22E2, and B22E3).

As a result of this evaluation, none of the groundwater-associated constituents will be retained for further evaluation in Volume 3.

Analytical Results for Groundwater Sample Associated with UST to the East of Building 29
Acetone was the only VOC constituent detected in the groundwater sample from B29E1. The detected concentration of 4.6 J ppb did not exceed the ITL.

Volatile petroleum hydrocarbons were detected in the groundwater sample from B29E1. The volatile petroleum hydrocarbon concentration of 0.73 ppm did not exceed the ITL.

The detected values for this groundwater sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-27 displays a comparison of the groundwater sample and ITL values. As a result of this evaluation, none of the groundwater-associated constituents will be retained for further evaluation in Volume 3.

Analytical Results for Groundwater Sample Associated with UST to the West of Building 29
Methylene chloride was the only VOC constituent detected in the groundwater sample from B29AW1. The methylene chloride concentration of 0.4 J,B ppb did not exceed the ITL.

TPH was not detected in the groundwater sample from B29AW1.

The detected values for this groundwater sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations. Table 5-27 displays a comparison of the groundwater sample and ITL values. As a result of this evaluation, none of the groundwater-associated constituents will be retained for further evaluation in Volume 3.

Analytical Results for Groundwater Samples Associated with the UST to the East of Building 221
Methylene chloride was only VOC constituent detected in two of the three groundwater samples collected from this area (0.57 J,B ppb at B221E2 and 0.46 J,B ppb at B221E3). Neither of these concentrations exceeded the ITL.

Volatile petroleum hydrocarbons were only detected in the groundwater sample from B221E1. The volatile petroleum hydrocarbon concentration of 0.65 ppm did not exceed the ITL.

The concentration values for the groundwater sample were compared to the constituent-specific ITL values to evaluate the presence of significant constituent concentrations in groundwater. Table 5-27 displays a comparison of the samples and ITL values for the groundwater samples from Building 221 (B221E1, B221E2, and B221E3). As a result of this evaluation, none of the groundwater-associated constituents will be retained for further evaluation in Volume 3.

5.15 Results for East Parking Lot

Analytical soil data and analytical wipe sample data were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the East Parking Lot.

5.15.1 Analytical Results for Soil Samples from East Parking Lot

Analytical results for soil samples from the East Parking Lot were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Two soil borings were advanced to assess the extent of any potential releases from this area. Soil samples were collected from each of the borings (approximately 2 ft bls) and submitted for radiological analysis to evaluate any potential impacts to soil at this location. The boring locations are displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from the East Parking Lot are summarized in Table 5-28.

Radioactivity (alpha and beta parameters) was evaluated in the soil samples (and field duplicate) collected from this area. Results for all three of the samples were similar (alpha values of approximately 23 pCi/g and beta values of approximately 27 pCi/g). Radioactivity levels were comparable with background values acquired from the western portion of the Facility. As a result, none of the soil-associated radioactive parameters will be retained for further evaluation in Volume 3.

5.15.2 Analytical Results for Wipe Samples from East Parking Lot

Analytical results for wipe samples from the East Parking Lot were utilized to characterize the nature of any potential fugitive dust impacts at the Facility.

Three wipe samples were collected from this area on two separate occasions for radiological analysis. Analytical results for the wipe samples collected from the East Parking Lot are summarized in Table 5-29. The wipe sampling locations are displayed in Figure 5-1.

Radioactivity (alpha and beta parameters) was evaluated in the wipe samples collected from this area. Alpha/beta levels were not detected in eleven of the twelve wipe samples. Sample EP1-P exhibited a low beta level of 1.14 J pCi/g. As a result, none of the fugitive emission-associated radiological parameters will be retained for further evaluation in Volume 3.

5.16 Results for Cyanide Storage Area

Phase 2A analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the Cyanide Storage Area.

5.16.1 Analytical Results for Soil Samples from Cyanide Storage Area

Analytical results for soil samples from the Cyanide Storage Area were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Soil boring CN1 was advanced to assess the extent of any potential releases from this area. One soil sample was collected from a depth of 8 ft bls and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring location is displayed in Figure 5-1. Analytical results for constituents detected in the soil sample from CN1 are summarized in Table 5-30.

Cyanide (total or reactive) was not detected in the soil sample acquired from this area. As a result, cyanide will not be retained as a soil-associated constituent for further evaluation in Volume 3.

5.16.2 Analytical Results for Groundwater Samples from Cyanide Storage Area

Analytical results for groundwater samples from the Cyanide Storage Area were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

One groundwater sample was collected from this area for chemical analysis. Analytical results for the groundwater sample collected from the temporary piezometer at CN1 are summarized in Table 5-31. The groundwater sampling location and associated analytical results are displayed in Figure 5-1.

Cyanide (total) was not detected in the groundwater sample acquired from this area. The low reactive cyanide concentration of 0.11 ppm represents a laboratory artifact that is associated with the batch analysis of multiple samples as allowed by the analytical method. As a result, cyanide will not be retained as a groundwater-associated constituent for further evaluation in Volume 3.

5.17 Results for PCB Storage Area

Phase 2A analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the PCB Storage Area.

5.17.1 Analytical Results for Soil Samples from PCB Storage Area

Analytical results for soil samples from the PCB Storage Area were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Soil boring PB1 was advanced to assess the extent of any potential releases from this area. One soil sample was collected from a depth of 6 ft bls and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring location is displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from HW1 are summarized in Table 5-32.

PCBs and TPH were not detected in the soil sample from the PCB Storage Area. As a result, neither soil-associated constituent will be retained for further consideration.

5.17.2 Analytical Results for Groundwater Samples from PCB Storage Area

Analytical results for groundwater samples from the PCB Storage Area were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

One groundwater sample was collected from this area for chemical analysis. Analytical results for the groundwater sample collected from the temporary piezometer at PB1 are summarized in Table 5-33. The groundwater sampling location is displayed in Figure 5-1.

PCBs and TPH were not detected in the groundwater sample from the PCB Storage Area. As a result, neither groundwater-associated constituent will be retained for further consideration.

5.18 Results for Building 29

Phase 2A analytical soil data, analytical groundwater data, geological soil boring data, and various field data/measurements were utilized to characterize the nature and extent of any hazardous constituent/waste impacts from the interior of Building 29.

5.18.1 Analytical Results for Soil Samples from Building 29

Analytical results for soil samples from the interior of Building 29 Area were utilized to assess the horizontal and vertical extent of any impacted soils at this location.

Soil boring B29I1 was advanced to assess the extent of any potential releases from this area. One soil sample was collected from a depth of 17 ft bls and submitted for chemical analysis to evaluate any potential impacts to soil at this location. The boring location is displayed in Figure 5-1. Analytical results for constituents detected in the soil samples from HW1 are summarized in Table 5-34.

Acetone was the only VOC detected in the soil sample acquired from this area. The acetone concentration of 21 J ppb did not exceed the ITL.

PAHs were not detected in the soil sample from B29I1.

As a result of this evaluation, none of the soil-associated constituents will be retained for further evaluation in Volume 3.

5.18.2 Analytical Results for Groundwater Samples from Building 29

Analytical results for groundwater samples from the interior of Building 29 were utilized to characterize the nature of any potential constituent releases to groundwater beneath this area.

One groundwater sample was collected from this area for chemical analysis. Analytical results for the groundwater sample collected from the temporary piezometer at B29I1 are summarized in Table 5-35. The groundwater sampling location and associated results are displayed in Figure 5-1.

Five VOC constituents including TCE (2.1 ppb), chloroform (1.7 ppb), methylene chloride (0.77 J,B ppb), bromodichloromethane (0.6 J ppb), and dibromochloromethane (0.37 J ppb) were detected in the sample acquired from this area. None of these concentrations exceeded their respective ITLs.

PAHs were not The highest VOC concentrations detected for this sample included 55 ppb 1,2-DCE, 43 ppb tetrachloroethene, and 18 ppb vinyl chloride. Vinyl chloride was the only VOC constituent that exceeded an ITL.

PAHs were not detected in the groundwater sample from B29I1.

As a result of this evaluation, none of the groundwater-associated constituents will be retained for further evaluation in Volume 3.

TABLE 5-1

Detected Constituent Concentrations for Groundwater Monitoring Well Samples (Shallow Unit)
Boeing Phase 2 ESA

		SAMPLE ID NUMBERS AND RESULTS													
CONSTITUENT	UNITS	MW-1	MW-2	MW-3	MW-3 (field duplicate)	MW-4	MW-5	MW-5AS	MW-6	MW-7	MW-8	MW-8AS	MW-9S	MW-10S	*INVESTIGATION THRESHOLD LEVEL (ITL) (1)*
Volatile Organics															
Carbon Disulfide	ug/l	ND	ND	0.37 J	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	*4,000*
Chloroform	ug/l	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*80*
1,1-Dichloroethane	ug/l	ND	ND	3.4	3.5	ND	ND	ND	0.96 J	ND	ND	ND	ND	16	*4,000*
1,1-Dichloroethene	ug/l	ND	ND	7.1	6.9	ND	ND	ND	0.35	ND	ND	ND	ND	ND	*7*
1,2-Dichloroethene (total)	ug/l	ND	0.66 J	2,100 D	5,900 D	ND	16	ND	ND	0.49 J	5.8	ND	ND	ND	*70*
Cis-1,2-dichloroethene	ug/l							71				ND	ND	3.1	*70*
Trans-1,2-dichloroethene	ug/l							3.2				ND	ND	ND	*100*
Methylene chloride	ug/l	ND	ND	0.43 J,B	0.86 J,B	ND	0.55 J,B	ND	ND	0.69 J,B	ND	ND	ND	ND	*5*
Tetrachloroethene	ug/l	ND	ND	ND	ND	ND	ND	ND	7.7	ND	ND	ND	ND	ND	*5*
Toluene	ug/l	ND	ND	0.5 J	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1000*
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	0.97 J	ND	ND	ND	ND	ND	*200*
Trichloroethene	ug/l	ND	ND	1700 D	5400 D	ND	29	14	3.9	0.92 J	ND	ND	ND	ND	*5*
Vinyl chloride	ug/l	ND	ND	32	30	ND	13	6.1 J	ND	ND	ND	ND	ND	ND	*2*
TPH															
TPH (volatile fraction)	mg/l	ND	ND	1.7	1.7	ND	ND	NA	ND	ND	ND	NA	NA	NA	*10*
TPH (extractable fraction)	mg/l	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA	NA	NA	*10*
Metals/Inorganics (Total)															
Arsenic	ug/l	119	16.8	18.7	43.7	34.9	8.9 B	ND	17.3	33.4	17.3	ND	251	23.5	*135.0*
Barium	ug/l	479	664	827	1,310	783	498	577	929	1,370	711	345	10,900	1,010	*2,520*
Chromium	ug/l	57.6	140	84.7	254	153	46.1	44.2	146	88	95.7	ND	858	123	*240*
Lead	ug/l	18.8	27.5	21.1	66.3	49.3	12.2	5.1	39.2	33	26.7	ND	399	47.6	*204*
Mercury	ug/l	0.075 B	0.083 B	0.081 B	0.26	0.11 B	0.062 B	ND	0.13 B	0.078 B	0.1 B	ND	1.1	ND	*2*
Selenium	ug/l	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*50*
Cyanide (Total & Reactive)		ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA	NA	NA	
Radioactivity															
Alpha	pCi/l	45	28	30	21	59	21	NA	71	36	51	NA	NA	NA	*N.A.V.*
Beta	pCi/l	77	41	70	30	180	37	NA	111	60	53	NA	NA	NA	*N.A.V.*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-2

Detected Constituent Concentrations for Groundwater Monitoring Well Samples (Deep Unit)
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS					INVESTIGATION THRESHOLD LEVEL (ITL) (1)
		MW-5D	MW-6D	MW-8AD	MW-9AD	MW-10D	
Volatile Organics							
All VOCs	ug/l	ND	ND	ND	ND	ND	
Metals/Inorganics (Total)							
Arsenic	ug/l	10.1	56.9	ND	177	ND	*135*
Barium	ug/l	574	2,340	554	5,220	418	*2,520*
Chromium	ug/l	134	274	108	923	105	*240*
Lead	ug/l	26.4	88.3	33.2	269	10.7	*204*
Mercury	ug/l	0.32	0.27	0.23	1.2	ND	*2*
Selenium	ug/l	ND	ND	ND	ND	ND	*50*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-3

Groundwater Elevations for Monitoring Well Network
Boeing Phase 2 ESA

		JULY 27-28, 2000 MONITORING EVENT	
MONITORING WELL ID	TOP OF CASING (ft)	DEPTH TO WATER (ft)	GROUNDWATER ELEVATION (ft)
MW-1	134.16	8.25	125.91
MW-2	125.02	5.14	119.88
MW-3	111.32	4.45	106.87
MW-4	116.22	6.23	109.99
MW-5	111.31	9.34	101.97
MW-6	94.9	10.25	84.65
MW-7	113.84	2.58	111.26
MW-8	108.23	8.87	99.36

TABLE 5-5

Detected Constituent Concentrations for Hazardous Waste Area Soil Samples
Boeing Phase 2 ESA

		SAMPLE ID NUMBERS AND RESULTS					
CONSTITUENT	**UNITS**	**HW1 (soil @ 5' bls)**	**B27W1 (soil @ 3' bls)**	**B27W2 (soil @ 8' bls)**	**B27W3 (soil @ 8' bls)**	**B27W3 (soil @ 25' bls)**	***INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)***
Volatile Organics							
Acetone	ug/kg	16 J	26 B	ND	40 B	ND	*14,000*
1,1-Dichloroethylene	ug/kg	ND	ND	ND	7.5	ND	*60*
1,2-Dichloroethene (total)	ug/kg	55	ND	ND	ND	ND	*400*
Cis-1,2-dichloroethene	ug/kg	ND	ND	ND	1800	18	*70*
Trans-1,2-dichloroethene	ug/kg	ND	ND	ND	160	ND	*100*
Ethylbenzene	ug/kg	ND	11	ND	ND	ND	*13,000*
Methylene chloride	ug/kg	13	ND	ND	ND	ND	*20*
Tetrachloroethene	ug/kg	43	ND	9.3	ND	ND	*60*
Toluene	ug/kg	ND	16	ND	71	ND	*5,130*
Trichloroethene	ug/kg	9	ND	ND	390 E	ND	*60*
Vinyl chloride	ug/kg	18	ND	ND	600 E	ND	*10*
Xylenes (total)	ug/kg	ND	64	ND	15	ND	*55,000*
PAHs							
PAHs	ug/kg	ND	NA	NA	NA	NA	
TPH							
TPH	mg/kg	ND	NA	NA	NA	NA	*200*
PCBs							
PCBs	ug/kg	ND	NA	NA	NA	NA	*600*
Metals/Inorganics (Total)							
Arsenic	mg/kg	4.4	130	5.8	13.5	40.7	*77*
Barium	mg/kg	142	152	187	123	141	*1,750*
Cadmium	mg/kg	ND	0.81	1.1	0.75	1.4	*8*
Chromium	mg/kg	14	13.7	13.2	11	14	*85*
Lead	mg/kg	8.1	7.5	8	7.3	24.9	*260*
Mercury	mg/kg	0.032 B	ND	ND	ND	ND	*2.00*
Cyanide (Total)	mg/kg	ND	NA	NA	NA	NA	*40*
Cyanide (Reactive)	mg/kg	0.14	NA	NA	NA	NA	*N.A.V.*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NA = Constituent was not analyzed.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-6

Detected Constituent Concentrations for Haz Waste Area Groundwater Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS								INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)
		HW1 (groundwater)	B27W1 (groundwater)	B27W2 (groundwater)	B27W3 (groundwater)	B27W3D (groundwater)	B28MW1 (groundwater)	B28MW2 (groundwater)	B28MW3 (groundwater)	
Volatile Organics										
Acetone	ug/l	ND	20	21 B	ND	ND	22 B	21 B	21 B	*4,000*
Benzene	ug/l	ND	ND	ND	7.3	ND	ND	ND	ND	*5*
Chloroform	ug/l	ND	ND	ND	ND	ND	8.4	ND	ND	*80*
1,1-Dichloroethane	ug/l	ND	ND	ND	12	ND	ND	ND	ND	*4,000*
1,1-Dichloroethene	ug/l	0.71 J	ND	ND	ND	ND	ND	ND	ND	*7*
1,2-Dichloroethene (total)	ug/l	180 D	ND	ND	ND	ND	ND	ND	ND	*70*
Cis-1,2-dichloroethene	ug/l	NA	ND	13	7200 D	ND	28	ND	ND	*70*
Trans-1,2-dichloroethene	ug/l	NA	14	ND	410 D	ND	39	ND	ND	*100*
Tetrachloroethene	ug/l	260 D	ND	39	ND	ND	33	ND	ND	*5*
Toluene	ug/l	0.48 J	ND	ND	41	ND	ND	ND	ND	*1,000*
Trichloroethene	ug/l	37	ND	20	510 D	ND	10	ND	ND	*5*
Vinyl chloride	ug/l	38	110	ND	2600 D	ND	20	ND	ND	*2*
PAHs										
All PAHs	ug/l	ND	NA	NA	NA	NA	NA	NA	NA	
TPH										
TPH (extractable fraction)	mg/l	ND	NA	NA	NA	NA	NA	NA	NA	*10*
TPH (volatile fraction)	mg/l	0.18	NA	NA	NA	NA	NA	NA	NA	*10*
PCBs										
All PCBs	ug/l	ND	NA	NA	NA	NA	NA	NA	NA	*0.5*
Metals/Inorganics (Total)										
Arsenic	ug/l	499	27.6	84.2	109	ND	25.9	88.9	43	*135*
Barium	ug/l	19,000	397	7660	2070	553	1020	794	623	*2,520*
Chromium	ug/l	906	72.9	336	250	ND	79.2	38.2	32.8	*240*
Lead	ug/l	798	27.6	95.2	97	ND	40.9	58.2	57.2	*204*
Mercury	ug/l	2 B	0.84	0.51	0.25	ND	0.2	ND	1.2	*2*
Selenium	ug/l	32.6	ND	ND	7.2	ND	5	ND	ND	*50*
Cyanide (total)	ug/l	ND	NA	NA	NA	NA	NA	NA	NA	*200*
Cyanide (reactive)	mg/kg	0.11	NA	NA	NA	NA	NA	NA	NA	*N.A.V.*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-7

Detected Constituent Concentrations for Recycling Area Soil Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS												INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)
		RC1 (soil @ 7' bls)	RC2 (soil @ 7' bls)	RC3 (soil @ 5' bls)	RC3 (field duplicate)	RC4 (soil @ 10' bls)	RC5 (soil @ 9' bls)	RC6 (soil @ 7' bls)	RC6 (soil @ 20' bls)	RC7 (soil @ 16' bls)	RC8 (soil @ 25' bls)	RC8 (soil @ 8' bls)	MW9S (soil @ 12' bls)	
Volatile Organics														
Acetone	ug/kg	23 J	20 J,B	130	200	ND	26 B	ND	26 B	ND	ND	26 B	ND	*14,000*
1,1-Dichloroethane	ug/kg	ND	1.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*23,000*
1,2-Dichloroethene (total)	ug/kg	58	ND	87	180 D	ND	ND	ND	ND	ND	ND	ND	ND	*400*
Cis-1,2-dichloroethene	ug/kg					9.1	ND	44	ND	ND	ND	130 [55.2]	ND	*70*
Trans-1,2-Dichloroethene	ug/kg					ND	ND	ND	ND	ND	ND	11	ND	*100*
Methylene chloride	ug/kg	ND	15	ND	ND	ND	ND	ND	ND	ND	7	7	11	*20*
Trichloroethene	ug/kg	3.9 J	ND	58 D	120 D	24	ND	58	ND	ND	ND	23 [7.3]	ND	*60*
Vinyl chloride	ug/kg	51	4.7 J	16 J	ND	ND	ND	28	ND	ND	ND	ND	ND	*10*
PAHs														
Benzo(a)anthracene	ug/kg	ND	29	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	*900*
Chrysene	ug/kg	ND	ND	140	30	NA	NA	NA	NA	NA	NA	NA	NA	*36,000*
TPH														
TPH (extractable fraction)	mg/kg	ND	980	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	*200*
TPH (volatile fraction)	mg/kg	ND	ND	0.22	ND	NA	NA	NA	NA	NA	NA	NA	NA	*200*
PCBs														
Aroclor 1254	ug/kg	ND	100	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	*600*
Metals/Inorganics (Total)														
Arsenic	mg/kg	8.8	4.7	5.7	3	9.7	6	6.3	2.9	2.2	5.9	3.3	5.2	*77*
Barium	mg/kg	188	98.1	98.4	96.4	124	97.5	94.6	128	104	132	97.4	117	*1,750*
Cadmium	mg/kg	0.14 B	ND	ND	ND	1.1	ND	ND	ND	ND	0.67	0.73	ND	*8*
Chromium	mg/kg	20	19.5	13.3	14.8	12.7	12.6	16.3	13.9	19.8	13.3	16.5	17.7	*85*
Lead	mg/kg	11.5	7.7	7.9	8.3	8.5	8.6	6.5	10.6	6	10.3	6.4	6.9	*260*
Mercury	mg/kg	0.015 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2.00*
Cyanide (Total)	mg/kg	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	*40*
Cyanide (Reactive)	mg/kg	0.14	0.14	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	*N.A.V.*

Notes:

(1) Constituent-specific screening value from Table 3-2.
[ ] Results from analysis performed by on-site mobile laboratory.

ND = Constituent was not detected.
NA = Constituent was not analyzed.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-8

Detected Constituent Concentrations for Recycling Area Groundwater Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS											INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)
		RC1 (groundwater)	RC2 (groundwater)	RC3 (groundwater)	RC3 (field duplicate)	RC4 (groundwater)	RC5 (groundwater)	RC6S (groundwater)	RC6D (groundwater)	RC7 (groundwater)	RC8S (groundwater)	RC8D (groundwater)	
Volatile Organics													
Acetone	ug/l	ND	7.1 J	ND	ND	ND	ND	21 B	44 B	23 B	ND	ND	*4,000*
Benzene	ug/l	ND	0.85 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
1,1-Dichloroethane	ug/l	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	*4,000*
1,1-Dichloroethene	ug/l	3.8 J	ND	0.28 J	0.34 J	ND	ND	ND	ND	ND	ND	ND	*7*
1,2-Dichloroethene (total)	ug/l	120	34 D	200 D	250 D	ND	ND	ND	ND	ND	ND	ND	*70*
Cis-1,2-dichloroethene	ug/l					9.9	ND	120	20	ND	1600	14	*70*
Trans-1,2-dichloroethene	ug/l					ND	ND	9.1	ND	ND	130	ND	*100*
Ethylbenzene	ug/l	ND	0.77 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	*700*
Methylene chloride	ug/l	4.8 J,B	1.1 B	ND	0.44 J,B	ND	ND	ND	ND	ND	ND	5.2	*5*
Toluene	ug/l	ND	3.6	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	*1,000*
Trichloroethene	ug/l	80	ND	2.7	0.37 J	49	ND	120	ND	ND	ND	ND	*5*
Vinyl chloride	ug/l	20	21 D	16	17	13	ND	59	ND	ND	ND	ND	*2*
Xylenes (total)	ug/l	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	*10,000*
PAHs													
Benzo(a)anthracene	ug/l	ND	250	ND	ND	NA	NA	NA	NA	NA	NA	NA	*80*
Chrysene	ug/l	ND	86	ND	ND	NA	NA	NA	NA	NA	NA	NA	*10*
TPH													
TPH (extractable fraction)	mg/l	ND	340	ND	49	NA	NA	NA	NA	NA	NA	NA	*10*
TPH (volatile fraction)	mg/l	0.19	2.1	0.13	0.14	NA	NA	NA	NA	NA	NA	NA	*10*
PCBs													
Aroclor 1254	ug/l	11	580	ND	ND	NA	NA	NA	NA	NA	NA	NA	*0.5*
Metals/Inorganics (Total)													
Arsenic	ug/l	15.4	549	11.9	7.8 B	109	37.9	16.4	11	61.4	ND	NA (ND)	*135*
Barium	ug/l	589	2,100	961	896	2540	1020	841	820	3160	756	NA (261)	*2,520*
Cadmium	ug/l	8.6	24.2	ND	ND	ND	ND	ND	ND	ND	ND	NA (ND)	*5*
Chromium	ug/l	64.5	159	48.5	25.9	490	91.5	69.8	16.2	411	25.2	NA (ND)	*240*
Lead	ug/l	19	39.8	15.6	9	220	31.6	22.6	34.8	124	5.9	NA (ND)	*204*
Mercury	ug/l	0.16 B	0.2	0.094	0.056	0.61	ND	ND	ND	0.49	ND	NA (ND)	*2*

Notes:

(1) Constituent-specific screening value from Table 3-3.

( ) = Dissolved Metals Concentrations
ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-9

Detected Constituent Concentrations for Building 27 Interior Soil Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS											INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)
		B27I1 (soil @ 12' bls)	B27I2 (soil @ 11' bls)	B27I3 (soil @ 12' bls)	B27I4 (soil @ 5' bls)	B27I5 (soil @ 14' bls)	B27I6 (soil @ 8' bls)	B27I6 (soil duplic @ 8' bls)	B27I7 (soil @ 3' bls)	B27I7 (soil @ 14' bls)	B27I8 (soil @ 15' bls)	B27I9 (soil @ 9' bls)	
Volatile Organics													
Acetone	ug/kg	ND	ND	ND	82	ND	20 J	25 J	ND	ND	ND	110	*14,000*
Chloroform	ug/kg	2.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*600*
1,2-Dichloroethene (total)	ug/kg	6.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*400*
Methyl Ethyl Ketone	ug/kg	12 J,B	14 J,B	11 J,B	18 J,B	ND	ND	ND	8.9 J,B	12 J,B	6.7 J,B	ND	*5,200*
4-Methyl 2-Pentanone	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7 J	*2,900*
Trichloroethene	ug/kg	290 D	4.4 J	5.5 J	ND	ND	ND	ND	ND	ND	ND	ND	*60*
PAHs													
Chrysene	ug/kg	ND	ND	ND	72	ND	ND	ND	ND	NA	ND	740	*36,000*
TPH													
TPH (diesel fraction)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,400	*200*
TPH (volatile fraction)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*200*
PCBs													
All ND													
Metals/Inorganics (Total)													
Arsenic	mg/kg	5.5	3.7	7.7	4.4	5.4	7.9	13.8	7.7	NA	8.5	6.5	*77*
Barium	mg/kg	152	71.6	142	233	122	116	216	293	NA	295	189	*1,750*
Cadmium	mg/kg	0.076 B	ND	0.098 B	ND	ND	ND	ND	ND	NA	0.18 B	ND	*8*
Chromium	mg/kg	13.4	14.4	17.5	13.2	17.9	73.3	114	18	NA	18.7	17.6	*85*
Lead	mg/kg	9.1	6.8	9.7	8.7	12.8	10.6	16.2	12.2	NA	11.7	14	*260*
Mercury	mg/kg	0.019 B	0.021 B	0.026 B	0.019 B	0.03 B	0.022 B	0.032 B	0.017 B	NA	0.021 B	0.02 B	*2.00*
Selenium	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.53 B	NA	ND	ND	*4.37*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-10

Detected Constituent Concentrations for Building 27 Interior Groundwater Samples
Boeing Phase 2 ESA

		SAMPLE ID NUMBERS AND RESULTS										
CONSTITUENT	UNITS	B27I1 (groundwater)	B27I2 (groundwater)	B27I3 (groundwater)	B27I4 (groundwater)	B27I5 (groundwater)	B27I6 (groundwater)	B27I7 (groundwater)	B27I8 (groundwater)	B27I9 (groundwater)	B27I9 (GW duplicate)	*INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)*
Volatile Organics												
Acetone	ug/l	ND	ND	NC due to	NC due to	ND	5.4 J	ND	ND	33	36	*14,000*
Benzene	ug/l	ND	ND	insufficient	insufficient	ND	0.24 J	ND	ND	ND	ND	*5*
Carbon Disulfide	ug/l	ND	ND	volume	volume	ND	ND	ND	ND	2.3	2	*4,000*
Chloroform	ug/l	0.92 J	ND			ND	ND	ND	ND	ND	ND	*80*
1,1-Dichloroethene	ug/l	2	1.5			ND	ND	ND	ND	ND	ND	*7*
1,2-Dichloroethene (total)	ug/l	290 D	290 D			0.81 J	0.51 J	ND	0.38 J	ND	ND	*70*
2-Hexanone	ug/l	ND	ND			ND	ND	ND	ND	16	16	*N.A.V.*
Methyl Ethyl Ketone	ug/l	ND	ND			ND	ND	ND	ND	13	16	*1,900*
4-Methyl 2-Pentanone	ug/l	ND	ND			ND	ND	ND	ND	ND	2.7 J	*160*
Methylene chloride	ug/l	0.6 J,B	ND			ND	ND	0.47 J,B	0.6 J,B	ND	ND	*5*
Toluene	ug/l	ND	ND			0.5 J	ND	ND	0.38 J	ND	ND	*1,000*
Trichloroethene	ug/l	620 D	200 D			7.4	ND	0.46 J	0.25 J	ND	ND	*5*
Vinyl chloride	ug/l	31	18			ND	16	ND	ND	ND	ND	*2*
PAHs												
All NDs												
TPH												
TPH (diesel fraction)	mg/l	ND	ND			ND	8	ND	ND	120	62	*10*
TPH (volatile fraction)	mg/l	0.57	0.11			ND	ND		ND	0.11	ND	*10*
PCBs												
	mg/l	ND				ND		ND	ND			*0.5*
Metals/Inorganics (Total)												
Arsenic	ug/l	33.3	NA			16.2	16.1	255	64.4	159	177	*135.0*
Barium	ug/l	1,250	NA			2,500	1,020	5,460	703	1,980	2,210	*2,520*
Cadmium	ug/l	0.41 B	NA			2.2 B	ND	11.3	5	0.96 B	1.3 B	*5*
Chromium	ug/l	133	NA			68.8	2,650	994	90.9	83.4	110	*240*
Lead	ug/l	51.5	NA			35.4	33.2	327	29.4	43.4	51.9	*204*
Mercury	ug/l	0.2	NA			0.15 B	0.087 B	2.6	0.15 B	0.12 B	0.13 B	*2*
Selenium	ug/l	ND	NA			ND	ND	ND	4.1 B	ND	ND	*50*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-11

Detected Constituent Concentrations for Building 27 (East) Soil Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS								INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)
		B27E1 (soil @ 9' bls)	B27E2 (soil @ 12' bls)	B27E3 (soil @ 12' bls)	B27E4 (soil @ 12' bls)	B27E5 (soil @ 14' bls)	B27E6 (soil @ 12' bls)	MW8AS (soil @ 12' bls)	MW8AS - DUP (soil @ 12' bls)	
Volatile Organics										
1,2-Dichloroethene (total)	ug/kg	2.4 J	ND	ND	ND	ND	ND	ND	ND	*400*
Cis-1,2-Dichloroethene	ug/kg	ND	ND	ND	7	ND	ND	ND	ND	*70*
Trichloroethene	ug/kg	11	ND	ND	37	ND	ND	ND	ND	*60*
PAHs										
Benzo(a)anthracene	ug/kg	ND	94	NA	NA	NA	NA	NA	NA	*900*
Benzo(b)fluoranthene	ug/kg	ND	39	NA	NA	NA	NA	NA	NA	*900*
Fluoranthene	ug/kg	ND	44	NA	NA	NA	NA	NA	NA	*600,000*
TPH										
TPH (extractable fraction)	mg/kg	ND	4,500	NA	NA	NA	NA	NA	NA	*200*
TPH (volatile fraction)	mg/kg	ND	0.24	NA	NA	NA	NA	NA	NA	*200*
PCBs										
PCBs	ug/kg	ND	ND	NA	NA	NA	NA	NA	NA	*600*
Metals/Inorganics (Total)										
Arsenic	mg/kg	7.2	9.4	2.7	1.5	4.4	4.6	9.5	12	*77*
Barium	mg/kg	164	176	101	64.8	103	85.1	189	418	*1,750*
Cadmium	mg/kg	0.29 B	1.2	ND	ND	0.74	ND	0.89	1.9	*8*
Chromium	mg/kg	69.8	17.2	11.8	13.7	10.9	13.3	15.6	17.2	*85*
Lead	mg/kg	14.1	10.4	9.2	7	10.6	7.6	8.3	11.3	*260*
Mercury	mg/kg	0.047	0.025 B	ND	ND	ND	ND	ND	ND	*2*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NA = Constituent was not analyzed.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-12

Detected Constituent Concentrations for Building 27 (East) Groundwater Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS									INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)
		B27E1 (groundwater)	B27E2 (groundwater)	B25MW1 (groundwater)	B25MW4 (groundwater)	B27E3 (groundwater)	B27E4 (groundwater)	B27E4 DUP (groundwater)	B27E5 (groundwater)	B27E6 (groundwater)	
Volatile Organics											
Acetone	ug/l	ND	5.9 J	NA	NA	NA	NA	NA	ND	NA	*4,000*
Benzene	ug/l	ND	0.91 J	NA	NA	NA	NA	NA	ND	NA	*5*
Bromodichloromethane	ug/l	0.73 J	ND	NA	NA	NA	NA	NA	ND	NA	*80*
Chloroform	ug/l	2	ND	NA	NA	NA	NA	NA	ND	NA	*80*
1,1-Dichloroethene	ug/l	0.58 J	ND	NA	NA	NA	NA	NA	ND	NA	*7*
1,2-Dichloroethene (total)	ug/l	740 D	ND	NA	NA	NA	NA	NA	ND	NA	*70*
Cis-1,2-Dichloroethene	ug/l			NA	NA	NA	NA [196.3]	NA [184.9]	ND	NA	*70*
Tetrachloroethene	ug/l	3.5	ND	NA	NA	NA	NA	NA	ND	NA	*5*
Toluene	ug/l	0.36 J	ND	NA	NA	NA	NA	NA	ND	NA	*1,000*
1,1,2-Trichloroethane	ug/l	1.3	ND	NA	NA	NA	NA	NA	ND	NA	*5*
Trichloroethene	ug/l	2,700 D	ND	NA	NA	NA	NA [418.7]	NA [358.2]	ND	NA	*5*
Vinyl chloride	ug/l	1.1 J	ND	NA	NA	NA	NA	NA	ND	NA	*2*
PAHs											
All PAHs	ug/l	ND	ND	NA	NA	NA	NA	NA	NA	NA	
TPH											
TPH (extractable fraction)	mg/l	ND	11	ND	8	NA	NA	NA	NA	NA	*10*
TPH (volatile fraction)	mg/l	0.45	ND	ND	ND	NA	NA	NA	NA	NA	*10*
PCBs											
All PCBs	ug/l	ND	ND	NA	NA	NA	NA	NA	NA	NA	*0.5*
Metals/Inorganics (Total)											
Arsenic	ug/l	ND	7 B	77.8	277	49.5	ND (ND)	ND (ND)	11.8	89.6	*135*
Barium	ug/l	421	526	2110	6400	1870	885 (ND)	ND (ND)	809	2420	*2,520*
Cadmium	ug/l	1.6 B	ND	ND	ND	ND	ND (ND)	ND (ND)	ND	ND	*5*
Chromium	ug/l	49,000	2.2 B	299	572	207	12000 (13,500)	15500 (11,000)	46.7	258	*240*
Lead	ug/l	24.2	2.3 B	138	261	80.3	71.5 (ND)	ND (ND)	15.6	125	*204*
Mercury	ug/l	0.23	0.099 B	0.46	0.75	2.9	ND (ND)	ND (ND)	ND	0.72	*2*
Selenium	ug/l	ND	ND	ND	ND	ND	ND (5.2)	ND (ND)	ND	ND	*50*

(1) Constituent-specific screening value from Table 3-3.

[ ] = Analysis performed by an on-site mobile laboratory.
( ) = Dissloved Metal Concentrations
ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-13

Detected Constituent Concentrations for Building 21 Soil Sample
Boeing Phase 2 ESA

		SAMPLE ID NUMBERS AND RESULTS	
CONSTITUENT	**UNITS**	**B21S1 (soil @ 12' bls)**	***INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)***
Volatile Organics			
All ND			
TPH			
All ND			
Metals/Inorganics (Total)			
Arsenic	mg/kg	3.1	*77*
Barium	mg/kg	68.3	*1,750*
Chromium	mg/kg	12.4	*85*
Lead	mg/kg	8.1	*260*
Mercury	mg/kg	0.015 B	*2*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-14

Detected Constituent Concentrations for Building 21 Groundwater Sample Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS B21S1 (groundwater)	*INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)*
Volatile Organics			
Carbon Disulfide	ug/l	0.52 J	*4,000*
TPH			
All NDs			
Metals/Inorganics (Total)			
Arsenic	ug/l	196	*135*
Barium	ug/l	22,900	*2,520*
Cadmium	ug/l	13.4	*5*
Chromium	ug/l	1,060	*240*
Lead	ug/l	388	*204*
Mercury	ug/l	1.3 B	*2*
Selenium	ug/l	7	*50*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-15

Detected Constituent Concentrations for Building 220 Soil Samples (for evaluation of former vapor degreaser) Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS		INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)
		B220I1 (soil @ 7' bls)	MW10S (soil @ 18' bls)	
Volatile Organics				
Acetone	ug/kg	ND	130 J	*14,000*
1,2-Dichloroethene (total)	ug/kg	75	ND	*400*
Methyl Ethyl Ketone	ug/kg	ND	110 J	*5,200*
Methylene Chloride	ug/kg	11	ND	*20*
Trichloroethene	ug/kg	48	ND	*60*
PAHs				
PAHs	ug/kg	ND	NA	
Metals/Inorganics (Total)				
Arsenic	mg/kg	NA	2.4	77
Barium	mg/kg	NA	69.1	1,750
Cadmium	mg/kg	NA	0.79	8
Chromium	mg/kg	NA	9.4	85
Lead	mg/kg	NA	5	260
Mercury	mg/kg	NA	ND	2

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NA = Constituent was not analyzed.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-16

Detected Constituent Concentrations for Building 220 Groundwater Samples (for evaluation of former vapor degreaser) Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS		INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)
		B220I1 (groundwater)	MW-10S (groundwater)	
Volatile Organics				
1,1-Dichloroethene	ug/l	0.88 J	16	7
1,2-Dichloroethene (total)	ug/l	54 D	NA	70
cis-1,2-Dichloroethene	ug/l	NA	3.1	70
Trichloroethene	ug/l	720	ND	5

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-17

Detected Constituent Concentrations for Building 220 Soil Samples (for evaluation of impacts near compactor) Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS			INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)
		B220N1 (soil @ 6' bls)	B220N2 (soil @ 8' bls)	B220N3 (soil @ 6' bls)	
VOC					
Acetone	ug/l	NA	30 B	ND	14,000
Methylene chloride	ug/l	NA	10	8.9	20
TPH					
TPH (volatile fraction)	mg/kg	ND	ND	ND	*200*
TPH (extractable fraction)	mg/kg	ND	ND	ND	*200*
Metals/Inorganics (Total)					
Arsenic	mg/kg	NA	7.4	4.1	77
Barium	mg/kg	NA	103	118	1,750
Cadmium	mg/kg	NA	0.72	0.77	8
Chromium	mg/kg	NA	13.9	14.9	85
Lead	mg/kg	NA	7.9	9.3	260

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
'NA = Constituent was not analyzed.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-18

Detected Constituent Concentrations for Building 220 Groundwater Samples (for evaluation of impacts near compactor) Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS			INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)
		B220N1 (groundwater)	B220N2 (groundwater)	B220N3 (groundwater)	
TPH					
TPH (volatile fraction)	mg/l	NA	ND	ND	*10*
TPH (extractable fraction)	mg/l	35	ND	ND	*10*
Metals/Inorganics (Total)					
Arsenic	ug/l	NA	13.2	17.7	*135*
Barium	ug/l	NA	332	518	*2,520*
Chromium	ug/l	NA	44.3	59.4	*240*
Lead	ug/l	NA	19.2	18.8	*204*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-19

Detected Constituent Concentrations for Oil/Water Separator Area Soil Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS			INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)
		B28N1 (soil @ 7' bls)	B28E1 (soil @ 6' bls)	B22N1 (soil @ 4' bls)	
Volatile Organics					
Acetone	ug/kg	33 B	21 J	61 B	*14,000*
Ethylbenzene	ug/kg	30	ND	ND	*13,000*
Methylene chloride	ug/kg	ND	ND	17	*20*
PAHs					
Acenaphthene	ug/kg	ND	ND	6,800	*570,000*
Acenaphthylene	ug/kg	ND	ND	74	*2,300*
Benzo(a)anthracene	ug/kg	ND	ND	42	*900*
Benzo(b)fluoranthene	ug/kg	ND	ND	42	*900*
Chrysene	ug/kg	110	ND	300	*36,000*
Fluoranthene	ug/kg	ND	ND	110	*60,000*
Fluorene	ug/kg	ND	ND	62	*560,000*
TPH					
TPH (extractable fraction)	mg/kg	ND	ND	ND	*200*
TPH (volatile fraction)	mg/kg	16	ND	1.4	*200*
PCBs					
All ND					
Metals/Inorganics (Total)					
Arsenic	mg/kg	6.1	3	3	*77*
Barium	mg/kg	118	82.6	84.4	*1,750*
Chromium	mg/kg	13	10.5	11.3	*85*
Lead	mg/kg	8	7.1	6.1	*260*
Mercury	mg/kg	0.038 B	0.043	0.029 B	*2*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-20

Detected Constituent Concentrations for Oil/Water Separator Area Groundwater Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS			INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)
		B28N1 (groundwater)	B28E1 (groundwater)	B22N1 (groundwater)	
Volatile Organics					
Acetone	ug/l	ND	ND	11	*4,000*
Benzene	ug/l	44 J	ND	ND	*5*
Carbon Disulfide	ug/l	ND	ND	0.51 J	*4,000*
1,2-Dichloroethene	ug/l	1,900	ND	ND	*70*
Methylene chloride	ug/l	43 J,B	0.39 J,B	0.38 J,B	*5*
Toluene	ug/l	ND	0.37 J	ND	*1,000*
Vinyl chloride	ug/l	260	ND	ND	*2*
PAHs					
Acenaphthene	ug/l	ND	ND	43	*2,000*
Chrysene	ug/l	ND	ND	25	*10*
TPH					
TPH (extractable fraction)	mg/l	ND	ND	2.9	*10*
TPH (volatile fraction)	mg/l	1	ND	3.6	*10*
PCBs					
All NDs					
Metals/Inorganics (Total)					
Arsenic	ug/l	23.2	82.8	70.9	*135*
Barium	ug/l	637	1,620	5,770	*2,520*
Cadmium	ug/l	ND	ND	14.9	*5*
Chromium	ug/l	54.6	301	425	*240*
Lead	ug/l	19.2	105	542	*204*
Mercury	ug/l	0.077 B	0.43	0.42	*2*
Selenium	ug/l	ND	ND	36.4	*50*
Silver	ug/l	ND	ND	1.2 B	*100*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-21

Detected Constituent Concentrations for Bldg 27 South Soil Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS			INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)
		B27S1 (soil @ 5' bls)	B27S2 (soil @ 8' bls)	B27S3 (soil @ 22' bls)	
Volatile Organics					
Acetone	ug/kg	ND	ND	58	*14,000*
PAHs					
Chrysene	ug/kg	ND	ND	160	*36,000*
TPH					
All NDs					
PCBs					
All NDs					
Metals/Inorganics (Total)					
Arsenic	mg/kg	2.2	7	7.5	*77*
Barium	mg/kg	75.4	108	104	*1,750*
Cadmium	mg/kg	ND	ND	0.05 B	*8*
Chromium	mg/kg	10.7	16	15.3	*85*
Lead	mg/kg	6.4	10.5	8	*260*
Mercury	mg/kg	0.011 B	0.029 B	0.021 B	*2*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-22

Detected Constituent Concentrations for Bldg 27 South Groundwater Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS					INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)
		B27S1 (groundwater)	B27S2 (groundwater)	B27S3 (groundwater)	RR5W (groundwater)		
Volatile Organics							
Acetone	ug/l	ND	ND	4.4 J	NA		*4,000*
Carbon Tetrachloride	ug/l	ND	0.32 J	ND	NA		*5*
1,2-Dichloroethene (total)	ug/l	ND	ND	3.4	NA		*70*
PAHs							
All PAHs	ug/l	ND	ND	ND	NA		
TPH							
All TPHs	ug/l	ND	ND	ND	NA		
PCBs							
All PCBs	ug/l	ND	ND	ND	NA		
Metals/Inorganics (Total)							
Arsenic	ug/l	68.2	93.5	28.9	37.7	(12)	*135*
Barium	ug/l	2,010	1,950	1,050	1,630	(754)	*2,520*
Chromium	ug/l	269	290	7.4	91.1	(36)	*240*
Lead	ug/l	98.6	158	3.2	33.5	(11)	*204*
Mercury	ug/l	0.35	0.44	0.091	ND	(ND)	*2*

Notes:

(1) Constituent-specific screening value from Table 3-3.

( ) = Dissolved Metals Concentrations

ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-23

Detected Constituent Concentrations for Bldg 22 Maintenance Area Soil Sample Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS B22W1 (soil @ 6' bls)	*INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)*
Volatile Organics			
Acetone	ug/kg	21 J	*14,000*
Methl Ethyl Ketone	ug/kg	25 J	*5,200*
Methylene chloride	ug/kg	13	*20*
TPH			
TPH (diesel fraction)	mg/kg	ND	*200*
TPH (volatile fraction)	mg/kg	0.27	*200*
Metals/Inorganics (Total)			
Arsenic	mg/kg	1.1 B	*77*
Barium	mg/kg	70	*1,750*
Chromium	mg/kg	13.1	*85*
Lead	mg/kg	8.8	*260*
Mercury	mg/kg	0.032 B	*2*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-24

etected Constituent Concentrations for Bldg 22 Maintenance Area Groundwater Sample
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS B22W1 (groundwater)	*INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)*
Volatile Organics			
1,2-Dichloroethene	ug/l	3.6	*70*
Trichloroethene	ug/l	2.2	*5*
TPH			
All NDs			
Metals/Inorganics (Total)			
Arsenic	ug/l	47.5	*135*
Barium	ug/l	23,100	*2,520*
Cadmium	ug/l	23.4	*5*
Chromium	ug/l	2,560	*240*
Lead	ug/l	1,180	*204*
Mercury	ug/l	2.1	*2*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-25

Detected Constituent Concentrations for PCB Wipe Samples
Boeing Phase 2 ESA

		SAMPLE ID NUMBERS AND RESULTS					
CONSTITUENT	UNITS	B27-P1	B27-P2	B27-P3	B29A-P	B220-P	*INVESTIGATION THRESHOLD LEVEL (ITL)*
PCBs							
Aroclor 1254	ug/wipe	1.5	1.6	71	ND	ND	*N.A.V.*

Notes:

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-26

Detected Constituent Concentrations for UST-Related Soil Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS											INVESTIGATION THRESHOLD LEVEL (ITL) (1) for SOIL
		B20E1 (soil @ 6' bls)	B20E2 (soil @ 8' bls)	B22E1 (soil @ 8' bls)	B22E2 (soil @ 6' bls)	B22E3 (soil @ 6' bls)	B29E1 (soil @ 17' bls)	B29AW1 (soil @ 8' bls)	B221E1 (soil @ 7' bls)	B221E1 (soil @ 12' bls)	B221E2 (soil @ 8' bls)	B221E3 (soil @ 7' bls)	
Volatile Organics													
Acetone	ug/kg	NA	NA	20 J	16 J	39	20J	ND	71 D	63 D	19 J	27	*14,000*
Ethylbenzene	ug/kg	3,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*13,000*
Methyl ethyl ketone	ug/kg	NA	NA	ND	ND	ND	11 J,B	ND	ND	ND	ND	ND	*5,200*
Methylene chloride	ug/kg	NA	NA	14	ND	ND	ND	13	ND	16	ND	ND	*20*
Tetrachloroethene	ug/kg	NA	NA	ND	ND	ND	ND	ND	2.1 J,D	ND	ND	ND	*60*
Xylenes (total)	ug/kg	1,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*55,000*
PAHs													
PAHs	ug/kg	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	
TPH													
TPH (diesel fraction)	mg/kg	170	490	ND	ND	ND	ND	ND	1,200	330	ND	ND	*200*
TPH (volatile fraction)	mg/kg	ND	320	ND	ND	ND	ND	ND	2.9	5.2	ND	0.22	*200*
PCBs													
PCBs	ug/kg	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	*2,500*
Metals/Inorganics (Total)													
Arsenic	mg/kg	NA	NA	NA	NA	NA	9.5	NA	NA	NA	NA	NA	*77*
Barium	mg/kg	NA	NA	NA	NA	NA	213	NA	NA	NA	NA	NA	*1,750*
Chromium	mg/kg	NA	NA	NA	NA	NA	20.3	NA	NA	NA	NA	NA	*85*
Lead	mg/kg	NA	NA	NA	NA	NA	11.2	NA	NA	NA	NA	NA	*260*
Mercury	mg/kg	NA	NA	NA	NA	NA	0.026 B	NA	NA	NA	NA	NA	*2.00*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-27

Detected Constituent Concentrations for UST-Related Groundwater Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	B22E1 (groundwater)	B22E2 (groundwater)	B22E3 (groundwater)	B29E1 (groundwater)	B29AW1 (groundwater)	B221E1 (groundwater)	B221E2 (groundwater)	B221E3 (groundwater)	*INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)*
Volatile Organics										
Acetone	ug/l	ND	ND	ND	4.6 J	ND	ND	ND	ND	*4,000*
Methylene chloride	ug/l	ND	ND	ND	ND	0.4 J,B	ND	0.57 J,B	0.46 J,B	*5*
Toluene	ug/l	ND	0.5 J	0.38 J	ND	ND	ND	ND	ND	*1,000*
TPH										
TPH (diesel fraction)	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	*10*
TPH (volatile fraction)	mg/l	ND	ND	0.13	0.73	ND	0.65	ND	ND	*10*
Metals/Inorganics (Total)										
Arsenic	ug/l	NA	577	453	NA	NA	NA	NA	NA	*135*
Barium	ug/l	NA	57,000	13,100	NA	NA	NA	NA	NA	*2,520*
Chromium	ug/l	NA	2,170	2,390	NA	NA	NA	NA	NA	*240*
Lead	ug/l	NA	684	802	NA	NA	NA	NA	NA	*204*
Mercury	ug/l	NA	1.8	2.2	NA	NA	NA	NA	NA	*2*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NA = Not analyzed for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-28

Detected Constituent Concentrations for East Parking Area Soil Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS				INVESTIGATION THRESHOLD LEVEL (ITL) for Soil (1)
		EPE1 (soil @ 2' bls)	EPE2 (soil @ 2' bls)	EPE2 (field duplicate)	MW6D (soil @ 12' bls)	
Radioactivity						
Alpha	pCi/g	23.2	23	22.2	NA	*N.A.V.*
Beta	pCi/g	26.9	26.9	22.5	NA	*N.A.V.*
Metals/Inorganics (Total)						
Arsenic	mg/kg	NA	NA	NA	9	*77*
Barium	mg/kg	NA	NA	NA	143	*1,750*
Cadmium	mg/kg	NA	NA	NA	0.76	*8*
Chromium	mg/kg	NA	NA	NA	14.3	*85*
Lead	mg/kg	NA	NA	NA	27.7	*260*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NA = Constituent was not analyzed.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-29

Detected Constituent Concentrations for East Parking Lot Wipe Samples
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS						*INVESTIGATION THRESHOLD LEVEL (ITL)*
		EP1		EP2		EP3		
		EP1-P (7/26/00)	EP1-P2 (8/11/00)	EP2-P (7/26/00)	EP2-P2 (8/11/00)	EP3-P (7/26/00)	EP3-P2 (8/11/00)	
Radioactivity								
Alpha	pCi/g	ND	ND	ND	ND	ND	ND	*N.A.V.*
Beta	pCi/g	1.14 J	ND	ND	ND	ND	ND	*N.A.V.*

Notes:

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-30

Detected Constituent Concentrations for Cyanide Storage Area Soil Sample Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS CN1 (soil @ 8' bls)	*INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)*
Inorganics			
Cyanide (total)	mg/kg	ND	*40*
Cyanide (reactive)	mg/kg	ND	*N.A.V.*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.

TABLE 5-31

Detected Constituent Concentrations for Cyanide Storage Area Groundwater Sample Boeing Phase 2 ESA

		SAMPLE ID NUMBERS AND RESULTS	
CONSTITUENT	**UNITS**	**CN1 (groundwater)**	***INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)***
Inorganics			
Cyanide (total)	ug/l	ND	*200*
Cyanide (reactive)	mg/kg	0.11	*N.A.V.*

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.

TABLE 5-32

Detected Constituent Concentrations for PCB Storage Area Soil Sample Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS PB1 (soil @ 6' bls)	*INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)*
TPH			
All ND			*200*
PCBs			
All ND			*600*

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.

TABLE 5-33

Detected Constituent Concentrations for PCB Storage Area Groundwater Sample Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS PB1 (groundwater)	*INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)*
TPH			
TPH (diesel fraction)	mg/l	ND	*10*
TPH (volatile fraction)	mg/l	NA	*10*
PCBs			
All ND			

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.
NA = Sample not analyzed for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-34

Detected Constituent Concentrations for Building 29 Soil Samples
Boeing Phase 2 ESA

		SAMPLE ID NUMBERS AND RESULTS	
CONSTITUENT	**UNITS**	**B29I1 (soil @ 17' bls)**	***INVESTIGATION THRESHOLD LEVEL (ITL) for SOIL (1)***
Volatile Organics			
Acetone	ug/kg	21 J	*14,000*
PAHs			
All ND			

Notes:

(1) Constituent-specific screening value from Table 3-2.

ND = Constituent was not detected.
NAV = ITL was not available or not applicable for specific constituent.
Shaded values indicate constituent concentrations which exceed the ITLs.

TABLE 5-35

Detected Constituent Concentrations for Building 29 Groundwater Sample
Boeing Phase 2 ESA

CONSTITUENT	UNITS	SAMPLE ID NUMBERS AND RESULTS B29I1 (groundwater)	*INVESTIGATION THRESHOLD LEVEL (ITL) for GW (1)*
Volatile Organics			
Bromodichloromethane	ug/l	0.6 J	*80*
Chloroform	ug/l	1.7	*80*
Dibromochloromethane	ug/l	0.37 J	*80*
Methylene chloride	ug/l	0.77 J,B	*5*
Trichloroethene	ug/l	2.1	*5*
PAHs			
All ND			

Notes:

(1) Constituent-specific screening value from Table 3-3.

ND = Constituent was not detected.

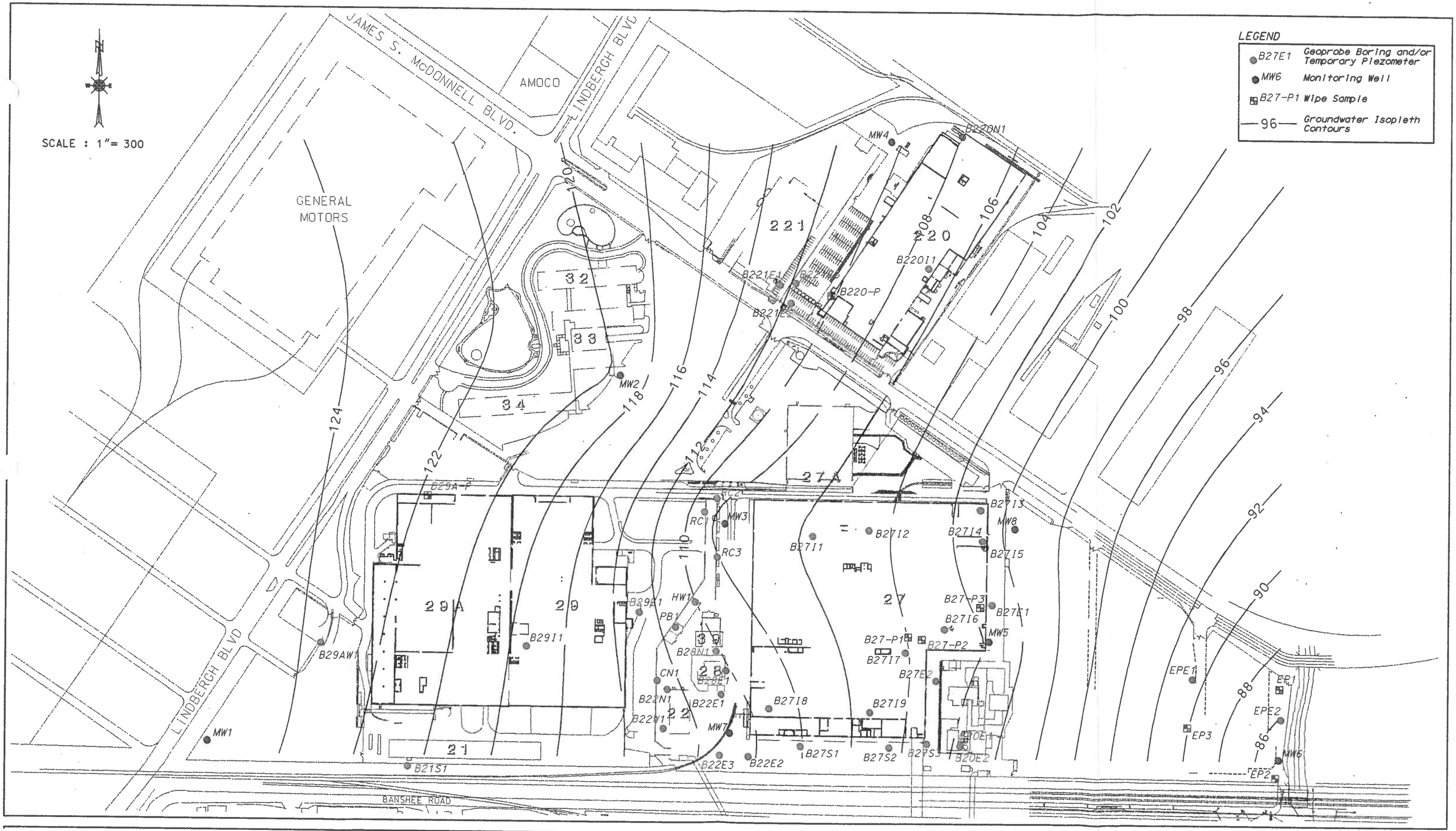

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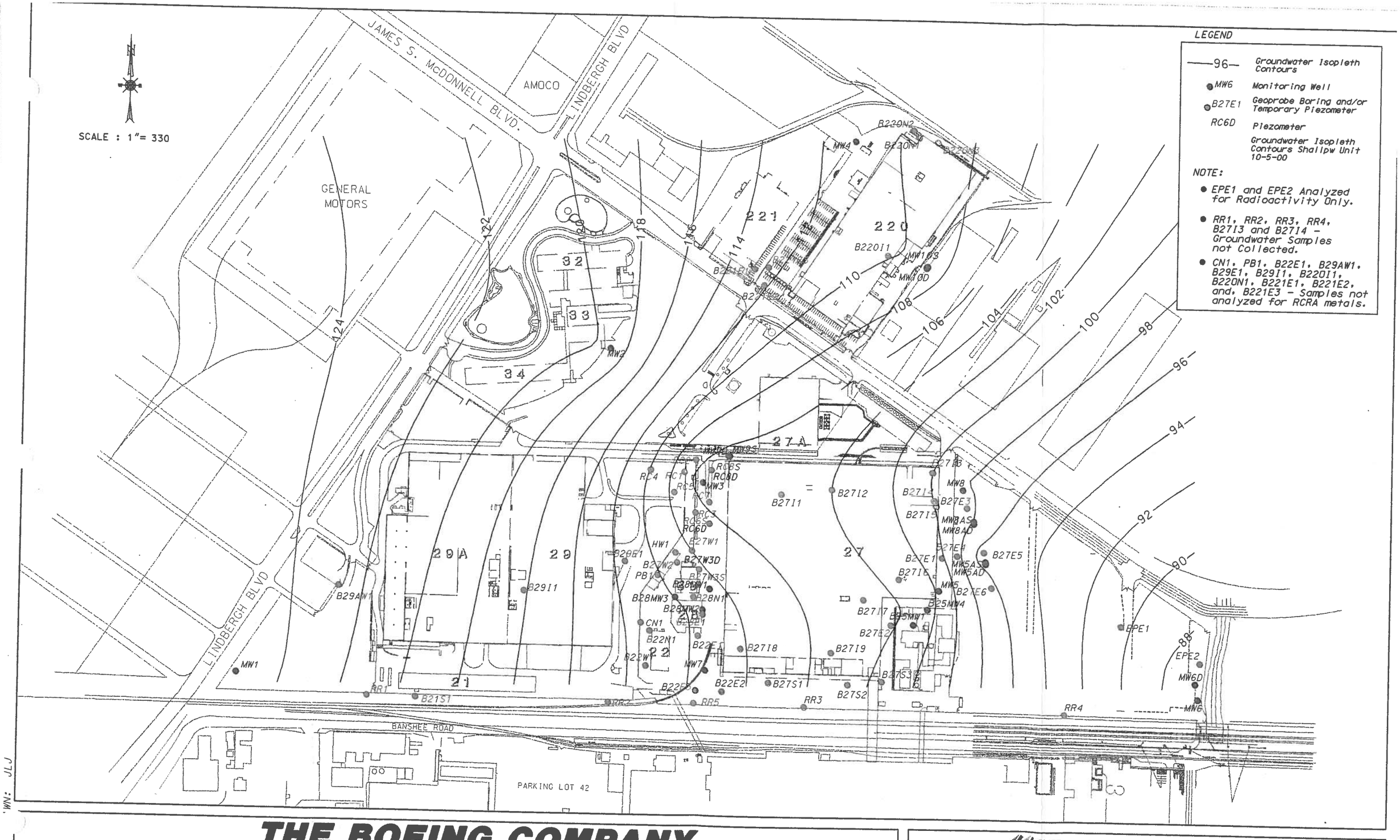
Figure 5-3
Groundwater Elevation Contours (July 2000)

Environmental Science & Engineering, Inc.
A MACTEC Company
3199 Riverport Tech Center Drive
St. Louis, MO 63043
314-209-5900

510098-0200 DRAWN: JLJ



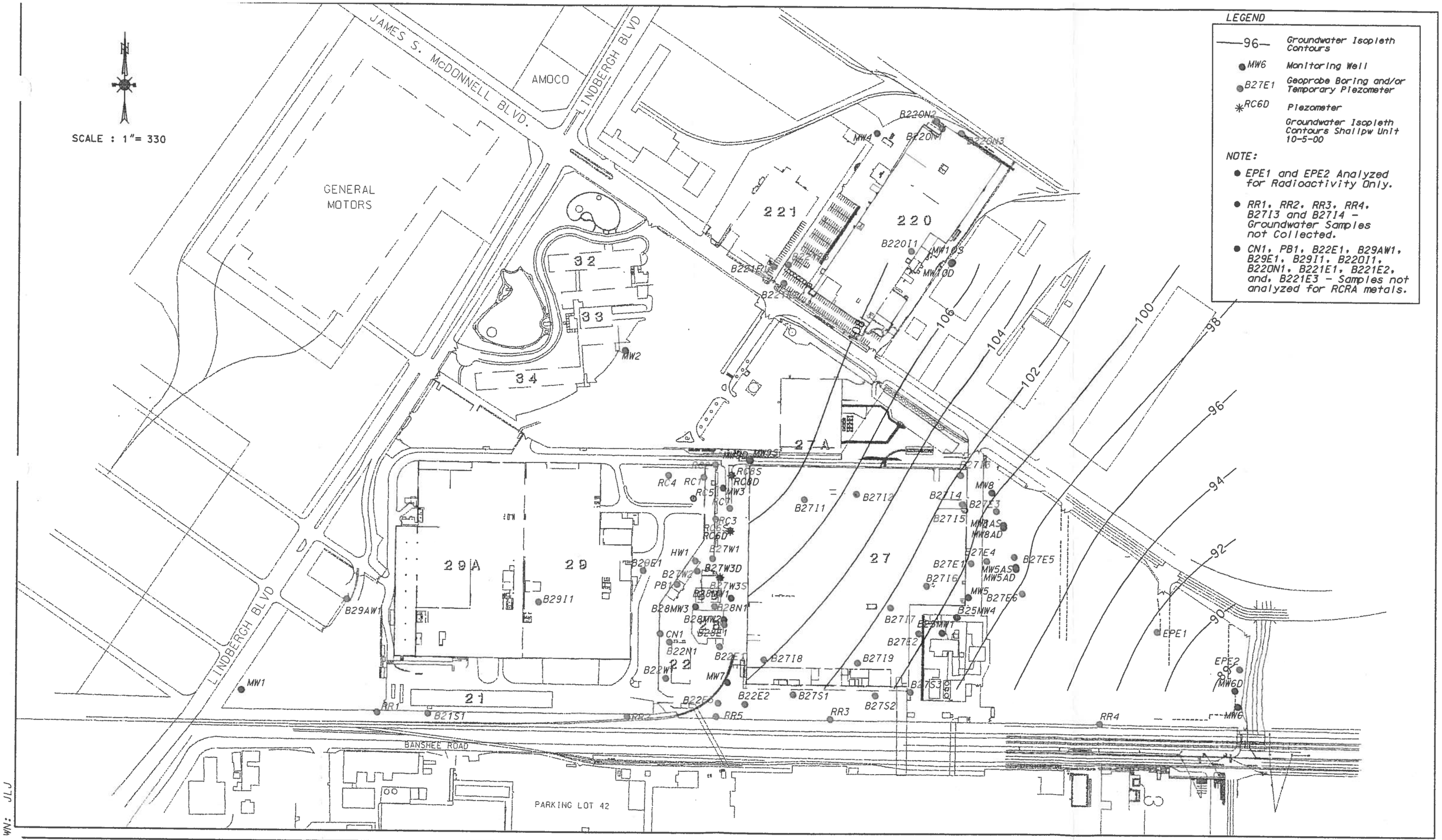
THE BOEING COMPANY

Figure 5-4
Groundwater Elevation Contours for
Shallow Water-Bearing Unit (October 2000)

Environmental Science & Engineering, Inc.
A MACTEC Company
3199 Riverport Tech Center Drive
St. Louis, MO 63043

510098-0300

WN: JLJ



LEGEND

—96—	Groundwater Isopleth Contours
● MW6	Monitoring Well
● B27E1	Geoprobe Boring and/or Temporary Piezometer
✳ RC6D	Piezometer
	Groundwater Isopleth Contours Shallow Unit 10-5-00

NOTE:

- EPE1 and EPE2 Analyzed for Radioactivity Only.
- RR1, RR2, RR3, RR4, B27I3 and B27I4 - Groundwater Samples not Collected.
- CN1, PB1, B22E1, B29AW1, B29E1, B29I1, B22DI1, B22DN1, B221E1, B221E2, and, B221E3 - Samples not analyzed for RCRA metals.

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Figure 5-5
Groundwater Elevation Contours for
Deep Water-Bearing Unit (October 2000)

Environmental Science & Engineering, Inc.
A MACTEC Company
3199 Riverport Tech Center Drive
St. Louis, MO 63043
314-209-5900

WN: JLJ

510098-0300

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Appendix A

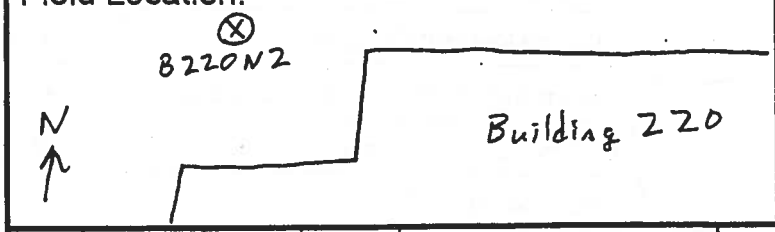
Soil Boring and Piezometer/Monitoring Well Logs

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B220N2
Logged by: C. Tedder		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 12'

Water Encountered at: 9'

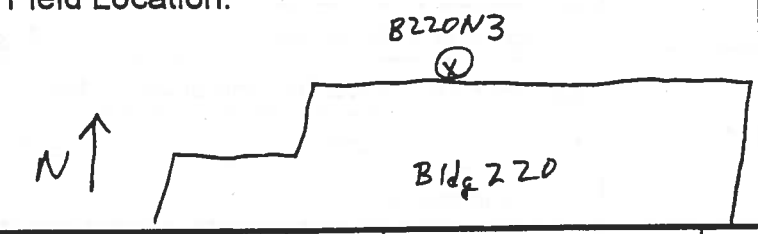
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								Description: asphalt/gravel
2		1	48"	2.4			CH	light brown high plastic silty clay
4				4.0				
6		2	48"	5.7			ML	light grey with brown low plastic clayey silt
8				4.0	B220N2-8	10:08		▽ saturated at 9'
10		3	48"	2.4				
12				0				
14								
16								
18								

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B220N3
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 12'

Water Encountered at: 7'

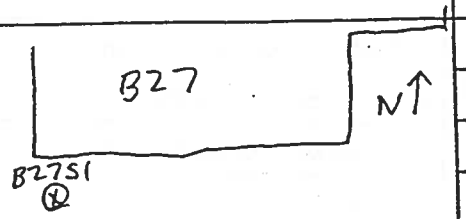
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description: asphalt/gravel
2		1	48"	0			CH	dark brown medium to high plastic silty clay stiff
4				2.4				
6		2	48"	4.0	B220N3-6	1020	ML	light gray with reddish brown low plastic clayey silt
								∇ saturated at 7'
8				2.4				
10		3	48"	0				
12				0				terminated at 12'
14								
16								
18								

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Near SW corner of B27	Boring No. B27S1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 8'

Water At: 5'

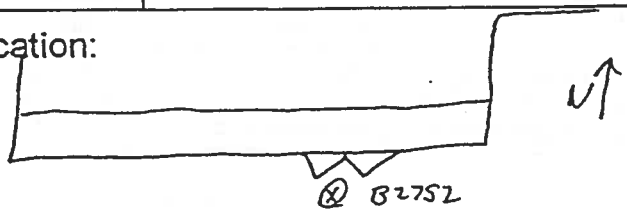
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								0-8" asphalt & gravel
2				4			ML	light brown & gray low plastic clayey silt
4				5				
					B27S1-5		▽	saturated @ 5'
6				5			CH	light brown/gray med/high plastic silty clay
8				4				
								terminated @ 8' set. TIP. @ 8'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Center of South Side, B27	Boring No. B27S2
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 12'

Water At: 9'

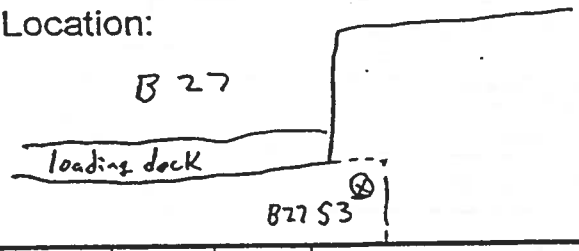
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-12" - asphalt, gravel
2				4				light brown medium to high plastic silty clay
4				4			CH	
6				5				
8				7				
					B27S2-9			Sat. @ 9'
10				6			ML	tan/lt. brown clayey silt w/gravel low plastic grades to
							CH	lt. brown high plastic silty clay
12				6				
								Terminated @ 12' T.P. @ 12'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: near SE corner of B27	Boring No. B27S3
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 2
Hole Diameter: 2"		

Field Location:



Total Depth: 24'

Water At: 21.5'

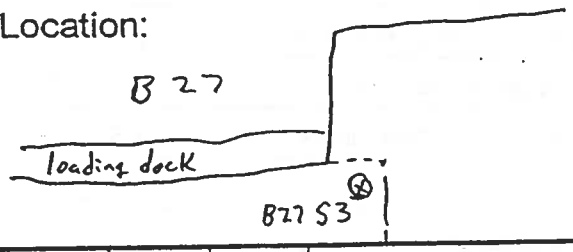
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-12" asphalt & gravel
2				3			CH	brown high plastic siltyclay
				3			CH	olive high plastic silty clay
6				3			OL	black organic rich clayey silt low to med. plastic
8				3			CH	Olive/gray high plastic silty clay
10				4				
12				4				
14				4				
11				4			OL	Olive, organic rich clayey silt grading to dark brown slightly moist silt low plastic
18				6			ML	

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: near SE corner of B27	Boring No. B27S3
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 2
Hole Diameter: 2"		

Field Location:



Total Depth: 24'

Water At: 21.5'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
							ML	dk. brown clayey silt/silt
22				7	B27S3-22		▽	Sat. @ 22'
24				6				terminated at 24' T.P. @ 24'

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Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B22W1
Logged by: ~~Chris Tedder~~ DLB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/03
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth:

Water At:

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						1530		2" ASPHALT 6" CONCRETE
2		1						SILTY CLAY
4	CL		3'	1		1535		
6		2			B22W1-6			CLAYEY SILT
	ML							
8			4'	4				
	CL							SILTY CLAY, MODERATE
10		3						
12	OL		4'			1540		11' ORGANIC SILT
								SET PIEZOMETER @ 12'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B22N1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 8'

Water At: 3'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						1505		Description: ASPHALT
2		1						CRUSHED ROCK BACKFILL, CONCRETE IN SAMPLER @ 3'
4			2'	86	B22N1-4			BLACK STAINING IN ROCK @ 4' MODERATE PETROLEUM ODOR
6	CJ/MI	2						CLAYEY SILT, LOW PLASTICITY, LIGHT OLIVE GRAY, MOIST TO WET, SOFT
8			18"	4		1515		DIFFUSIONETER SET @ 8'
10								

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Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B22E1
Logged by: ~~Chris Tedder~~ DLB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 12'

Water At: 9'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						1555		ASPHALT
2		1						CRUSHED ROCK BACKFILL TO 2'
4			2.5'	2				SILTY CLAY, MODERATE PLASTICITY OLIVE GRAY, SLIGHTLY MOIST, NO ODOR
6	CL	2						
8			3½'	2	B22E1-8	1005		
10								
12	OL	3	4			1600		

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Log of Exploratory Boring

Client: Boeing	Location:
Logged by: ~~Chris Tedder~~ DLB	
Drilled by: Roberts Environmental	
Drilling Method: Geoprobe	
Sampling Method: Continuously driven, 4' Macro Core	
Hole Diameter: 2"	

Boring No. B2E2

Project No. 5100098

Date: 7/25/00

Sheet 1 of 1

Field Location:

Total Depth: 12'

Water At: 8'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 2" ASPHALT,
		1						SILT, TRACE CLAY, DARK REDDISH BROWN/BLACK
				1				
4			2'					
								SILTY CLAY, MODERATE PLASTICITY, LIGHT BROWN IRON STAINING, SOFT, MOIST, NO ODOR
6								
		2		23	-			
8			3½					
								NO SAMPLE FROM 10 TO 9', LARGE AMOUNTS OF WATER, SOME CRUSHED LIMESTONE, NO ODOR OR STAIN
10		3		3				
12			2½					SILTY CLAY ASABOVE, MORE SILT, LOW PLASTICITY.

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Log of Exploratory Boring

Client: Boeing	Location:	Boring No. 221E1
Logged by: ~~Chris Tedder~~ Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-24-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 13'

Water At: ?

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
						900		6" ASPHALT
2		1						~4 FEET OF 3/4" MINUS CRUSHED LIMESTONE BACKFILL SLIGHTLY MOIST, NO ODOR
4			2'					
								SILTY CLAY, HIGH PLASTICITY, DARK OLIVE GRAY, SLIGHTLY MOIST
6		2						
				16		910		
8			3'					
10		3						
12			3'	46	B221E1-12	915		
								REFUSAL @ 13' ON CONCRETE. SET PIEZOMETER @ 13'
14								
16								
18								

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B22E3
Logged by: ~~Chris Todder~~ DLO		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/25/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 16'

Water At: ~8'

PIEZOMETER SET @ 16'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						1520		
2	ML	1						SILT, TRACE CLAY
4			3'	3				
6		2		3	B22E3-6	1530		SILTY CLAY, MODERATE PLASTICITY, LIGHT BROWN, ~~DK~~ GRAY, IRON STAINING, MOIST TO SATURATED AT 11', SOFT, NO ODOR.
8			5'					
10		3		4				
12	OL		3½'					ORGANIC SILT,
		4		4				
14			2½'			1540		

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Log of Exploratory Boring

Client:	Location:	Boring No. B221E2
Logged by:		Project No.
Drilled by:		Date: 7/26/00
Drilling Method:		
Sampling Method:		Sheet 1 of 1
Hole Diameter:		

Field Location:

Total Depth: 16'

Water At: ~ 9'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								6" ASPHALT 6" ROCK BASE
2								SILTY CLAY
	CL							
4			2½	1				
6								SILTY CLAY/CLAYEY SILT
	ML/CL							
8			2'	1	B221E2-8 1045			
10								
12			3½'	1				
14	OL							ORGANIC SILT
16			4'					
								PIEZOMETER SET @ 16'

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Log of Exploratory Boring

Client: BOEING	Location:
Boring No. B22IE3	
Logged by: DLB	Project No.
Field Location:	
Drilled by: ROBERTS	Date: 7/26/03
Drilling Method:	
Sampling Method:	Sheet 1 of 1
Hole Diameter: 2"	
Total Depth: 16'	
Water At: ~8'	

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						1010		6" ASPHALT
		1						SILTY CLAY, DARK BLACK MODERATE
4			2'	0				
6		2		1	B22IE3-7			SILTY CLAY/CLAYEY SILT, LOW PLASTICITY, LIGHT OLIVE GRAY IRON STAINING, MOIST TO WET @ 13' SOFT NO ODOR
8			3'					
10		3		1				COLOR CHANGE TO LIGHT BROWN @ 10' NO ODOR
12			4'					
14								
15	OL	4				1078		
16			4'	1				
18								

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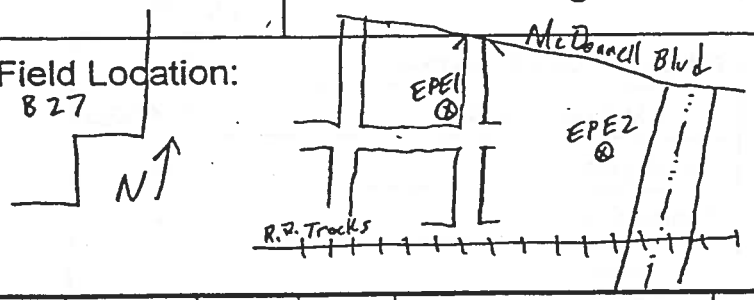
Log of Exploratory Boring

Client: Boeing	Location: B27 east parking	Boring No. EPE1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-20-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water At: 11.25'

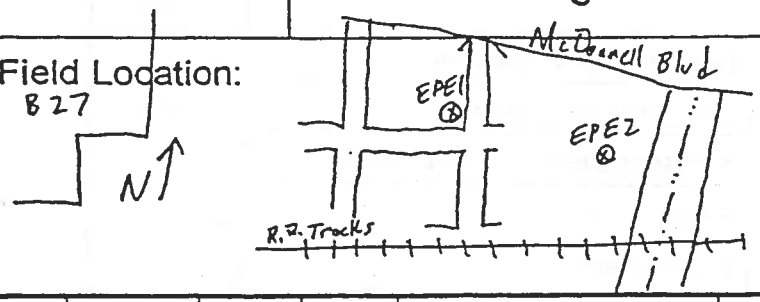
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Rad. Reading	USCS Symbol	Description
						2750		0-2" - asphalt; 2"-8" - gravel
2				2	EPE1-2	2650	CH	light brown high plastic silty clay
4				3		2500		
6				2		2800	CH	light brown w/gray high plastic silty clay; 6" very wet layer from 6'-6.5'
8				2		2600		
10				3		2500	ML	grey & light brown low plastic clayey silt
							▽	saturated @ 11.25'
12				2		2500		
14				2		2500	ML/CL	tan clayey silt/silty clay low plastic
16				2		2400		
								terminated @ 16'; T.P. installed @ 16'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: B27 east parking	Boring No. EPE2
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-20-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water At: 10.25'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Rad Readings	USCS Symbol	Description
						2650		0-18" asphalt & gravel
2				2	EPE2-2	2800	OH	black organic rich high plastic silty clay
4				2		2700		
6				3		2600	CH	tan w/grey & brown high plastic silty clay
8				2		2650		
10				2		2700	▽	Saturated @ 10.25'
12				2		2600		same material
14				2		2600		
16				2		2600		

terminated @ 16'
T.P. installed @ 16'

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Well Log

Client: Boeing	Location: BLDG. 29A	Boring No.: MW-1
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/17/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of ___
Hole Diameter:		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 20' To 10'

Sand Pack: 20' To 8'

Seal: 8' To 6'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 4" ASPHALT, 1" MINUS ROCK BELOW
		1	8"		MW-1-3			SILTY CLAY, SOFT, GRAY-BLACK, MEDIUM PLASTICITY, SLIGHTLY MOIST NO ODOR TO SLIGHT OIL ODOR
5				0		1015		RUBBLE ZONE @ 3'-5'
								CONCRETE AT TOP OF SAMPLE @ 5'
		2		0				
10			4'	0		1020		SILTY CLAY, HIGH PLASTICITY, GRAYISH OLIVE, SOFT, NO ODOR
		3		0				
15			4½'	0		1035		CLAYEY SILT, MODERATE PLASTICITY, LIGHT GRAYISH OLIVE W/ BROWN IRON STAINING, MOIST, SOFT, NO ODOR
				0	MW-1-16			
		4						CLAYEY SILT AS ABOVE, WET,
20			4½'	0		1045		CLAYEY SILT WITH LARGE AMOUNT OF ORGANIC DEBRIS, WOOD SPICES, LOW PLASTICITY, DARK GRAY, SLIGHTLY MOIST, SOFT NO ODOR

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: BLD. 33	Boring No.: MW-2
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/17/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 1
Hole Diameter:		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
						1250		2" ASPHALT, 6" CONCRETE
				0	MW-2-2	1315		SILTY CLAY, HIGH PLASTICITY, GRAYISH OLIVE, SOFT, MOIST, IRON STAINING
		1						
								AS ABOVE
5			4'	0				
						1325		~~AS ABOVE~~ CLAYEY SILT, MODERATE PLASTICITY GRAYISH OLIVE, SOFT, MOIST TO WET. THIN SEAM w/ INTERMIXED SAND @ 7'
				0	MW-2-7			
		2						
								GRADATIONAL @ 8' TO DARK GRAY SILT, LOW PLASTICITY, H. STIFF, SLIGHTLY MOIST LOTS OF ORGANIC DEBRIS, WOOD, TWIGS NO ODOR
				0				
10			4'			1340		
				0				
		3						
				0				AS ABOVE.
15			5'			1345		
				0				@17' SILTY CLAY, MODERATE PLASTICITY, DARK OLIVE GRAY, MEDIUM STIFF, MOIST WET, NO ODOR
		4						
				0				TOTAL DEPTH 19.1'
20			5'			1355		

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Well Log

Client: Boeing	Location: RECYCLING DOCK	Boring No.: MW-3
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/19/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 1
Hole Diameter: 8"		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 19.7 To 9.7

Sand Pack: 19.7 To 7.5

Seal: 7.5 To 2'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: TIME	USCS Symbol	Description
								Description: 2" ASPHALT, 8" CONCRETE. NO ROCK BELOW
		1		3	MW-3-2			SILTY CLAY, MODERATE PLASTICITY, GRAYISH OLIVE, SOFT SLIGHTLY MOIST, NO ODOR
			3'	3		1505		
		2		2				SILTY CLAY ~~AS ABOVE~~, HIGH PLASTICITY DUSKY YELLOWISH BROWN, MOIST, SOFT W/IRON STAINING, NO ODOR
10			3'	5		15.15		
		3		4				SILTY CLAY, GRAYISH OLIVE, MODERATE TO HIGH PLASTICITY, MOIST, STIFF, NO ODOR
15			5'			1530		
		4		5				AS ABOVE, VERY STIFF, WET.
20			5'	2		15.40		

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: BLDG. 220	Boring No.: MW-4
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/19/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 1
Hole Diameter: 8"		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 19.5 To 9.5

Sand Pack: 19.5 To 7.0

Seal: 7.0 To 5.0

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	TIME	USCS Symbol	Description
						830		10" ASPHALT 12" OF ROCK BASE
						900		
		1		3	MW-4-2			SILTY CLAY, MODERATE PLASTICITY, DUSKY YELLOWISH BROWN, STIFF, SLIGHTLY MOIST, NO ODOR
5			2'	3				
		2		4				SILTY CLAY, MODERATE PLASTICITY, GRAYISH OLIVE, SOFT, MOIST TO WET IRON STAINING, NO ODOR
10			4½'	4		915		SILTY CLAY AS ABOVE, NUMEROUS VERTICAL WORMHOLES INFILLED WITH IRON OXIDATION
		3		3				
15			4'	2		925		AS ABOVE, WET TO SATURATED AT CONTACT W/ SILT @ 16'
		4			MW-4-16			CLAYEY SILT 16-18', MODERATE PLASTICITY DARK GRAY, SOFT, MOIST, NO ODOR, TRACE ORGANIC DEBRIS
20			4'			935		SILTY CLAY, HIGH PLASTICITY, DARK GRAY, SOFT, SATURATED, NO ODOR.

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: SE CORNER BLD 27	Boring No.: MW-5
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/18/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 1
Hole Diameter: 8"		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 17.9 To 7.9

Sand Pack: 17.9 To 5.9

Seal: 5.9 To 2.9

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Lab Sample Location & ID	TIME	USCS Symbol	Description
								Description: 6" ASPHALT, 10" CONCRETE
		1		0	MW-5-2	1245		SILTY CLAY, MODERATE TO HIGH PLASTICITY, GRAYISH OLIVE, SOFT, MOIST NO ODOR
5			18"	1 ~~1245~~		1245		
		2		5				5'-7' SILT, TRACE CLAY, LOW PLASTICITY, DUSKY YELLOWISH BROWN, SOFT, SLIGHTLY MOIST, NO ODOR
								SILTY CLAY, HIGH PLASTICITY, GRAYISH OLIVE, SOFT MOIST, IRON STAINING NO ODOR
10				4 ~~1255~~		1255		
		3		~~4~~ 4	MW-5-12			CLAYEY SILT, LOW PLASTICITY GRAYISH OLIVE W/ IRON STAINING AND SOME VERTICAL, FILLED HOLES, SOFT MOIST TO WET, NO ODOR
15				4 ~~1310~~		1310		
		4		3				AS ABOVE.
								@ 17' SILT, LARGE AMOUNT OF ORGANIC DEBRIS, VERY THINLY BEDDED, DARK GRAY SLIGHTLY MOIST, LOW PLASTICITY, SOFT, NO ODOR
20				6		1316		PLACED SAND FROM 19.9 TO 17.9

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-5AS
Logged by: C. TEDDER		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9/21/00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet 1 of 1
	Hole Diameter:	

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 15' To 5'

Sand Pack: 15' To 4'

Seal: 4' To 1'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 6" ASPHALT 6" GRAVEL
		1						
5								NO RECOVERY
		2	NONE					
10		3 SHELBY TUBE	NONE					DROVE 2' SHELBY TUBE 10'-12' NO RECOVERY.
		SPLIT SPOON 4	2'				ML	SILT DARK BROWN, SLIGHTLY MOIST FIRM, ORGANIC DEBRIS
15								
20								

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-5AD
Logged by: CLTEDDER		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9/20/00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet 1 of 4
	Hole Diameter: 12 1/2"	

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 6" ASPHALT, 6" GRAVEL
							CI	SILTY CLAY, DARK GRAY, BROWN AND OLIVE, HIGH PLASTICITY, SLIGHTLY MOIST, FIRM
		1	4'	2.0				
							ML	CLAYEY SILT, BLACK DARK OLIVE, LOW PLASTICITY, SLIGHTLY MOIST FIRM, ORGANIC DEBRIS
5				5.0				
				5.5				
		2	4.5'				CI	SILTY CLAY DARK BROWN AND OLIVE MOTTLED, HIGH PLASTICITY, SLIGHTLY MOIST, FIRM, IRON STAINING
10				2.0				CLAYEY SILT, LIGHT BROWN, LOW PLASTICITY, MOIST TO SATURATED @ 12.5', SOFT,
		3		4.1	MW5AD-12			
			4.5'					
15				1.3				
		4		6.0				SILTY CLAY, GRAY, MODERATE TO HIGH PLASTICITY, WET, STIFF
			4.5'					
20		5		4.2				

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-5AD
Logged by: C. TEDDER		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9/20/00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet 2 of 4
	Hole Diameter:	

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
		5		5.5	MW5AD-24		CI	SILTY CLAY, GRAY, HIGH PLASTICITY MOIST, STIFF
25		6		3.1				
				2.4				AS ABOVE
				2.4				
30		SHELBY TUBE 7			MW5AD-31			SHELBY TUBE DRIVEN FROM 29' TO 31'
		8		3.9			CI	AS ABOVE
				7.3				
35		9		4.8				SILTY CLAY, LIGHT BROWN, HIGH PLASTICITY, MOIST, VERY STIFF IRON STAINING @ 35 & 37'
				5.3				
40		10						

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-5AD
Logged by: D. BRINKLEY		Project No. 510098
Drilled by: Roberts Environmental		Date: 9/20/00 9/25/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 3 of 4
Hole Diameter: 12½"/8½"		

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 78.4' To 68.4'

Sand Pack: 78.4' To 66.0'

Seal: 66.0' To 63.0'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID		USCS Symbol	Description
		10		5.4				SILTY CLAY, GRAY, HIGH PLASTICITY SOFT, WET
					MW5AD-43			
				3.8				
45								
				5.0				AS ABOVE, LIGHT BROWN
		11						
				7.1				10" STEEL CASING SET @ 49', FLOATED INTO GROUT.
50								9/25/00 START DRILLING INSIDE CASING
		12						PVC FRAGMENTS FROM CASING END CAP IN SAMPLER
							CL	SILTY CLAY, OLIVE GRAY, MODERATE PLASTICITY, MOIST, SOFT
55			3'					
		13						SILTY CLAY AS ABOVE, HIGH PLASTICITY.
60			3'					

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-5AD
Logged by: D. BRINKLEY		Project No. 510098
Drilled by: Roberts Environmental		Date: 9/25/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 4 of 4
Hole Diameter: 8½"		

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 78.4' To 68.4'

Sand Pack: 78.4' To 66.0'

Seal: 66.0' To 63.0'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
		14					CI	SILTY CLAY, OLIVE GRAY, HIGH PLASTICITY, STIFF, MOIST,
65			3'					
		15						SILTY CLAY AS ABOVE, SOME MEDIUM GRAVEL INTERMIXED IN CLAY FROM 68'
70			3'					
		16						ROCK ZONE, 1 TO 3" DIAMETER CHERT AND GRAVEL @ 72'
								SILTY CLAY, LIGHT BROWN, HIGH PLASTICITY MOIST TO WET, STIFF
75			3'					
		17	1'					DROVE SHELBY TUBE @ 75', COULD ONLY PUSH 2' TUBE 1'. BENT NOSE OF SAMPLER ON LIMESTONE ROCK.
								AUGER REFUSAL @ 78.5'
80								

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: EAST PARKING LOT	Boring No.: MW-6
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/18/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 2
Hole Diameter: 8"		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 23 To 8

Sand Pack: 23 To 6

Seal: 6 To 2

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
						900		Description: 6" ASPHALT 1½' of CRUSHED ROCK SUBBASE
		1		0	MW-6-2			SILTY CLAY, GRAY-BLACK, MEDIUM STIFF, SLIGHTLY MOIST, SOME ORGANIC DEBRIS, NO ODOR
			2½'	1		920		
		2						SILTY CLAY, GRAYISH OLIVE ~~GREEN~~, MODERATE PLASTICITY, SOFT, MOIST
10			2½'	3		930		
		3		4	MW-6-13			SILTY CLAY, DUSKY ~~OLIVE~~ YELLOWISH BROWN, HIGH PLASTICITY, MOIST SOFT, NO ODOR, SOME IRON STAINING/ STRATIFICATION.
15						950		
				3				AS ABOVE, WET
20				2		1000		

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Well Log

Client: Boeing	Location: EAST PARKING LOT	Boring No.: MW-6
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/19/00 ~~PAULETO~~
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 2 of 2
Hole Diameter: 8"		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
				3				SILTY CLAY AS ABOVE, WET-SATURATED
		5						
			3'	3				@ 22½' CLAYEY SILT, LOW PLASTICITY, LIGHT GRAYISH OLIVE, W IRON STAINING, MOIST, MEDIUM STIFF, NO ODOR
25								

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-6D
Logged by: D. BRINKLEY		Project No. 510098
Drilled by: ~~Roberts Environmental~~ ADVANCE		Date: 9/20/00
Drilling Method: ~~Hollow Stem Auger~~ GEOPROBE		
Sampling Method: 5' ~~CME Continuous~~ MACRO CORE		Sheet 1 of 4
Hole Diameter: 12 1/2"		

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 8" ASPHALT
		1					ML	SILT, DARK BROWN, LOW PLASTICITY SLIGHTLY MOIST, FIRM
5			3.5'				CL	SILTY CLAY, OLIVE GRAY, MOD. PLASTICITY, FIRM, SLIGHTLY MOIST IRON STAINING
		2						
10			4.5					
		3					ML	SILT, TRACE OF CLAY, OLIVE GRAY, LOW PLASTICITY, FIRM, SLIGHTLY MOIST
15			5					
		4					CL	SILTY CLAY, LIGHT BROWN WITH IRON STAINING, MODERATE PLASTICITY, FIRM TO STIFF, MOIST TO WET
20			5					

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-6D
Logged by: D. BRINKLEY		Project No. 510098
Drilled by: ~~Roberts Environmental~~ ADVANCE		Date: 9/20/00
Drilling Method: ~~Hollow Stem Auger~~ GEOPROBE/		
Sampling Method: 5' ~~CME Continuous~~ MACRO CORE		Sheet 2 of 4
Hole Diameter: 12½"		

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
		5					CI	SILTY CLAY, LIGHT BROWN WITH IRON STAINING MODERATE PLASTICITY STIFF, MOIST
25			4'					
		6						AS ABOVE
30			4'					
		7						
35			4.5'					SILTY CLAY, DARK OLIVE GREEN HIGH PLASTICITY, MOIST, VERY STIFF IRON STAINING
		8						
40								

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-6D
Logged by: D. BRINKLEY		Project No. 510098
Drilled by: Roberts Environmental		Date: 9/20/00 9/23/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet
Hole Diameter: 12.5"		3 of 4

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001 " slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description:
		9					CI	SILTY CLAY, DARK OLIVE GREEN, HIGH PLASTICITY, MOIST VERY STIFF
45			4.5					
		10					CI	AS ABOVE
50			4.5					
		11						FOLLOWING SAMPLING w/ GEOPROBE, DRILL w/ CENTER PLUG & 10¼" AUGERS SET 10" STEEL CASING, FLOATED IN GROUT @ 53.2',
55								
		12						9/23/00 ROBERTS ENVIRONMENTAL DRILL THROUGH PVC ~~END~~ CAP NO RECOVERY, PVC IN NOSE OF SAMPLER.
60			NONE				CI	SILTY CLAY, OLIVE GREEN, HIGH PLASTICITY, STIFF SATURATED

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-6D
Logged by: D. BRINKLEY		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9/23/00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet
	Hole Diameter: 8.5"	4 of 4

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 78' To 68'

Sand Pack: 78' To 66'

Seal: 66' To 50'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
		13					ML	CLAYEY SILT, TRACE FINE SAND OLIVE GRAY, LOW PLASTICITY, STIFF SLIGHTLY MOIST 7.5 YR 4/2
65			3'					
		14					ML/CL	AS ABOVE, GRADING TO SILTY CLAY
70			5'					
		15						CLAYEY SILT, BROWN, LOW PLASTICITY, WET, SOFT,
								1/2" THICK SANDY GRAVEL ZONE @ 74.5 DARK BROWN 7.5 YR 3/4, MEDIUM DENSE, WET
75			18"					GRAVELLY CLAY IN NOSE OF SAMPLER FINE GRAVEL TO COARSE SAND IN CLAY MATRIX, HIGH PLASTICITY STRONG BROWN 7.5 YR 4/6
78								

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Well Log

Client: Boeing	Location: SW CORNER BLD. 27	Boring No.: MW-7
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/19/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 1
Hole Diameter: 8"		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: ~~12.4~~ 11.9 To 6.9

Sand Pack: 12.4 To 4'

Seal: 14.4 to 12.4 & 4' To 2'

Description: 10" ASPHALT 2" ROCK BASE

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
				14	MW-7-2	1200		
		1						SILTY CLAY, HIGH PLASTICITY, GRAYISH OLIVE, SOFT, MOIST
				68	MW-7-5	1255		
	M'			186	MW-7-7	1305		BLAKEY SILT, LOW PLASTICITY, GRAYISH OLIVE, MEDIUM STIFF, MOIST TO WET, NO DESCERNIBLE ODOR COLOR CHANGE @ 7½' TO DUSKY YELLOWISH BROWN
		2						
10			4'	6		1300		
				5				@ 12' SILT, HIGHLY ORGANIC DEBRIS, V-THINLY BEDDED, LOW PLASTICITY, DARK GRAY, SLIGHTLY MOIST DRY SOFT, NO ODOR
	O'	3						
15			4'	5				
20								

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Well Log

Client: Boeing	Location: BLD 27	Boring No.: MW-8
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/19/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 1
Hole Diameter: 8"		

Field Location:

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	TIME	USCS Symbol	Description
						1440		3" ASPHALT 6" 2" ROCK
				1	MW-8-2	1445		
	M1	1						CLAYEY SILT, LOW PLASTICITY, DUSKY YELLOWISH BROWN, STIFF, SLIGHTLY MOIST, NO ODOR
			2'	1		1450		
5								
				3				C 5' SILTY CLAY, HIGH PLASTICITY, DARK OLIVE GRAY, SOFT, MOIST, NO ODOR.
		2						
				2				
	C1		5'			1500		
10								
								SAME AS ABOVE
				1				
		3						
				1				
15						1510		C 14½' SILT, TRACE CLAY, LOW PLASTICITY, GRAYISH OLIVE W/ IRON STAINING, SOFT, MOIST TO WET, NO ODOR
	M1							
								16-18' SILT, LARGE AMOUNT OF ORGANIC DEBRIS, THINLY BEDDED, LOW PLASTICITY, SLIGHTLY MOIST, NO ODOR
	O1			4				
		4						
								SILTY CLAY, HIGH PLASTICITY, OLIVE GRAY SOFT, SATURATED, NO ODOR
	C1			1				
20						1520		

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-8AS
Logged by: C. TEDDER		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9/21/00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet 1 of 1
	Hole Diameter: 8.5'	

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval:	16.5'	To	6.5'
Sand Pack:	16.5'	To	4.5'
Seal:	4.5'	To	1'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 6" ASPHALT, 12" GRAVEL
		1	4'	9.2			FILL	FILL, SILTY CLAY, DARK OLIVE/BLACK HIGH PLASTICITY, SLIGHTLY MOIST, RUBBLE (BRICK, CINDER, WOOD, WIRE, GRAVEL) TO 5.5'
5		2	5'	9.1			CL	TRANSITION TO NATIVE SILTY CLAY, BROWN, HIGH PLASTICITY, SLIGHTLY MOIST, FIRM IRON STAINING.
10		SHELBY TUBE 3		12.5				CLAYEY SILT TO SILTY CLAY, LIGHT GREY AND BROWN MOTTLED, MEDIUM PLASTICITY, MOIST TO WET, FIRM
		4	3'	8.5	MW8AS-12 MW8AS-12DUP			
15		SPLIT SPOON 5		3.6				
							ML OL	SILT, DARK BROWN, LOW PLASTICITY SLIGHTLY MOIST, FIRM, ORGANIC DEBRIS

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW8AD
Logged by: C. Tedder		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9-21-00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet 1 of 4
	Hole Diameter: 12.5" & 8.5"	

Well Construction: 2" schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: 80½' To 70½'

Sand Pack: 80½' To 68½'

Seal: 68½' To 65'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
		1	30"	4.6				0-2½' Rubble Fill including brick, cinders, gravel, wood
								No recovery from 2½' to 18'
5		2	Ø					
10		3	Ø					
15		4	12"					
					MW8AD-19	11:12	CH	light brown & grey high plastic silty clay
20		5						

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW8AD
Logged by: C. Tedder		Date: 9-21-00

Drilled by: Roberts Environmental

Drilling Method: Hollow Stem Auger

Sampling Method: 5' CME Continuous

Hole Diameter:

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
22		5	6"					
24				4.0				grey high plastic siltyclay very wet stiff
26		6	60"	4.7				
28				5.6	MW5AD-29	11:30		
30		7	60"	3.0				
32								
34				2.3				
36		8	60"	3.0				
38					MW8AD-38	11:50		
				14.1				
40		9	SHELBY					becoming brown and grey High plastic silty clay

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW8AD
Logged by: C. Tedder		Date: 9-21-00 & 9-25-00

Drilled by: Roberts Environmental

Drilling Method: Hollow Stem Auger

Sampling Method: 5' CME Continuous

Hole Diameter:

Depth (ft.)	Graphic Log	Sampler Location (SHELBY)	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description:
42		9	24"					9/21/00
								10" STEEL CASING FLOATED IN GROUT @ 45'
44				4.0				9/25/00 START DRILLING w/ 6¼" AUGERS INSIDE CASING.
								light brown and grey high plastic silty clay
46		10	36"	6.2				
48				7.0				
50		11	60"					
52				3.3				
54				4.2				becoming reddish brown & grey high plastic silty clay
56		12	60"	5.7				
58				4.2				
60		13						

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing | Location: Fabrication Operations Facility | Boring No.: MW8AD

Logged by: C. Tedder | Date: 9/25/00

Drilled by: Roberts Environmental

Drilling Method: Hollow Stem Auger

Sampling Method: 5' CME Continuous

Hole Diameter:

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
62		13	60"	4.7				iron nodules at 62'
64				4.2				Reddish brown and grey high plastic silty clay
66		14	60"	3.3			CH	
68				5.1				
70		15	60"	7.0			CH	
72				5.7				
74				3.3			GC	poorly sorted gravel within high plastic silty clay
							CH	
76		16	60"				GC	poorly sorted gravel within high plastic silty clay
78				4.2			CH	light reddish buff high plastic clay with gravel
80		~~14~~ 17	~~0~~	3.3				
81								

terminated @ 81, refusal.

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-9S
Logged by: Scott George		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9-18-00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet 1 of 4
	Hole Diameter: 8"	

Well Construction: 2" Schedule 40 PVC, 0.001 " slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
0								3" asphalt, 9" concrete
1								@1-2' cl
2				0				Clay fill/brown-black, occ. gravel
3				0				Silty clay - yellow brown, strong Iron mottles + concretions - moist
4								
5								Clay - slightly silty - soft slightly moist, yellow brown, strong Iron mottles - concretions
6								
7				0				
8								
9					MW9S-9'	10:00		
10								9'-12' silty clay, light gray brown matrix with strong Iron mottles
11								@12' sharp change to gray-gleyed silty clay - moist to wet
12		▼		0	MW9S-12'	10:15		Sample collected at groundwater contact
13								
14								
15								Silt clay brown to gray moist to wet, soft
16								
17				0				17'-19' brown to gray mottled silty clay - dryer - harder
18								
19								

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW9S
Logged by: Scott George		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date:
	Drilling Method: Hollow Stem Auger	9-18-00
	Sampling Method: 5' CME Continuous	Sheet
	Hole Diameter:	2 of 4

Well Construction: 2" Schedule 40 PVC, 0.001 " slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
19								slighty silty clay, light pink to orange/brown - firm to hard moist, occ. mottled gray trace organics (black) material at 23-24'
20								
21				0				
22								
23								
24								
25								slightly silty clay - light brown orange mottles, occassional concretions, soft to firm sl.-moderatly plastic, occassional macro-pores
26				0				
27								
28								Gray mottles toward base
29								
30								Silty clay - becoming more clay @ base - generally hard plastic clay @ 30' oxide concretions noted. strongly mottled brown to orange trace sand noted within matrix
31								
32				0				
33								
34								
35								Slightly silty, hard, plastic clay, light brown - orange occ. gray mottles
36				0				
37								
38								

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-95
Logged by: Scott George		Project No 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9-18-00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet 3 of 4
	Hole Diameter: 8"	

Well Construction: 2" Schedule 40 PVC, 0.001 " slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
39								Slightly silty clay, firm to hard, yellow-orange with gray mottles. slightly damp, dryer than above. Occ. concretions, trace organic material.
40								
41				0				
42								
43								
44								Abnt water in drilling rods. Slightly silty clay - very hard, plastic, generally brown with gray mottles.
45								
46								
47				0				
48								Very hard - plastic @ base
49								
50								Hard - plastic clay yellow orange to brown
51								dry to slightly moist
52				0				
53								
54								55' to 55.5' ~ 6" Sandy, gravel with clay matrix - wet - friable
55								
56								55.5' to 59' slightly silty clay, yellow orange with gray mottles, moist to damp
57								
58								Grading to gray clay @ base

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-9S
Logged by: Scott George		Project No. 510098
Field Location:	Drilled by: Roberts Environmental	Date: 9-18-00
	Drilling Method: Hollow Stem Auger	
	Sampling Method: 5' CME Continuous	Sheet 4 of 4
	Hole Diameter: 8"	

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID		USCS Symbol	Description
59								
60								Silty clay - firm/occ. soft, plastic, generally yellow orange to gray mottles.
61				0				occ. Fe/Mg. concretions + mottles
62								trace sand within matrix
								moist
63								trace small pebbles noted.
64								
65				0				Silty clay (as above)
66								
								@ 67' pebbles within matrix
67								
68				0				67.5' - 69' Sand + sand/clay mix mottled black, occ. mottled gray - yellow brown, moist - wet
69								occ pebbles
70								69'-70' Soft, wet silt clay (as above)
71			No sample recovery					70' limestone, rock auger with bit to 72.5'
72								push spoon - obtain ~3" of limestone, Return with drill bit and
73								drill to 73.5' (auger refusal).
	73.5'							Place bentonite chips to 24.6' - set monitoring wells

Environmental Science & Engineering, Inc.

Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-9D
Logged by: C. TEDDER		Project No. 510098
Drilled by: Roberts Environmental		Date: 9/19/00 9/22/00
Drilling Method: Hollow Stem Auger		
Sampling Method: ~~5' CME Continuous~~ NONE		Sheet
Hole Diameter: 12.5" / 8.5"		1 of 1

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval:	72.5'	To	62.5'
Sand Pack:	72.5'	To	60'
Seal:	60'	To	48'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								SEE MW-9S LOG FOR LITHOLOGY
								9/19/00
								AUGER TO 50' WITH CENTER PLUG WITHOUT SAMPLING.
								BOTTOM OF BORING 50' 2"
								PULL 20' OF AUGER AND PLACE GROUT IN BORING. PULL REMAINING AUGERS AND SET 10" STEEL CASING @ 50'
								9/22/00
								DRILL W/ 8¼" AUGERS THROUGH CASING TO TOTAL DEPTH OF 72.5, REFUSAL ON BEDROCK. SIGNIFICANT HEAVE INSIDE AUGERS, WATER FILLS AUGERS TO NEAR SURFACE
								FOLLOWING PLACEMENT OF BENTONITE TRAMIED GROUT TO 3' BELOW GROUND SURFACE

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Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-10S
Logged by: Scott George		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 5
Hole Diameter: 8"		

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
0								0-1' asphalt + gravel subbase
1								1-2' silt clay - black, organic, dry - firm
2								2-3' Black silt (as above)
3				2				3-4' Grading into a mottled graybrown clay, occ. mottles
4								
5								Silty clay, soft - firm, slightly moist - gray, with abnt. Fe mottles
6			4'	1-2*				trace sand within matrix
7				*background				
8								
9								
10								9-13.5' silty clay (as above)
11			~3'	1-2				@ 13.5' Distinct change to silty clay, black, wood - other organics
12								
13								
14								
15			NO Recovery					
16								
17								Clayey silt - dark gray to black, slightly damp to moist abnt organic material - black wood fragments.
18					MW10S 18'	10:50		
19								

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Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-105
Logged by: Scott George		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 2 of 5
Hole Diameter:		

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
19								
20		NO Recovery						NO recovery — WET sampler
21								
22								
23								
24		Split spoon	2'					Silt-clay - soft/wet, gray uniform color, trace sand within matrix, becoming firmer @ base
25								
26		Split spoon	2'					Silt clay - soft to firm, damp to wet, gray green uniform color slightly plastic
27								
28		Split spoon	2'					Silt clay (as above)
29								
30		Split spoon	2'					Silty clay - firm to hard, damp gray/green
31								
32		Split spoon	2'					Silty clay - hard, plastic, moist gray with Iron mottles occ. macropores, trace sand within matrix
33								
34		Return to 5' CME Sampler	5'					Silty clay, Gray with strong brown mottles, moist, plastic
35								
36								
37								Higher silt content @ base very moist, plastic clay
38								

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Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-105
Logged by: BN		Project No. 510098
Drilled by: Roberts Environmental		Date:
Drilling Method: Hollow Stem Auger		9-19-00
Sampling Method: 5' CME Continuous		Sheet
Hole Diameter:		3 of 5

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001 " slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test	USCS Symbol	Description:
39								
40								Silty Clay, brown, WET, soft trace fine gravel within matrix
41			5'	3				
42								
43								
44								
45		NO Recovery						No recovery
46								
47								
48								
49								
50		Split Spoon		2'				Silty Clay, brown w/ some gray moist, plastic
51								
52		Split Spoon		2'				Silty clay, brown, moist very plastic
53								
54		Split Spoon		2'				Silty clay, brown, moist very plastic
55								
56		Split Spoon		2'				Silty clay, brown, moist very plastic
		Split Spoon		2'				Silty Clay - pinkish gray + brown very plastic

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Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-10S
Logged by: BN		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 4 of 5
Hole Diameter: 8"		

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
59								Silty clay, gray with brown mottles, moist, very plastic.
60		split spoon	2'	2				
61								61'-64' silty clay, gray with strong brown mottles, moist
62		5' CME	~3'					
63								very plastic - hard
64								
65								Clayey Silt, brown, moist plastic
66			5'					
67								
68								
69								Clayey Silt, brown, moist hard - plastic
70								
71			5'					
72								
73								
74								Clayey Silt, brown, trace sand grains, moist
75								
76			~3.8'					
77								@ 78' silty clay w/ gravel - WET
78								clay is very moist - stiff

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Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-105
Logged by: BN		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 5 of 5
Hole Diameter: 8"		

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001" slotted screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
79	↑ total depth	—	NO Recovery					Auger refusal at 79.5 feet, limestone

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Well Log

Client: Boeing	Location: Fabrication Operations Facility	Boring No.: MW-10D
Logged by: D. BRINKLEY		Project No. 510098
Drilled by: Roberts Environmental		Date: 9/20/00 9/22/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet
Hole Diameter: 12½" / 8½"		1 of 1

Field Location:

Well Construction: 2" Schedule 40 PVC, 0.001 " slotted screen, flush mount well box

Screen Interval: 79.5' To 69.5

Sand Pack: 79.5' To 67.4'

Seal: 67.4' To 47'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 6" ASPHALT 6" GRAVEL
								SEE LOG OF MW-10S FOR LITHOLOGY
								BENTONITE CHIPS BROUGHT FROM
								SANDPACK TO 47' 3' INSIDE STEEL
								OUTER CASING. BENTONITE GROUT
								TREMIED TO 2' BELOW GROUND SURFACE
								9/20/00
								10" STEEL CASING SET @ 50'
								DRILLED THROUGH PVC CAP ON CASING
								W/ 8¼" AUGERS W/OUT SAMPLING TO
								REFUSAL.
								9/22/00
								REFUSAL ON BEDROCK @ 79.5'

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Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B220N1
Logged by: ~~Chris Tedder~~ DLB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/03
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 8'

Water At: 7'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: TIME	USCS Symbol	Description
						940		8" ASPHALT
2		1						CLAYEY SILT, LOW PLASTICITY, BLACK, STIFF, SLIGHTLY MOIST, SLIGHT OIL ODOR
4			3'	3.0				
6		2		3	B220N1			SILTY CLAY, MODERATE PLASTICITY, DUSKY YELLOWISH BROWN, WET TO SATURATED, SOFT, SLIGHT OIL ODOR.
8			3'	3				
10								SET PIEZOMETER @ 8'

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Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B220I1
Logged by: ~~Chris Tedder~~ DCB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 16'

Water At: ~10'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 8" CONCRETE
2		1						CLAYEY SILT, LOW PLASTICITY, BROWN, SLIGHTLY MOIST, SOFT, NO ODOR
4			3'	2				
6		2		15	B220I1-7			ABRUPT CHANGE @ 6.5' TO SILT BLACK, LOW PLASTICITY, SLIGHTLY MOIST, NO ODOR, SOFT
8			3'					
10		3		8				SILTY CLAY, MODERATE PLASTICITY, OLIVE GRAY GRADING TO DUSKY YELLOWISH BROWN, WITH IRON STAINING.
12			3'					
14		4		3				
16			3'					SET PIEZOMETER AT 16'

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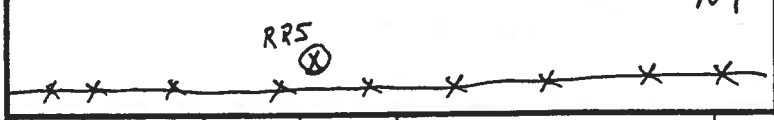
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RR5
Logged by: C. Tedder		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location: Bldg 28, Bldg 22, Bldg 27



Total Depth: 16'

Water Encountered at: 10'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
								Asphalt/gravel
2		1		0			OL	dark brown organic rich silt
4				2.4			ML	light brown & light grey low plastic clayey silt
6		2		2.4				more grey & iron stained
8				2.4				
10		3		2.4				▽ saturated at 10'
12				1.1				
14		4		1.1				
16				0			OL	dark olive/brown organic rich silt, slightly moist
18								terminated at 16'

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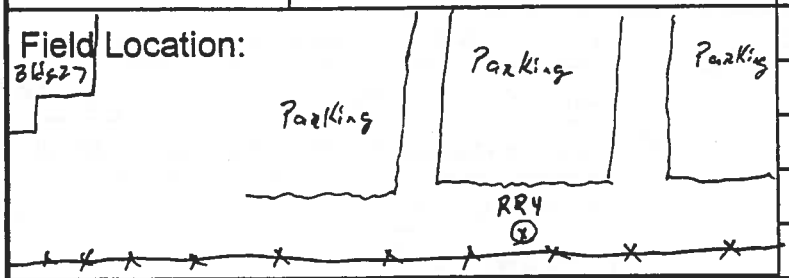
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RR4
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 4'

Water Encountered at: not encountered

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test PID (ppm)	Analysis/Test Lab Sample Location & ID	Analysis/Test Time	USCS Symbol	Description: Asphalt/gravel
2		1	48"	0			OL	dark brown organic rich silt
					RR4-3	0925		
4				0				
6								
8								
10								
12								
14								
16								
18								

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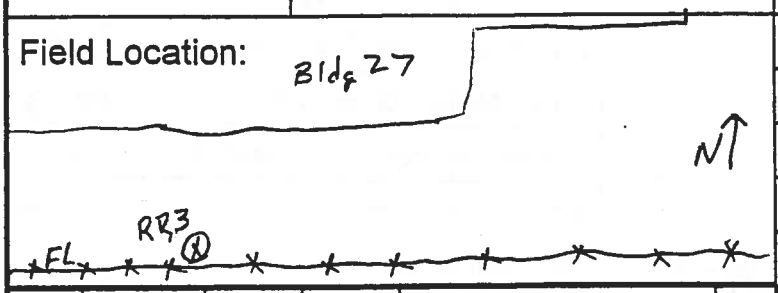
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RR3
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location: Bldg 27



Total Depth: 4'

Water Encountered at: not encountered

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
								Description: concrete/gravel
2				0	RR3-2	13:10	OL	dk brown organic rich silt
4				0			CL	light brown & grey, iron stained low plastic silty clay
6								terminated @ 4'
8								
10								
12								
14								
16								
18								

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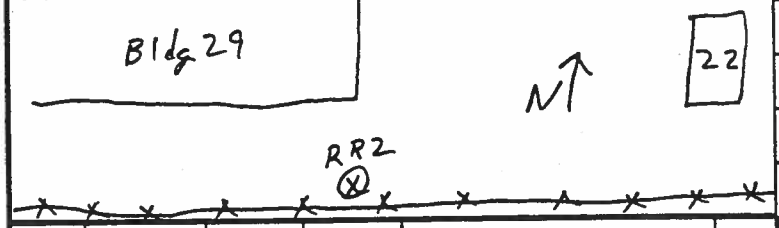
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RR2
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location: Bldg 29



Total Depth: 4'

Water Encountered at: not encountered

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
2		1	48"	0				gravel fill
					RR2-3	0900		
4				0				terminated at 4'
6								
8								
10								
12								
14								
16								
18								

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Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RR-1
Logged by: KEITH BOONE		Project No.510098
Drilled by: KEITH BOONE		Date: 9/22/00
Drilling Method: Hand Auger		
Sampling Method:		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 2'

Water Encountered at: NA

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
								6" ASPHALT
								6" ROCK BASE
2								SILTY CLAY, DARK BROWN, MODERATE PLASTIC, SLIGHTLY MOIST
4								
6								
8								
10								
12								
14								
16								
18								

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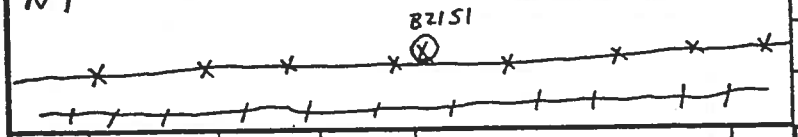
Log of Exploratory Boring

Client: Boeing	Location: South of Bldg. 21	Boring No. B21S1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location: B21

N↑



Total Depth: 16'

Water At: 13'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-6" gravel
								brown silty loam
2				5				
								grading to
4				6				brown low plastic clayey silt slightly moist
							ML	
6				5				
8				5				light grey w/brown medium/high plastic silty clay
							CH	
10				3				
								very moist
12				4	B21S1-12			
								saturated @ 13'
14				5				
16				4				
								terminated @ 16' set. TiP. @ 16'

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Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B27I9
Logged by: ~~Chris Todder~~ DLB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/25/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 16'

Water At: ~9'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 8" CONCRETE
		1		3				CLAYEY SILT, LOW TO MODERATE PLASTICITY, STIFF, SLIGHTLY MOIST NO ODOR
5								
		2						
8								
				5	B27I9-9			SILTY CLAY, MODERATE PLASTICITY LIGHT OLIVE GRAY, IRON STAINING SOFT, MOIST, BLACK STAINING IN VERTICAL HOLES, MODERATE PETROLEUM ODOR
10								
12								AS ABOVE, STAINING & ODOR TAPERS OUT W/ DEPTH, INCREASING SILT CONTENT W/ DEPTH
14				5				
16				5				
1								

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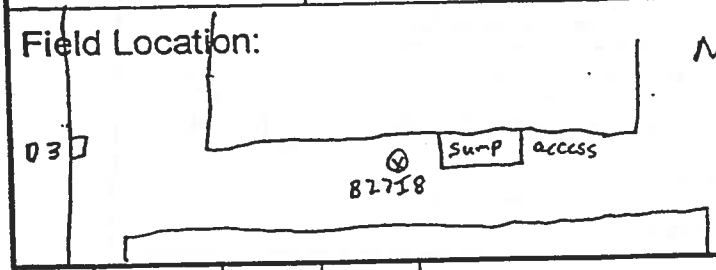
Log of Exploratory Boring

Client: Boeing	Location: Inside B27 Near Col. D3	Boring No. B27I8
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-21-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 20'

Water At: 17'

sump depth = 14.5'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	USCS Symbol	Description
							0-3' - concrete 3'-4' - gravel
2							
4						ML	tan clayey silt slightly moist soft → medium stiff
6				1			
8				3			
10				2		CH	grey w/reddish brown mottles medium to high plastic silty clay stiff, moist
12				1			
14				2	B27I8-15	OL	black organic silt w/wood moist, soft
16				4		CH △	light brown high plastic silty clay Saturated @ 17'
18				2		OL	black organic silt moist, soft terminated @ 20', T.P. @ 20'

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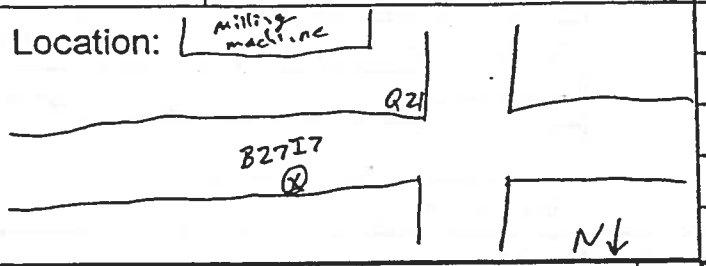
Log of Exploratory Boring

Client: Boeing	Location: Inside B27 Near Q21	Boring No. B27I7
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-21-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water At: 12.5'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-12" - concrete & gravel
2				2			OL	black organic silty clay low plastic
					B27I7-3			
4				3				
6				1				
							CH	brown high plastic silty clay
8				1				
10				2				becoming tan w/grey high plastic silty clay
12				1			ML	tan w/grey clayey silt
								Saturated at 12½ feet
								tan w/grey high plastic silty clay
14				2	B27I7-14 (VOC&TPH)		CH	
16				2			ML	tan w/grey clayey silt
								boring term. @ 16'
18								install temporary piezometer @ 16'

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Log of Exploratory Boring

Client: BOEING	Location:
Logged by: D. BRINKLEY	Boring No. B27IG
Project No. 510098	
Drilled by: ROBERTS	Date: 7/25/00
Drilling Method: GEOPROBE	
Sampling Method: 4" MACRO CORE	Sheet 1 of 1
Hole Diameter: 2"	
Total Depth: 20'	
Water At: ~15'	

Field Location:

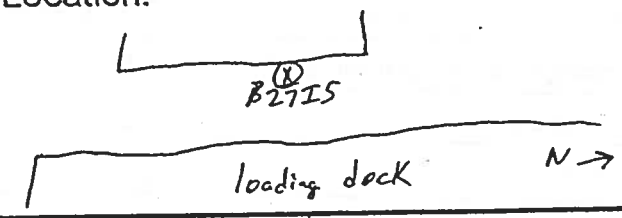
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
						845		12" CONCRETE
		1						SILTY CLAY, LOW PLASTICITY, SOFT, BLACK, SLIGHTLY MOIST
				1				
5		2						
				1				
								SILTY CLAY, HIGH PLASTICITY BROWN, SLIGHTLY MOIST, FIRM
10		3						
		4						SILTY CLAY AS ABOVE, TAN, MOIST, FIRM.
15				3				
		5						AS ABOVE
								SET TEMPORARY PIEZOMETER @ 20'
20								

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Inside B27 Near Col. FF 34	Boring No. B27IS
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-21-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 20'

Water At: 14.5'

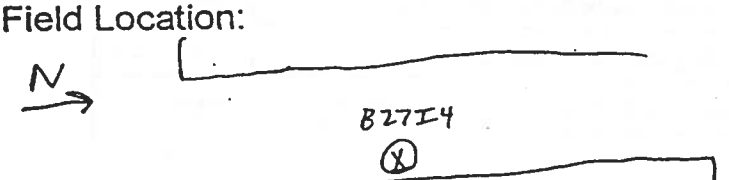
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-1' brick, concrete
2				2			OL	black organic rich clayey silt
4				2				
6				2			GM	limestone gravel, fill?
8				2			OL	Black organic rich clayey silt
10				3			CL	brown high plastic silty clay
12				3				
14				3	B27IS-14		▽	tan high plastic silty clay saturated @ 14.5'
16				2			CL	tan w/gray high plastic silty clay
18				2				
								boring terminated @ 20'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Inside B27 near Col. GG 34	Boring No. B27I4
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-21-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: $5\frac{1}{2}'$

Water At: not encountered

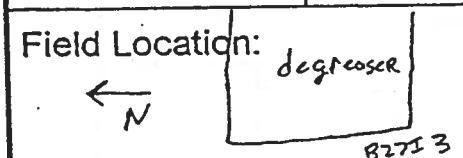
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								0-1' concrete
2				2			OL	black organic clayey silt
4				3				
				2	B27I4-5			
6								refusal @ $5\frac{1}{2}'$ on concrete

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Inside B27 near degreaser	Boring No. B27I3
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-21-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water At: not encountered

base of degreaser sump = 9.5'

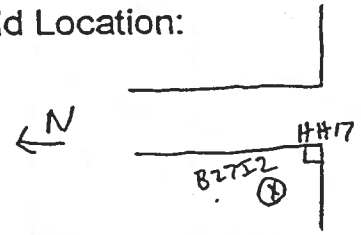
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-12" concrete
								1'-6' fine grained limestone gravel fill
2				0			FILL	
4				0				
6				0				
							ML	brown low plastic clayey silt
8				0				slightly moist
10				0			CH	light brown/tan high plastic silty clay
								slightly moist
12				1	B27I3-12			
14				0				
16				0				
								terminated @ 16'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Inside B27 Near Col. HH17	Boring No. B27I2
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-21-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water At: 11 1/2'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	USCS Symbol	Description
						FILL	Description: 0-8" concrete; 8"-2' brown clayey fill
2				2		SP	quartz sand, tan, poorly sorted
4				2		CH	lt. brown/tan high plastic silty clay, moist
6				3		CL	lt. brown low plastic silty clay with iron staining
8				2		CH	tan & grey high plastic silty clay moist
10				3			
					B27I2-11	▽	Saturated @ 11.5'
12				2		SP	quartz sand lense, tan, poorly sorted
14				1		CH	tan/grey high plastic silty clay
						ML	lt. grey silt, moist/wet, soft
16				2		OL	dk grey low plastic organic silt
							terminated @ 16', intall T.P.

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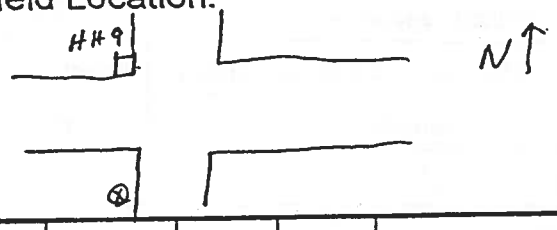
Log of Exploratory Boring

Client: Boeing	Location: Inside B27 Near Column HH9	Boring No. B27I1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-21-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water At: 12.25'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-8" concrete
2				8			OL	dark brown/black organic clayey silt
4				10			CH	brown high plastic silty clay becoming light brown
6				8			ML	lt. brown and grey low plastic clayey silt
8				8				
10				6				
12				12	B27I12		OL	dk. grey organic silt
							▽	saturated @ 12.25'
							CH	lt. brown & grey high plastic silty clay
14				10			OL	black/dark brown organic silt
16				10				terminated @ 16', T.P. installed

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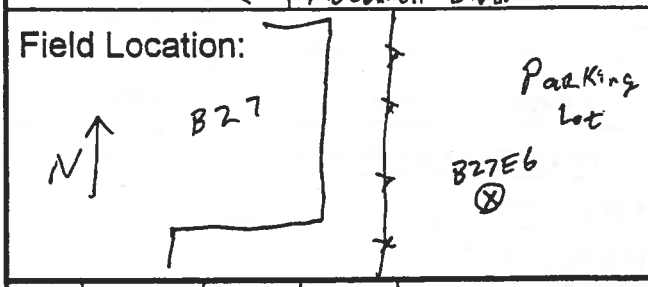
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B27E6
Logged by: C. Tedder		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Geoprobe		Sheet 1 of 1
Sampling Method: Continuously driven, 4' Macro Core sampler		
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water Encountered at: 12.5'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								8"- Asphalt, gravel
							CL/CH	dark brown clay Fill
2		1		4.5			OL	dark brown/black organic rich clayey silt dry
4				6.2				
6		2		5.8				
8				5.4			ML	light grey with brown, iron stained low plastic clayey silt
10		3		6.7				
12				8.2	B27E6-12	15:05		▽ saturated at 12.5'
14		4		6.1				
16				7.0				terminated at 16'
18								

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Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B27E5
Logged by: C. Tedder		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 20'

Water Encountered at: 15'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								Description: 8" asphalt & gravel
2		1	48"	11.5			CH	dark brown high plastic silty clay
4				2.3				
6		2	48"	5.0			ML	light brown/grey with iron staining low plastic clayey silt
8				2.6				
10		3	48"	17.0				
12				16.7				
14		4	48"	24.8	B27E5-14	14:20	ML	▽ saturated at 15'
16				3.3				
18		5	48"	3.1				
				0.0				terminated at 20'

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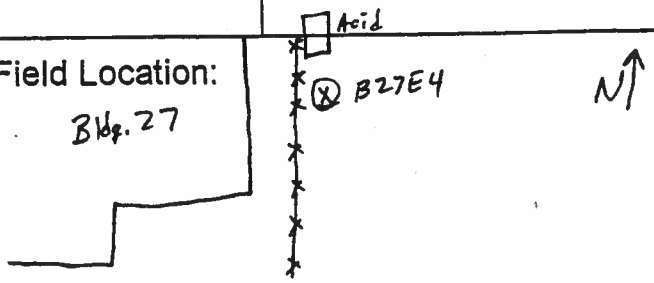
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B27E4
Logged by: C. Tedder		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location: Bldg. 27



Total Depth: 16'

Water Encountered at: 12.5'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								Asphalt/gravel
2		1	48"	2.1			CH	dark brown/black high plastic clay - fill
4				2.7			CH	dark brown high plastic silty clay
6		2	48"	2.1				
8				1.5			CH	light brown with grey and iron staining med/high plastic silty clay
10		3	48"	3.3				light grey low plastic clayey silt moist
12				4.0	B27E4-12	15:55	ML	▽ saturated at 12½'
14		4	48"	4.6				
16				10.1				
18								terminated at 16'

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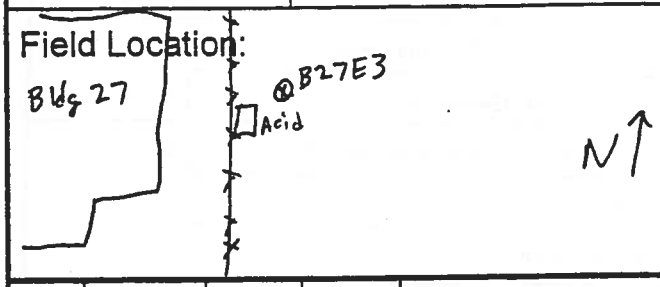
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B27E3
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water Encountered at: 12½'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								asphalt/gravel
2		1	48"	0			ML	dark olive/brown low plastic silty clay/clayey silt
4				0				
6		2	48"	1.1				
8				2.1			CH	light brown and olive high plastic silty clay
10		3	48"	3.3				
12				4.0	B27E3-12	1530		▽ Saturated at 12½'
14		4	48"	2.7				
16				2.1				terminated at 16'
18								

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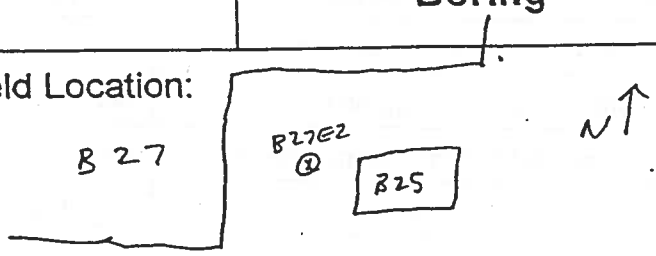
Log of Exploratory Boring

Client: Boeing	Location: between B27 & B25	Boring No. B27E2
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-19-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 20'

Water At: 18'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-2" Asphalt; 2"-8" Concrete
2							OL	Black organic rich clayey silt
4				2.4				
6				2.7				
				3.0				
8				3.0				
10				3.0			CL	light brown low plastic silty clay
							SC	sandy clay, less than 6"
12				3.6	B27E2-12		CH	grey w/ brown mottles high plastic silty clay slight odor (unknown) slightly moist
14								
16				1.8				
18				3.3			▽	Saturated @ 18'

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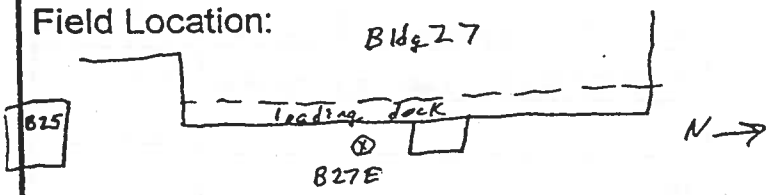
Log of Exploratory Boring

Client: Boeing	Location: adj. to B27 loading dock (east)	Boring No. B27 E1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-20-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 12'

Water At: 9'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-12" asphalt (4") & concrete (8")
2				3			ML	light brown low plastic clayey silt
4				3			OL	dk brown/black low plastic organic rich silt
6				3				
8				5	B27E1-8		CH	grey w/brown mottles med/high plastic silty clay
							▽	saturated @ 9'
10				3				
12				10			CL	low/medium plastic tan silty clay
								terminated @ 12' Set T.P. @ 12'

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Log of Exploratory Boring

Client: BOEING	Location:	Boring No. RC8D
Logged by: D. BRINKLEY		Project No. 510098
Drilled by: ROBERTS		Date: 9/12/00
Drilling Method: GEOPROBE DUAL TUBE		
Sampling Method: 1" LARGE BORE SAMPLER		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth:

Water At: 1" PREPACK WELL SCREEN SET @ 24' TO 19', 6" SAND ABOVE SCREEN, GRANULAR BENTONITE TO SURFACE.

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								SEE LOG OF RC8S FOR 0-18'
15								
20		1						SILTY CLAY, YELLOWISH BROWN, MODERATE TO LOW PLASTICITY, SLIGHTLY MOIST MOTTLED
		2						
		3						SILTY CLAY AS ABOVE, HIGH PLASTICITY
								TOTAL DEPTH 24', PROBE RIG COULD NOT ADVANCE DUAL TUBE FURTHER

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Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RC-85
Logged by: D. BRINKLEY		Project No.51009
Drilled by: Roberts Environmental		Date: 9/18/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 18'

Water Encountered at: ~10'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
						935		
2		1						CLAYEY SILT, LOW PLASTICITY, ~~YELLOWISH~~ BROWN, SLIGHTLY MOIST, SOFT, IRON STAINING
				2				
4			3'					
6		2						AS ABOVE W/ IRON STAINING AND V
8			4'	2				
10		3		7				AS ABOVE BECOMING SILTY CLAY MODERATE TO HIGH PLASTICITY VERTICAL
12			4'	11				
14		4						SILTY CLAY, DARK BROWN, HIGH PLASTICITY, SATURATED VERY SOFT,
16			4'	10				
18		5	NONE			1000		NO RECOVERY SET 1" TEMP PIEZOMETER, ONLY ABLE TO PUSH SCREEN TO ABOUT 13' DUE TO HOLE COLLAPSE.

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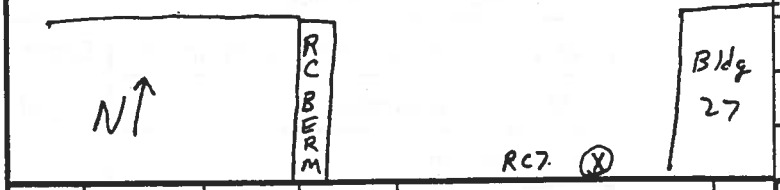
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RC7
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 20'

Water Encountered at: 16.5'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								Description: concrete/gravel
2		1	48"	0			CH	light brown and tan high plastic silty clay
4				0				
6		2	48"	1.1			OL	dark olive grey organic rich low plastic clayey silt
8				1.1				
10		3	48"	1.1				
12				1.1				
14		4	48"	2.3			OH	dark olive grey organic rich high plastic silty clay
16				2.3	RC7-16	10:12		▽ saturated at 16½'
18		5	48"	0			CH	grey high plastic silty clay very stiff

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Log of Exploratory Boring

Client: BOEING

Location:

Boring No. RC6D

Logged by: D. BRINKLEY

Project No. 51009

Field Location:

Drilled by: ROBERTS

Date: 9/18/00

Drilling Method: GEOPROB DUAL TUBE

Sampling Method: 2' LARGE BORE SAMPLER

Sheet 1 of 1

Hole Diameter: 2"

Total Depth: 21'

Water At: 1" PREPACK WELL SET @ 21' TO 16'

6" SAND ABOVE PREPACK, GRANULAR BENTONITE TO SURFACE

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								SEE LOG OF RC65 FOR 0-12'
15		1					ML	SILT, DARK BROWN, TRACE ORGANIC DEBRIS, SLIGHTLY MOIST LOW PLASTICITY
							CL	@ 16' SILTY CLAY, YELLOWISH BROWN HIGH PLASTICITY, FIRM, SLIGHTLY MOIST
		2						SILTY CLAY AS ABOVE, LIGHT OLIVE GRAY 17-19', MOTTLED BROWN AND OLIVE GRAY 19-21'
		3						

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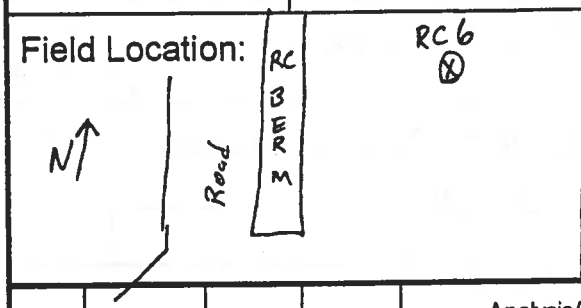
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RC6
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 12'

Water Encountered at: 8½'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
								Asphalt
2		1	48"	~~0~~			ML	light brown and grey iron stained low plastic clayey silt
4				3.6				moist at 4'
6		2	48"	3.3				
8				3.3			OL	dark olive grey organic rich low plastic clayey silt
10		3	48"	3.3			CH	▽ saturated at 8½' light brown and grey high plastic silty clay
12				2.1			OL	dark olive grey organic rich low plastic clayey silt
14								terminated at 12'
16								
18								

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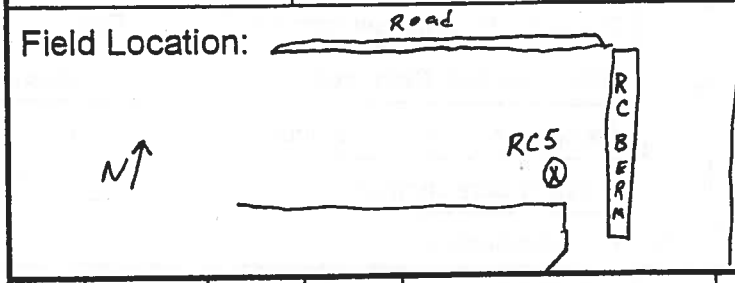
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RC5
Logged by: C. Tedder		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water Encountered at: 9.5'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
				*				Asphalt/gravel
2		1					OL	black organic rich low plastic clayey silt
4							CH	brown med/high plastic silty clay
6		2					ML	light brown/grey, iron stained low plastic clayey silt
8								
10		3			RC5-9	11:03		▽ saturated at 9.5'
12								
14		4						
16								
18								terminated at 16'

* due to PID malfunction, no pid readings taken

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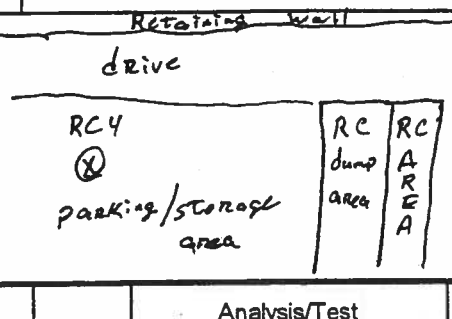
Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. RC 4
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: ~~16'~~ 20'

Water Encountered at: 10.5'

Depth (ft)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								Asphalt / Gravel
2		1		1.5			OL	dark brown / black topsoil / organic rich clayey silt
4				2.1			CH	brown high plastic silty clay stiff, dry
6		2		1.5			ML	light brown and grey low plastic clayey silt iron stained moist
8				1.5				
10		3		0	RC4-10	11:44		▽ saturated at 10.5'
12				0			CH	light brown and grey, iron stained high plastic silty clay, stiff
14		4		11.2			ML	light brown and grey clayey silt
16				8.6				
18		5		4.2			ML	~~terminated at 16' cf no recovery dry, extend~~ insufficient H_2O, extend to 20'

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Log of Exploratory Boring

Client: Boeing	Location:	Boring No. RC3
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date:
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet ___ of ___
Hole Diameter: 2"		

Field Location:

Total Depth:

Water At:

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						1450		2" ASPHALT 6" CONCRETE
2								
4								
6								
8								
10								
12								

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Log of Exploratory Boring

Client: Boeing	Location:
Logged by: ~~Chris Tedder~~ DLB	Boring No. RC-2
	Project No. 5100098
Drilled by: Roberts Environmental	Date: 7/25/00
Drilling Method: Geoprobe	
Sampling Method: Continuously driven, 4' Macro Core	Sheet 1 of 1
Hole Diameter: 2"	

Field Location:

Total Depth: 16'

Water At: ~ 8'

PIEZOMETER SET @ 16'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID		USCS Symbol	Description
						1300		Description: CONCRETE
2		1		2				DARK OLIVE GRAY FROM 6" TO 2' SILTY CLAY, MODERATE OIL ODOR.
4			2½					SILTY CLAY, MODERATE PLASTICITY LIGHT BROWN TO DARK OLIVE W/IRON STAINING AND VERTICAL HOLES. BLACK, PETROLEUM ODOR? STAINING @ 6 - 9'
6		2		2	RC2-7			
8			4'	1				
10		3		3				SILTY CLAY AS ABOVE LIGHT BROWN, NO ODOR
12			4'					
14		4						
16	ML		4'			1345		@ 15' SILT, SOME CLAY, LOW PLASTICITY, DARK REDDISH BROWN, MOIST, MEDIUM STIFF, NO ODOR

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location:	Boring No. RC1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/25/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth:

Water At: ~ 8'

20' PIEZOMETER 10' SCREEN SET

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (In.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						1030		3" CONCRETE
4				3				
6								SILTY CLAY, MODERATE TO HIGH PLASTICITY, LIGHT BROWN, SOME IRON STAINING, MOIST TO WET W/ DEPTH, SOFT, NO ODOR
				4	RC1-7	1045		
8								
10				5				
								AS ABOVE MORE SILT,
12								
14								
				2				SILTY CLAY, HIGH PLASTICITY, LIGHT BROWN W/ IRON STAINING WET, SOFT TO MEDIUM STIFF, NO ODOR.
16								
18				3				
						1100		

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: BOEING	Location:	Boring No. B27W3D
Logged by: D. BRINKLEY		Project No. 510098
Drilled by:		Date: 9/ /00
Drilling Method: GEOPROBE DUAL TUBE		
Sampling Method: 1" LARGE BORE SAMPLER		Sheet 1 of 1
Hole Diameter:		

Field Location:

Total Depth: 26'

Water At: 1" PREPACK WELL SCREEN

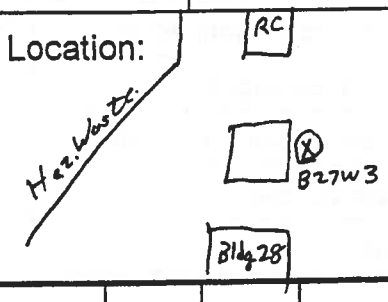
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								SEE B2735 FOR LOG of 0-15'
15								
		1					M	SILT, DARK BROWN, TRACE ORGANIC DEBRIS, LOW PLASTICITY, MEDIUM STIFF, SLIGHTLY MOIST.
		2					CL	SILTY CLAY, YELLOWISH BROWN MODERATE PLASTICITY, SLIGHTLY MOIST, MOTTLED, FIRM
20		3						
		4						SILTY CLAY AS ABOVE, HIGH PLASTICITY.
25		5						
		6.						SILTY CLAY ABOVE.

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B27W3
Logged by: C. Tedder		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water Encountered at: 12'

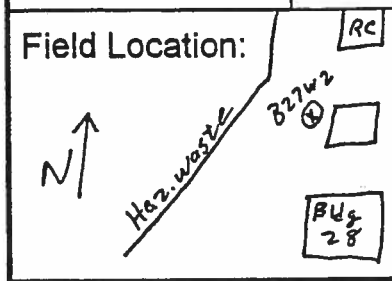
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								Asphalt/gravel
2		1	48"	0	B27W3-2	14:22	ML	light brown and grey low plastic clayey silt
4				6.4				
6		2	48"	14.4				
8				6.1	B27W3-8	14:35	OL	dark olive low plastic organic Rich clayey silt
10		3	48"	6.0				
12				13.2				▽ saturated at 12'
14		4	0"					
16								terminated at 16'
18								

Environmental Science & Engineering, Inc.
A MACTEC COMPANY

Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B27W2
Logged by: C. Tedder		Project No.510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Bldg. 27

Total Depth: 12'

Water Encountered at: 9'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								Description: Concrete / gravel
2		1	48"	3.3			CL	light Reddish brown low plastic silty clay
4				4.0				
6		2	48"	1.5			ML	light grey low plastic clayey silt, iron stained
8				3.3	B27W2-8	14:06		▽ saturated at 9'
10		3	48"	4.6			OL	dark olive / black organic rich clayey silt low plastic
12				4.0				
14								terminated at 12'
16								
18								

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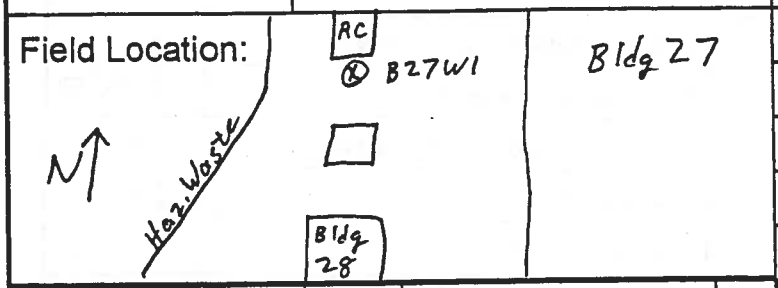
A BACTECH COMPANY

Log of Exploratory Boring

Client: Boeing	Location: Fabrication Operations Facility	Boring No. B27W1
Logged by: C. Tedder		Project No. 510098
Drilled by: Roberts Environmental		Date: 9-18-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core sampler		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:



Total Depth: 16'

Water Encountered at: 10'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	Time	USCS Symbol	Description
								asphalt/concrete
2		1	48"	2.7	B27W1-3	13:35	CH	dark olive/grey med. to high plastic silty clay; oil stains between 3' & 4'
4				2.1				
6		2	48"	2.1				
8				9.5	B27W1-9	13:40	ML	dark olive grey/brown low plastic clayey silt
10		3	48"	3.3				▽ saturated at 10'
12				3.3			OL	dark grey/brown low plastic organic rich clayey silt
14		4	48"	5.8				
16				1.5			CH	grey med./high plastic silty clay
18								terminated at 16'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B29 I1
Logged by: ~~Chris Todder~~ DLB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/25/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of ___
Hole Diameter: 2"		

Field Location:

Total Depth: 20'

Water At: 15'

INSTALLED 15' PIEZOMETER, BOREHOLE COLLAPSES

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	PID (ppm)	Lab Sample Location & ID	TIME	USCS Symbol	Description
						1230		8" CONCRETE
2		1						3/4" MINUS COMPACTED ~~CRUSH~~ LIMESTONE BACKFILL, DRY, NO ODOR
4			2'	1				
6		2						
8			2'	3				
10		3						
12			2'	4				
14		4						
16			2'	4				
		5						SILT, TRACE CLAY, LOW PLASTICITY
			2'	AO 35				

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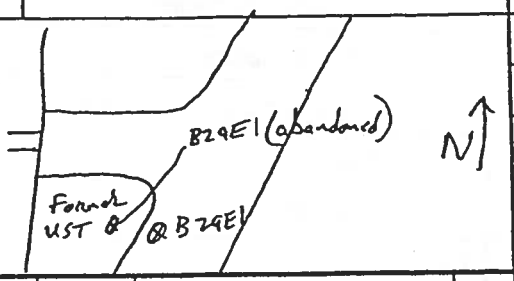
Log of Exploratory Boring

Client: Boeing	Location: east of B29	Boring No. B29E1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-20-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 2 of 2
Hole Diameter: 2"		

Field Location:



Total Depth: 24'

Water At: 19'

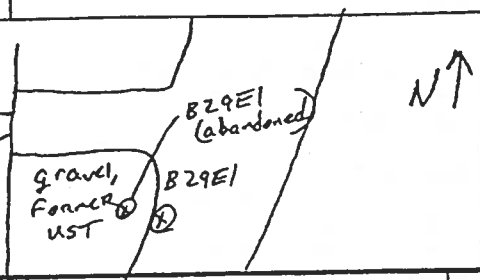
Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								no recovery
22			No Recovery					
24								terminated @ 24' set T.P. @ 23'6"

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location: East of B29	Boring No. B29E1
Logged by: Chris Tedder		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7-20-00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core.		Sheet 1 of 2
Hole Diameter: 2"		

Field Location:



Total Depth: 24'

Water At: 19.0'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
								Description: 0-18" asphalt & gravel
2				3				light brown high plastic silty clay
4				3			CH	
6				3				
8				4			OL	dark brown/black organic silt, low plastic
10				4			OH	gray/olive high plastic silty clay, organic rich
12				4			OL	black organic rich clayey silt low plastic
14				3				
16				4			CH	olive & tan high plastic silty clay
					B29E1-17			olive & grey w/tan mottles high plastic silty clay, moist
18				4				Grey w/brown high plastic silty clay
							▽	saturated @ 19'
20				4			CH	

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Log of Exploratory Boring

Client: Boeing	Location: WEST of BLD. 29A	Boring No. B29AW1
Logged by: ~~Chris Tedder~~ DLB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 12'

Water At: 9'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (In.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						1255		6" ASPHALT 6" ROCK BASE
2		1						SILTY CLAY, MODERATE PLASTICITY, DUSKY YELLOWISH BROWN, SLIGHTLY MOIST, SOFT, NO ODOR
4	CL			3		1300		
								5.5' TO 9.5' SILT, TRACE CLAY LOW PLASTICITY, OLIVE GRAY, IRON STAINING, SOFT, MOIST NO ODOR
6		2						
8	ML			3	B29AW1-8	1305		
10	CL	3		2				SILTY CLAY, MODERATE PLASTICITY OLIVE GRAY, IRON STAINING, SOFT, MOIST TO WET, NO ODOR
12	OL					1310		ORGANIC SILT @ 11.5'

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Log of Exploratory Boring

Client: Boeing	Location:	Boring No. B28E1
Logged by: ~~Chris Tedder~~ DLD		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/26/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth:

Water At:

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						855		2" ASPHALT, 6" CONCRETE
2		1						
4			3'	1				SILT, TRACE CLAY, LOW PLASTICITY
6		2		1	B28E1-6	905		
8			4'					
10		3		1				
12			4'			910		

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Well Log

Client: Boeing	Location:	Boring No.: B28N1
Logged by: Dennis Brinkley		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/26/00
Drilling Method: Hollow Stem Auger		
Sampling Method: 5' CME Continuous		Sheet 1 of 1
Hole Diameter:		

Field Location:

~~Well Construction: 2" schedule 40 PVC, 0.001" slotted~~ screen, flush mount well box

Screen Interval: To

Sand Pack: To

Seal: To

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test:	USCS Symbol	Description
						918		Description: 2" ASPHALT, 6" CONCRETE
2								CRUSHED LIMESTONE ROCK FROM 0 TO 6', SLIGHTLY MOIST NO ODOR
				1				
4			2'					
6								
				181	B28 N1-7	925		SILTY CLAY/CLAYEY SILT, LOW PLASTICITY OLIVE GRAY W IRON STAINING AND PETROLEUM STAINING IN IRON, SOFT MOIST TO WET @ 10', MODERATE PETROLEUM ODOR.
8	cl/m		2'					
				5				
12								ORGANIC SILT @ 10.5'
	01			30			01	SLIGHTLY MOIST, M STAIN NO ODOR
12			3'			970		
								SET PIEZOMETER @ 12'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location:	Boring No. CN1
Logged by: ~~Chris Tedder~~ DLS		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 12'

Water At: 8'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: TIME	USCS Symbol	Description
						1440		Description: ASPHALT
2		1						
								CLAYEY SILT,
4			3'	2		1445		
6	M1	2		1				
8			4'		CN1-8	1450		SILTY CLAY, MODERATE PLASTICITY
10	C1	3						
								11.5' ORGANIC SILT
12	DL		4'			1500		

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location:	Boring No. PB1
Logged by: ~~Chris Tedder~~ DLB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 8'

Water At: 6'

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol	Description
						1415		4" ASPHALT 6" CONCRETE
2		1						CLAYEY SILT,
4			3'			1420		
6		2			PB1-6			
8			4'			1430		
	OL							ORGANIC SILT @ 7.5', SLIGHTLY MOIST
								PIEZOMETER SET @ 8'

Environmental Science & Engineering, Inc.

Log of Exploratory Boring

Client: Boeing	Location:	Boring No. HW-1
Logged by: ~~Chris Tedder~~ DCB		Project No. 5100098
Drilled by: Roberts Environmental		Date: 7/24/00
Drilling Method: Geoprobe		
Sampling Method: Continuously driven, 4' Macro Core		Sheet 1 of 1
Hole Diameter: 2"		

Field Location:

Total Depth: 8'

Water At: 6'

Description: 8" ASPHALT

Depth (ft.)	Graphic Log	Sampler Location	Sample Recovery (in.)	Analysis/Test: PID (ppm)	Analysis/Test: Lab Sample Location & ID	Analysis/Test: Time	USCS Symbol
						1400	
2							
		1					
4			3'	160	HW1-5		
						1405	
		2					
6				5'			
8			3½'			1410	

Appendix B

Analytical Laboratory Results and Data Validation Reports for Phase 2A & 2B (Prepared by Severn Trent Laboratories)

(CD-R Format)

ANALYTICAL REPORT

Boeing

Lot #: F0G140291

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

July 26, 2000

Case Narrative
LOT NUMBER: **F0G140291**

This report contains the analytical results for the five samples received under chain of custody by STL St. Louis on July 14, 2000. These samples are associated with your Boeing project.

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

Observations/Nonconformances
Nonconformance F00897

Affected Samples:
1: B220-P
2: B27-P3
3: B27-P1
4: B27-P2
5: B29A-P

Affected Methods:
8082

Case Narrative Details:
Due to sample matrix, a MS and MSD was not performed on these sample(s). The laboratory performed a LCS and LCSD for Batch QC.

Corrective Action:
None.

METHODS SUMMARY

F0G140291

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
PCBs by SW-846 8082	SW846 8082	SW846 3580

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G140291

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DG913	001	B220-P	07/14/00	08:50
DG91D	002	B27-P3	07/14/00	09:08
DG91F	003	B27-P1	07/14/00	09:20
DG91G	004	B27-P2	07/14/00	09:25
DG91K	005	B29A-P	07/14/00	09:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220-P

GC Semivolatiles

Lot-Sample #...: F0G140291-001 **Work Order #...:** DG913101 **Matrix.....:** WIPE
Date Sampled...: 07/14/00 08:50 **Date Received..:** 07/14/00
Prep Date.....: 07/18/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0202233 **Analysis Time..:** 09:28
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/wipe
Aroclor 1221	ND	1.0	ug/wipe
Aroclor 1232	ND	1.0	ug/wipe
Aroclor 1242	ND	1.0	ug/wipe
Aroclor 1248	ND	1.0	ug/wipe
Aroclor 1254	ND	1.0	ug/wipe
Aroclor 1260	ND	1.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	32	(10 - 224)
Decachlorobiphenyl	19	(10 - 195)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27-P3

GC Semivolatiles

Lot-Sample #...: F0G140291-002 **Work Order #...:** DG91D101 **Matrix.....:** WIPE
Date Sampled...: 07/14/00 09:08 **Date Received..:** 07/14/00
Prep Date.....: 07/18/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0202233 **Analysis Time..:** 09:42
Dilution Factor: 50

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	50	ug/wipe
Aroclor 1221	ND	50	ug/wipe
Aroclor 1232	ND	50	ug/wipe
Aroclor 1242	ND	50	ug/wipe
Aroclor 1248	ND	50	ug/wipe
Aroclor 1254	**71**	**50**	**ug/wipe**
Aroclor 1260	ND	50	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	0.0 DIL	(10 - 224)
Decachlorobiphenyl	0.0 DIL	(10 - 195)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27-P1

GC Semivolatiles

Lot-Sample #...: F0G140291-003 **Work Order #...:** DG91F101 **Matrix.....:** WIPE
Date Sampled...: 07/14/00 09:20 **Date Received..:** 07/14/00
Prep Date.....: 07/18/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0202233 **Analysis Time..:** 09:56
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/wipe
Aroclor 1221	ND	1.0	ug/wipe
Aroclor 1232	ND	1.0	ug/wipe
Aroclor 1242	ND	1.0	ug/wipe
Aroclor 1248	ND	1.0	ug/wipe
Aroclor 1254	**1.5**	**1.0**	**ug/wipe**
Aroclor 1260	ND	1.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	25	(10 - 224)
Decachlorobiphenyl	16	(10 - 195)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27-P2

GC Semivolatiles

Lot-Sample #...: F0G140291-004 **Work Order #...:** DG91G101 **Matrix.....:** WIPE
Date Sampled...: 07/14/00 09:25 **Date Received..:** 07/14/00
Prep Date.....: 07/18/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0202233 **Analysis Time..:** 10:09
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/wipe
Aroclor 1221	ND	1.0	ug/wipe
Aroclor 1232	ND	1.0	ug/wipe
Aroclor 1242	ND	1.0	ug/wipe
Aroclor 1248	ND	1.0	ug/wipe
Aroclor 1254	**1.6**	**1.0**	**ug/wipe**
Aroclor 1260	ND	1.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	29	(10 - 224)
Decachlorobiphenyl	16	(10 - 195)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29A-P

GC Semivolatiles

Lot-Sample #...: F0G140291-005 **Work Order #...:** DG91K101 **Matrix.....:** WIPE
Date Sampled...: 07/14/00 09:50 **Date Received..:** 07/14/00
Prep Date.....: 07/18/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0202233 **Analysis Time..:** 10:23
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/wipe
Aroclor 1221	ND	1.0	ug/wipe
Aroclor 1232	ND	1.0	ug/wipe
Aroclor 1242	ND	1.0	ug/wipe
Aroclor 1248	ND	1.0	ug/wipe
Aroclor 1254	ND	1.0	ug/wipe
Aroclor 1260	ND	1.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	31	(10 - 224)
Decachlorobiphenyl	20	(10 - 195)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G140291 **Work Order #...:** DGHCF101 **Matrix.....:** WIPE
MB Lot-Sample #: F0G200000-233

Prep Date.....: 07/18/00 **Analysis Time..:** 11:49
Analysis Date..: 07/20/00 **Prep Batch #...:** 0202233
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/wipe	SW846 8082
Aroclor 1221	ND	1.0	ug/wipe	SW846 8082
Aroclor 1232	ND	1.0	ug/wipe	SW846 8082
Aroclor 1242	ND	1.0	ug/wipe	SW846 8082
Aroclor 1248	ND	1.0	ug/wipe	SW846 8082
Aroclor 1254	ND	1.0	ug/wipe	SW846 8082
Aroclor 1260	ND	1.0	ug/wipe	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	111	(10 - 224)
Decachlorobiphenyl	108	(10 - 195)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G140291 **Work Order #...:** DGHCF102-LCS **Matrix.....:** WIPE
LCS Lot-Sample#: F0G200000-233 DGHCF103-LCSD
Prep Date.....: 07/18/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0202233 **Analysis Time..:** 12:03
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**113**	**(64 - 160)**			**SW846 8082**
	116	**(64 - 160)**	**2.8**	**(0-20)**	**SW846 8082**
Aroclor 1260	**107**	**(53 - 163)**			**SW846 8082**
	110	**(53 - 163)**	**3.2**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	117	(10 - 224)
	121	(10 - 224)
Decachlorobiphenyl	109	(10 - 195)
	114	(10 - 195)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/14/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 18:01:15
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G140291-001
PROJECT #: WORK ORDER: DG913
REPORT TO: Doug Marion RECEIVING DATE: 7/14/00
P.O. NUMBER: SAMPLING DATE: 7/14/00
SITE: Boeing ANALYTICAL DUE DATE: 7/21/00N
AMOUNT REC"D: 500G REPORT DUE DATE: 7/21/00
STORAGE LOC: T1C PRIORITY: 07
LOT COMMENTS: SAMPLING TIME: 8:50
MATRIX: WIPE RECEIVING TIME: 10:45
SAMPLE ID: B220-P
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
PCBs (8082)	06	7/14/00	7/28/00	9/06/00

EXTRACTION, SOLID/SOLVENT (Auto shaker)
STL: Aroclors
(D-0B-QH-01) DG913-1-01 Protocol: A QC Program: STANDARD TEST SET

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/14/00
Time: 18:01:15
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 500P
STORAGE LOC: T1C
LOT COMMENTS:
MATRIX: WIPE
SAMPLE ID: B27-P3
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G140291-002
WORK ORDER: DG91D
RECEIVING DATE: 7/14/00
SAMPLING DATE: 7/14/00
ANALYTICAL DUE DATE: 7/21/00N
REPORT DUE DATE: 7/21/00
PRIORITY: 07
SAMPLING TIME: 9:08
RECEIVING TIME: 10:45

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
PCBs (8082)	06	7/14/00	7/28/00	9/06/00

EXTRACTION, SOLID/SOLVENT (Auto shaker)
STL: Aroclors
(D-0B-QH-01) DG91D-1-01 Protocol: A QC Program: STANDARD TEST SET

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/14/00
Time: 18:01:15
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 500P
STORAGE LOC: T1C
LOT COMMENTS:
MATRIX: WIPE
SAMPLE ID: B27-P1
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G140291-003
WORK ORDER: DG91F
RECEIVING DATE: 7/14/00
SAMPLING DATE: 7/14/00
ANALYTICAL DUE DATE: 7/21/00N
REPORT DUE DATE: 7/21/00
PRIORITY: 07
SAMPLING TIME: 9:20
RECEIVING TIME: 10:45

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
PCBs (8082)	06	7/14/00	7/28/00	9/06/00

EXTRACTION, SOLID/SOLVENT (Auto shaker)
STL: Aroclors
(D-0B-QH-01) DG91F-1-01 Protocol: A QC Program: STANDARD TEST SET

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/14/00
Time: 18:01:15
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 500P
STORAGE LOC: T1C
LOT COMMENTS:
MATRIX: WIPE
SAMPLE ID: B27-P2
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G140291-004
WORK ORDER: DG91G
RECEIVING DATE: 7/14/00
SAMPLING DATE: 7/14/00
ANALYTICAL DUE DATE: 7/21/00N
REPORT DUE DATE: 7/21/00
PRIORITY: 07
SAMPLING TIME: 9:25
RECEIVING TIME: 10:45

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
PCBs (8082)	06	7/14/00	7/28/00	9/06/00

EXTRACTION, SOLID/SOLVENT (Auto shaker)
STL: Aroclors
(D-0B-QH-01) DG91G-1-01 Protocol: A QC Program: STANDARD TEST SET

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/14/00
Time: 18:01:15
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 500P
STORAGE LOC: T1C
LOT COMMENTS:
MATRIX: WIPE
SAMPLE ID: B29A-P
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G140291-005
WORK ORDER: DG91K
RECEIVING DATE: 7/14/00
SAMPLING DATE: 7/14/00
ANALYTICAL DUE DATE: 7/21/00N
REPORT DUE DATE: 7/21/00
PRIORITY: 07
SAMPLING TIME: 9:50
RECEIVING TIME: 10:45

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
PCBs (8082)	06	7/14/00	7/28/00	9/06/00

EXTRACTION, SOLID/SOLVENT (Auto shaker)
STL: Aroclors
(D-0B-QH-01) DG91K-1-01 Protocol: A QC Program: STANDARD TEST SET

LOT# F0G140291

STL ST. LOUIS

[redacted]

Chain of Custody Record

Quanterra

19.3

QUA-4124

Client: ESE	Project Manager: DOUG MARIN	Date: 7/14/00	Chain Of Custody Number: 47050
Address: 3199 RIVERPORT TECH	Telephone Number (Area Code)/Fax Number: (314) 209 5900	Lab Number:	Page ____ of ____
City: ST. LOUIS; State: MO; Zip Code: 63043	Site Contact:		
Project Name: BOEING	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Analysis: PCB BY 8082

Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt
B220-P	7/14/00	850	WIPE	1X500mL	G			
B27-P3	↓	908	WIPE	↓	↓			
B27-P1		920	WIPE					
B27-P2		925	WIPE					
B29A-P		950	WIPE					

Special Instructions

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required: ☐ Normal ☐ Rush

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/14/00	1045	1. Received By: [signature] STL	07.14.00	1045
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Committed to *Your* Success

Lot No.: F0G140291

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: ESE

Quote No: 37419

Shipper/No: client drop-off

Date: 07.14.00 Time: ~~08~~ 1045 SN

Initiated by: [signature] 07.14.00

RFA/COC Numbers: 47056

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below) _____

☑ **No variances were noted during sample receipt.**

☐ **Cooler Temperature Upon Receipt in °C:** 19.3°

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: samples just collected

Corrective Action:

☑ Client's Name: DENNIS BRINKLEY Informed verbally on: 7/17/00 By: MARK LOEB

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☑ Sample(s) processed "as is". SAMPLES JUST TAKEN / CHILLED AT LAB

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [signature] Date: 07.14.00

Project Management Review: [signature] Date: 7-18-00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

ANALYTICAL REPORT

Boeing

Lot #: F0G180113

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

July 28, 2000

Case Narrative
LOT NUMBER: **F0G180113**

This report contains the analytical results for the five samples received under chain of custody by STL St. Louis on July 17, 2000. These samples are associated with your Boeing project.

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

Observations/Nonconformances
Nonconformance F00888

Affected Samples:
3: MW-1-16
4: MW-2-7

Affected Methods:
PCBs 8082

Case Narrative Details:
The LCS was above laboratory stated control limits. The samples associated with this LCS had no hits for target analytes. The data is accepted with no further corrective action.

Corrective Action:
The laboratory will monitor to see if this method to verify if a trend is present.

Nonconformance F00894

Affected Samples:
3: MW-1-16

Affected Methods:
8310

Case Narrative Details:
The MS/MSD result for chrysene is outside of laboratory stated control limits due to a sample dilution. This dilution was required due to concentrations of targetanalytes found in the sample.

Corrective Action:
None

METHODS SUMMARY

F0G180113

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 8015 Mod.
Gross Alpha/Beta by GFPC Th230/Sr90-Y90 cal	DOE RP-710 MOD	
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
PCBs by SW-846 8082	SW846 8082	
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

DOE "DOE METHODS FOR EVALUATING ENVIRONMENTAL AND WASTE MANAGEMENT SAMPLES" OCTOBER 1994 US DEPARTMENT OF ENERGY

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G180113

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGD3W	001	MW-1-3	07/17/00	10:15
DGD44	002	MW-2-2	07/17/00	13:15
DGD45	003	MW-1-16	07/17/00	10:45
DGD5J	004	MW-2-7	07/17/00	13:35
DGD6J	005	TRIP BLANK	07/17/00	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-3

Quanterra, Inc. - Radiochemistry

Lab Sample ID F0G180113-001
Work Order: DGD3W
Matrix: SOLID

Date Collected: 07/17/00 1015
Date Received: 07/17/00 1530

Parameter	Result	Qual	Total Uncert. (2 σ+/-	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g		RP-710 MOD			
Gross Alpha	1.09E+01		3.9E+00	4.5E+00	07/21/00	07/26/0	0203154	
Gross Beta	2.00E+01		3.6E+00	3.8E+00	07/21/00	07/26/0	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-2

Quanterra, Inc. - Radiochemistry

Lab Sample ID F0G180113-002
Work Order: DGD44
Matrix: SOLID

Date Collected: 07/17/00 1315
Date Received: 07/17/00 1530

Parameter	Result	Qual	Total Uncert. (2 σ+/-	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g		RP-710 MOD			
Gross Alpha	1.49E+01		4.8E+00	5.5E+00	07/21/00	07/26/0	0203154	
Gross Beta	2.49E+01		4.2E+00	4.2E+00	07/21/00	07/26/0	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-16

GC Semivolatiles

Lot-Sample #...:	F0G180113-003	**Work Order #...:**	DGD45109	**Matrix.....:**	SOLID
Date Sampled...:	07/17/00 10:45	**Date Received..:**	07/17/00		
Prep Date.....:	07/18/00	**Analysis Date..:**	07/23/00		
Prep Batch #...:	0202477	**Analysis Time..:**	18:49		
Dilution Factor:	1				
% Moisture.....:	31	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	36	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	76	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-16

GC Volatiles

Lot-Sample #...: F0G180113-003 **Work Order #...:** DGD45108 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 10:45 **Date Received..:** 07/17/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0206578 **Analysis Time..:** 15:41
Dilution Factor: 1
% Moisture.....: 31 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.14	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	77	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-16

GC Semivolatiles

Lot-Sample #...: F0G180113-003 Work Order #...: DGD45103 Matrix.....: SOLID
Date Sampled...: 07/17/00 10:45 Date Received..: 07/17/00
Prep Date.....: 07/20/00 Analysis Date..: 07/24/00
Prep Batch #...: 0202413 Analysis Time..: 14:17
Dilution Factor: 1
% Moisture.....: 31 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	48	ug/kg
Aroclor 1221	ND	48	ug/kg
Aroclor 1232	ND	48	ug/kg
Aroclor 1242	ND	48	ug/kg
Aroclor 1248	ND	48	ug/kg
Aroclor 1254	ND	48	ug/kg
Aroclor 1260	ND	48	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	50	(10 - 199)
Decachlorobiphenyl	30	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-16

GC/MS Volatiles

Lot-Sample #...: F0G180113-003 **Work Order #...:** DGD45105 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 10:45 **Date Received..:** 07/17/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0203425 **Analysis Time..:** 19:11
Dilution Factor: 1
% Moisture.....: 31 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	7.2	ug/kg
1,2-Dichloropropane	ND	7.2	ug/kg
cis-1,3-Dichloropropene	ND	7.2	ug/kg
Trichloroethene	ND	7.2	ug/kg
Dibromochloromethane	ND	7.2	ug/kg
1,1,2-Trichloroethane	ND	7.2	ug/kg
Benzene	ND	7.2	ug/kg
trans-1,3-Dichloropropene	ND	7.2	ug/kg
Bromoform	ND	7.2	ug/kg
4-Methyl-2-pentanone	ND	29	ug/kg
2-Hexanone	ND	29	ug/kg
Tetrachloroethene	ND	7.2	ug/kg
Toluene	ND	7.2	ug/kg
Chlorobenzene	ND	7.2	ug/kg
Ethylbenzene	ND	7.2	ug/kg
Styrene	ND	7.2	ug/kg
Chloromethane	ND	14	ug/kg
Bromomethane	ND	14	ug/kg
Vinyl chloride	ND	7.2	ug/kg
Chloroethane	ND	14	ug/kg
Methylene chloride	ND	7.2	ug/kg
Acetone	**41**	**29**	**ug/kg**
Carbon disulfide	ND	7.2	ug/kg
1,1-Dichloroethene	ND	7.2	ug/kg
1,1-Dichloroethane	ND	7.2	ug/kg
1,2-Dichloroethene (total)	ND	7.2	ug/kg
Chloroform	ND	7.2	ug/kg
1,2-Dichloroethane	ND	7.2	ug/kg
2-Butanone	**24 J**	**29**	**ug/kg**
1,1,1-Trichloroethane	ND	7.2	ug/kg
Carbon tetrachloride	ND	7.2	ug/kg
Bromodichloromethane	ND	7.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	7.2	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	97	(73 - 109)
Toluene-d8	104	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-16

GC/MS Volatiles

Lot-Sample #...: F0G180113-003 Work Order #...: DGD45105 Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-16

HPLC

Lot-Sample #...: F0G180113-003 **Work Order #...:** DGD45102 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 10:45 **Date Received..:** 07/17/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 11:19
Dilution Factor: 10
% Moisture.....: 31 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	430	ug/kg
Acenaphthylene	ND	430	ug/kg
Anthracene	ND	430	ug/kg
Benzo(a)anthracene	ND	220	ug/kg
Benzo(a)pyrene	ND	220	ug/kg
Benzo(b)fluoranthene	ND	220	ug/kg
Benzo(ghi)perylene	ND	430	ug/kg
Benzo(k)fluoranthene	ND	220	ug/kg
Chrysene	**1500**	**220**	**ug/kg**
Dibenz(a,h)anthracene	ND	430	ug/kg
Fluoranthene	ND	430	ug/kg
Fluorene	ND	430	ug/kg
Indeno(1,2,3-cd)pyrene	ND	220	ug/kg
Naphthalene	ND	430	ug/kg
Phenanthrene	ND	430	ug/kg
Pyrene	ND	430	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	71	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-7

GC Semivolatiles

Lot-Sample #...:	F0G180113-004	**Work Order #...:**	DGD5J109	**Matrix.....:**	SOLID
Date Sampled...:	07/17/00 13:35	**Date Received..:**	07/17/00		
Prep Date.....:	07/18/00	**Analysis Date..:**	07/23/00		
Prep Batch #...:	0202477	**Analysis Time..:**	20:09		
Dilution Factor:	1				
% Moisture.....:	23	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	63	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-7

GC Volatiles

Lot-Sample #...:	F0G180113-004	**Work Order #...:**	DGD5J108	**Matrix.....:**	SOLID
Date Sampled...:	07/17/00 13:35	**Date Received..:**	07/17/00		
Prep Date.....:	07/24/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0206578	**Analysis Time..:**	16:17		
Dilution Factor:	1				
% Moisture.....:	23	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	95	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-7

GC Semivolatiles

Lot-Sample #...:	F0G180113-004	**Work Order #...:**	DGD5J103	**Matrix.....:**	SOLID
Date Sampled...:	07/17/00 13:35	**Date Received..:**	07/17/00		
Prep Date.....:	07/20/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0202413	**Analysis Time..:**	14:30		
Dilution Factor:	1				
% Moisture.....:	23	**Method.....:**	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	43	ug/kg
Aroclor 1221	ND	43	ug/kg
Aroclor 1232	ND	43	ug/kg
Aroclor 1242	ND	43	ug/kg
Aroclor 1248	ND	43	ug/kg
Aroclor 1254	ND	43	ug/kg
Aroclor 1260	ND	43	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(10 - 199)
Decachlorobiphenyl	77	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-7

GC/MS Volatiles

Lot-Sample #...: F0G180113-004 **Work Order #...:** DGD5J105 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 13:35 **Date Received..:** 07/17/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0203425 **Analysis Time..:** 19:46
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.5	ug/kg
1,2-Dichloropropane	ND	6.5	ug/kg
cis-1,3-Dichloropropene	ND	6.5	ug/kg
Trichloroethene	ND	6.5	ug/kg
Dibromochloromethane	ND	6.5	ug/kg
1,1,2-Trichloroethane	ND	6.5	ug/kg
Benzene	ND	6.5	ug/kg
trans-1,3-Dichloropropene	ND	6.5	ug/kg
Bromoform	ND	6.5	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.5	ug/kg
Toluene	ND	6.5	ug/kg
Chlorobenzene	ND	6.5	ug/kg
Ethylbenzene	ND	6.5	ug/kg
Styrene	ND	6.5	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.5	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.5	ug/kg
Acetone	ND	26	ug/kg
Carbon disulfide	ND	6.5	ug/kg
1,1-Dichloroethene	ND	6.5	ug/kg
1,1-Dichloroethane	ND	6.5	ug/kg
1,2-Dichloroethene (total)	ND	6.5	ug/kg
Chloroform	ND	6.5	ug/kg
1,2-Dichloroethane	ND	6.5	ug/kg
2-Butanone	**8.9 J**	**26**	**ug/kg**
1,1,1-Trichloroethane	ND	6.5	ug/kg
Carbon tetrachloride	ND	6.5	ug/kg
Bromodichloromethane	ND	6.5	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.5	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	93	(82 - 119)
Dibromofluoromethane	93	(82 - 132)
1,2-Dichloroethane-d4	103	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-7

GC/MS Volatiles

Lot-Sample #...: F0G180113-004 **Work Order #...:** DGD5J105 **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-7

HPLC

Lot-Sample #...: F0G180113-004 **Work Order #...:** DGD5J102 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 13:35 **Date Received..:** 07/17/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 09:36
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	39	ug/kg
Acenaphthylene	ND	39	ug/kg
Anthracene	ND	39	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	39	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	39	ug/kg
Fluoranthene	ND	39	ug/kg
Fluorene	ND	39	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	39	ug/kg
Phenanthrene	ND	39	ug/kg
Pyrene	ND	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G180113-005 **Work Order #...:** DGD6J101 **Matrix.....:** WATER
Date Sampled...: 07/17/00 **Date Received..:** 07/17/00
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0206140 **Analysis Time..:** 09:14
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.84 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	92	(78 - 124)
Toluene-d8	106	(71 - 129)
Dibromofluoromethane	96	(74 - 135)
1,2-Dichloroethane-d4	84	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G180113-005 **Work Order #...:** DGD6J101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-16

General Chemistry

Lot-Sample #...: F0G180113-003 **Work Order #...:** DGD45 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 10:45 **Date Received..:** 07/17/00
% Moisture.....: 31

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.72	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**30.9**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/18-07/20/00**	**0200428**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.072	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1		Analysis Time..: 16:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-7

General Chemistry

Lot-Sample #...: F0G180113-004 **Work Order #...:** DGD5J **Matrix.....:** SOLID
Date Sampled...: 07/17/00 13:35 **Date Received..:** 07/17/00
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.65	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**22.5**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/18-07/20/00**	**0200428**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.065	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1		Analysis Time..: 16:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-1-16

TOTAL Metals

Lot-Sample #...: F0G180113-003 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 10:45 **Date Received..:** 07/17/00
% Moisture.....: 31

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.4	mg/kg	SW846 6010B	07/21-07/23/00	DGD4510A
		Dilution Factor: 1		Analysis Time..: 10:31		
Arsenic	**7.5**	**1.4**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD4510C**
		Dilution Factor: 1		Analysis Time..: 10:31		
Barium	**77.4**	**28.9**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD4510D**
		Dilution Factor: 1		Analysis Time..: 10:31		
Cadmium	ND	0.72	mg/kg	SW846 6010B	07/21-07/23/00	DGD4510E
		Dilution Factor: 1		Analysis Time..: 10:31		
Chromium	**11.9**	**1.4**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD4510F**
		Dilution Factor: 1		Analysis Time..: 10:31		
Lead	**7.0**	**0.43**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD4510G**
		Dilution Factor: 1		Analysis Time..: 10:31		
Selenium	**0.42 B**	**0.72**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD4510H**
		Dilution Factor: 1		Analysis Time..: 10:31		
Prep Batch #...: 0203235						
Mercury	**0.014 B**	**0.048**	**mg/kg**	**SW846 7471A**	**07/21/00**	**DGD4510J**
		Dilution Factor: 1		Analysis Time..: 15:17		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-2-7

TOTAL Metals

Lot-Sample #...: F0G180113-004 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 13:35 **Date Received..:** 07/17/00
% Moisture.....: 23

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGD5J10A
		Dilution Factor: 1		Analysis Time..: 10:36		
Arsenic	**1.9**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD5J10C**
		Dilution Factor: 1		Analysis Time..: 10:36		
Barium	**71.5**	**25.8**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD5J10D**
		Dilution Factor: 1		Analysis Time..: 10:36		
Cadmium	**0.17 B**	**0.65**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD5J10E**
		Dilution Factor: 1		Analysis Time..: 10:36		
Chromium	**20.9**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD5J10F**
		Dilution Factor: 1		Analysis Time..: 10:36		
Lead	**6.6**	**0.39**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGD5J10G**
		Dilution Factor: 1		Analysis Time..: 10:36		
Selenium	ND	0.65	mg/kg	SW846 6010B	07/21-07/23/00	DGD5J10H
		Dilution Factor: 1		Analysis Time..: 10:36		
Prep Batch #...: 0203235						
Mercury	**0.0090 B**	**0.043**	**mg/kg**	**SW846 7471A**	**07/21/00**	**DGD5J10J**
		Dilution Factor: 1		Analysis Time..: 15:19		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G180113
MB Lot-Sample #: F0G200000-477
Analysis Date..: 07/23/00
Dilution Factor: 1

Work Order #...: DGJM9101
Prep Date.....: 07/18/00
Prep Batch #...: 0202477

Matrix.....: SOLID
Analysis Time..: 17:56

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	25	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	64	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G180113
MB Lot-Sample #: F0G240000-578
Analysis Date..: 07/24/00
Dilution Factor: 1

Work Order #...: DGPR4101
Prep Date.....: 07/24/00
Prep Batch #...: 0206578

Matrix.....: SOLID
Analysis Time..: 12:30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G180113 **Work Order #...:** DGJ83101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G200000-413
Prep Date.....: 07/20/00 **Analysis Time..:** 07:22
Analysis Date..: 07/21/00 **Prep Batch #...:** 0202413
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	122	(10 - 199)
Decachlorobiphenyl	123	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G180113 **Work Order #...:** DGLFP101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G210000-377
Prep Date.....: 07/20/00 **Analysis Time..:** 07:27
Analysis Date..: 07/24/00 **Prep Batch #...:** 0203377
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	30	ug/kg	SW846 8310
Acenaphthylene	ND	30	ug/kg	SW846 8310
Anthracene	ND	30	ug/kg	SW846 8310
Benzo(a)anthracene	ND	15	ug/kg	SW846 8310
Benzo(a)pyrene	ND	15	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	15	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	30	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	15	ug/kg	SW846 8310
Chrysene	ND	15	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	30	ug/kg	SW846 8310
Fluoranthene	ND	30	ug/kg	SW846 8310
Fluorene	ND	30	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	15	ug/kg	SW846 8310
Naphthalene	ND	30	ug/kg	SW846 8310
Phenanthrene	ND	30	ug/kg	SW846 8310
Pyrene	ND	30	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G180113
MB Lot-Sample #: F0G210000-425
Analysis Date..: 07/20/00
Dilution Factor: 1

Work Order #...: DGM0Q101
Prep Date.....: 07/20/00
Prep Batch #...: 0203425

Matrix.....: SOLID
Analysis Time..: 10:01

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	82	(73 - 109)
Toluene-d8	92	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	108	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G180113 **Work Order #...:** DGM0Q101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G180113 **Work Order #...:** DGNL9101 **Matrix.....:** WATER
MB Lot-Sample #: F0G240000-140

Prep Date.....: 07/21/00 **Analysis Time..:** 07:24
Analysis Date..: 07/21/00 **Prep Batch #...:** 0206140
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**0.61 J**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	90	(78 - 124)
Toluene-d8	112	(71 - 129)
Dibromofluoromethane	88	(74 - 135)
1,2-Dichloroethane-d4	85	(70 - 130)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G180113 **Work Order #...:** DGNL9101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G180113 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DGJ4W101		MB Lot-Sample #:	F0G200000-398	
	ND	0.50	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1				
		Analysis Time..: 12:00				
Reactive Cyanide		Work Order #: DGN18101		MB Lot-Sample #:	F0G220000-108	
	ND	0.050	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1				
		Analysis Time..: 16:15				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G180113 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G210000-211 **Prep Batch #...:** 0203211						
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX102
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Barium	ND	20.0	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX103
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX104
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Chromium	ND	1.0	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX105
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Lead	ND	0.30	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX106
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX107
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Silver	ND	1.0	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX101
		Dilution Factor: 1				
		Analysis Time..: 10:17				
MB Lot-Sample #: F0G210000-235 **Prep Batch #...:** 0203235						
Mercury	ND	0.033	mg/kg	SW846 7471A	07/21/00	DGKR9101
		Dilution Factor: 1				
		Analysis Time..: 15:09				
Mercury	ND	0.033	mg/kg	SW846 7471A	07/21-07/24/00	DGNRK101
		Dilution Factor: 1				
		Analysis Time..: 00:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G180113
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ+/-	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g	RP-710 MOD			F0G210000-154B	
Gross Alpha	-4E-02	U ?	2.2E+00	4.3E+00	07/21/00	07/26/0	0203154	
Gross Beta	9E-01	U	2.5E+00	4.3E+00	07/21/00	07/26/0	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

? For informational purposes only. The result does not follow significant figures SOP
U Result is less than the sample detection limit.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G180113 **Work Order #...:** DGJM9102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G200000-477
Prep Date.....: 07/18/00 **Analysis Date..:** 07/23/00
Prep Batch #...: 0202477 **Analysis Time..:** 18:22
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**67**	**(10 - 164)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	82	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G180113 **Work Order #...:** DGPR4102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G240000-578
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0206578 **Analysis Time..:** 13:41
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**128**	**(50 - 150)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	114	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G180113 **Work Order #...:** DGJ83102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G200000-413
Prep Date.....: 07/20/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0202413 **Analysis Time..:** 07:35
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**136 a**	**(74 - 127)**	**SW846 8082**
Aroclor 1260	**129**	**(74 - 129)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	148	(62 - 162)
Decachlorobiphenyl	130	(53 - 145)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G180113 **Work Order #...:** DGM0Q102-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: F0G210000-425 DGM0Q103-LCSD
Prep Date.....: 07/20/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0203425 **Analysis Time..:** 10:36
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**81**	**(72 - 120)**			**SW846 8260B**
	82	**(72 - 120)**	**0.61**	**(0-24)**	**SW846 8260B**
Benzene	**94**	**(79 - 125)**			**SW846 8260B**
	93	**(79 - 125)**	**1.9**	**(0-21)**	**SW846 8260B**
Toluene	**92**	**(75 - 124)**			**SW846 8260B**
	94	**(75 - 124)**	**1.9**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**89**	**(81 - 119)**			**SW846 8260B**
	90	**(81 - 119)**	**1.2**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**108**	**(70 - 149)**			**SW846 8260B**
	110	**(70 - 149)**	**2.0**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	83	(73 - 109)
	84	(73 - 109)
Toluene-d8	97	(82 - 119)
	98	(82 - 119)
Dibromofluoromethane	97	(82 - 132)
	96	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)
	104	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G180113 **Work Order #...:** DGNL9102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G240000-140
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0206140 **Analysis Time..:** 08:01
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**93**	**(71 - 120)**	**SW846 8260B**
Benzene	**98**	**(76 - 127)**	**SW846 8260B**
Toluene	**100**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**97**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**93**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	95	(78 - 124)
Toluene-d8	101	(71 - 129)
Dibromofluoromethane	79	(74 - 135)
1,2-Dichloroethane-d4	95	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G180113 **Work Order #...:** DGLFP102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G210000-377
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 07:53
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**77**	**(22 - 109)**	**SW846 8310**
Acenaphthylene	**71**	**(9.0- 125)**	**SW846 8310**
Anthracene	**58**	**(45 - 110)**	**SW846 8310**
Benzo(a)anthracene	**70**	**(43 - 132)**	**SW846 8310**
Benzo(a)pyrene	**68**	**(24 - 156)**	**SW846 8310**
Benzo(b)fluoranthene	**77**	**(46 - 132)**	**SW846 8310**
Benzo(ghi)perylene	**72**	**(50 - 104)**	**SW846 8310**
Benzo(k)fluoranthene	**70**	**(47 - 126)**	**SW846 8310**
Chrysene	**68**	**(39 - 142)**	**SW846 8310**
Dibenz(a,h)anthracene	**70**	**(52 - 110)**	**SW846 8310**
Fluoranthene	**72**	**(16 - 131)**	**SW846 8310**
Fluorene	**64**	**(40 - 108)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**74**	**(49 - 124)**	**SW846 8310**
Naphthalene	**84**	**(20 - 115)**	**SW846 8310**
Phenanthrene	**67**	**(50 - 103)**	**SW846 8310**
Pyrene	**59**	**(48 - 100)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	61	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G180113 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DGJ4W102-LCS/DGJ4W103-LCSD				LCS Lot-Sample#: F0G200000-398	
	95	(80 - 120)			SW846 9012A	07/20-07/21/00	0202398
	98	(80 - 120)	2.5	(0-30)	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1					
Reactive Cyanide		WO#:DGN18102-LCS/DGN18103-LCSD				LCS Lot-Sample#: F0G220000-108	
	9.6 N	(0.0- 0.0)			SW846 7.3.3	07/21-07/22/00	0204108
	10 N,*	(0.0- 0.0)	8.0	(0-0.0)	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G180113 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Arsenic	108	(72 - 128)			SW846 6010B	07/21-07/23/00	0203211
	111	(72 - 128)	2.3	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Barium	100	(77 - 122)			SW846 6010B	07/21-07/23/00	0203211
	104	(77 - 122)	4.1	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Cadmium	102	(77 - 122)			SW846 6010B	07/21-07/23/00	0203211
	108	(77 - 122)	6.3	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Chromium	94	(77 - 123)			SW846 6010B	07/21-07/23/00	0203211
	98	(77 - 123)	4.1	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Lead	105	(76 - 124)			SW846 6010B	07/21-07/23/00	0203211
	107	(76 - 124)	1.5	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Selenium	104	(74 - 126)			SW846 6010B	07/21-07/23/00	0203211
	106	(74 - 126)	2.3	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Silver	109	(75 - 126)			SW846 6010B	07/21-07/23/00	0203211
	114	(75 - 126)	4.2	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Mercury	84	(58 - 142)			SW846 7471A	07/21/00	0203235
	88	(58 - 142)	5.0	(0-20)	SW846 7471A	07/21/00	0203235
		Dilution Factor: 5					
Mercury	75	(58 - 142)			SW846 7471A	07/21-07/24/00	0203235
	70	(58 - 142)	6.9	(0-20)	SW846 7471A	07/21-07/24/00	0203235
		Dilution Factor: 5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Laboratory Control Sample Report

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G180113
Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
GROSS A/B BY DOE RP-710 MOD		pCi/g		RP-710 MOD			F0G210000-154C
Gross Alpha	2.71E+01	2.49E+01	5.3E+00	3.7E+00		92	48 - 147
Gross Beta	2.68E+01	3.16E+01	4.9E+00	4.5E+00		118	68 - 145
	Batch #:	0203154		AnalysisDate	07/26/00		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G180113 **Work Order #...:** DGD4510L-MS **Matrix.....:** SOLID
MS Lot-Sample #: F0G180113-003 DGD4510M-MSD
Date Sampled...: 07/17/00 10:45 **Date Received..:** 07/17/00
Prep Date.....: 07/18/00 **Analysis Date..:** 07/23/00
Prep Batch #...: 0202477 **Analysis Time..:** 19:16
Dilution Factor: 1 **% Moisture.....:** 31

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**49**	**(10 - 164)**			**SW846 8015 MOD**
	57	**(10 - 164)**	**16**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	75	(10 - 150)
	68	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G180113 **Work Order #...:** DGD4510N-MS **Matrix.....:** SOLID
MS Lot-Sample #: F0G180113-003 DGD4510P-MSD
Date Sampled...: 07/17/00 10:45 **Date Received..:** 07/17/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 08:44
Dilution Factor: 1 **% Moisture.....:** 31

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**106**	**(22 - 109)**			**SW846 8310**
	82	**(22 - 109)**	**26**	**(0-35)**	**SW846 8310**
Acenaphthylene	**65**	**(9.0- 125)**			**SW846 8310**
	65	**(9.0- 125)**	**1.0**	**(0-35)**	**SW846 8310**
Anthracene	**55**	**(45 - 110)**			**SW846 8310**
	56	**(45 - 110)**	**0.32**	**(0-35)**	**SW846 8310**
Benzo(a)anthracene	**61**	**(28 - 121)**			**SW846 8310**
	64	**(28 - 121)**	**6.0**	**(0-35)**	**SW846 8310**
Benzo(a)pyrene	**61**	**(13 - 136)**			**SW846 8310**
	62	**(13 - 136)**	**1.9**	**(0-35)**	**SW846 8310**
Benzo(b)fluoranthene	**77**	**(28 - 124)**			**SW846 8310**
	81	**(28 - 124)**	**5.5**	**(0-35)**	**SW846 8310**
Benzo(ghi)perylene	**60**	**(50 - 104)**			**SW846 8310**
	63	**(50 - 104)**	**5.8**	**(0-35)**	**SW846 8310**
Benzo(k)fluoranthene	**61**	**(29 - 116)**			**SW846 8310**
	63	**(29 - 116)**	**3.7**	**(0-35)**	**SW846 8310**
Chrysene	**0.0 a**	**(10 - 173)**			**SW846 8310**
	0.0 a	**(10 - 173)**	**0.0**	**(0-35)**	**SW846 8310**
Dibenz(a,h)anthracene	**61**	**(52 - 110)**			**SW846 8310**
	64	**(52 - 110)**	**5.0**	**(0-35)**	**SW846 8310**
Fluoranthene	**64**	**(16 - 131)**			**SW846 8310**
	69	**(16 - 131)**	**8.0**	**(0-35)**	**SW846 8310**
Fluorene	**62**	**(40 - 108)**			**SW846 8310**
	63	**(40 - 108)**	**0.72**	**(0-35)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**63**	**(29 - 117)**			**SW846 8310**
	65	**(29 - 117)**	**2.2**	**(0-35)**	**SW846 8310**
Naphthalene	**73**	**(20 - 115)**			**SW846 8310**
	72	**(20 - 115)**	**1.2**	**(0-35)**	**SW846 8310**
Phenanthrene	**62**	**(50 - 103)**			**SW846 8310**
	66	**(50 - 103)**	**6.2**	**(0-35)**	**SW846 8310**
Pyrene	**60**	**(48 - 100)**			**SW846 8310**
	66	**(48 - 100)**	**9.4**	**(0-35)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	51	(44 - 140)
	52	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G180113 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 13:35 **Date Received..:** 07/17/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G180113-004 **Prep Batch #...:** 0203211							
Arsenic	102	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10M
	99	(75 - 125)	2.8	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10N
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Barium	116	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10P
	107	(75 - 125)	6.3	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10Q
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Cadmium	95	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10R
	92	(75 - 125)	2.9	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10T
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Chromium	182 N	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10U
	188 N	(75 - 125)	2.2	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10V
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Lead	100	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10W
	100	(75 - 125)	0.78	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10X
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Selenium	97	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J110
	93	(75 - 125)	3.3	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J111
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Silver	82	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10K
	79	(75 - 125)	3.6	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10L
		Dilution Factor: 1					
		Analysis Time..: 10:40					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G180113 **Matrix.....:** SOLID
Date Sampled...: 07/06/00 09:20 **Date Received..:** 07/10/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G110200-001 **Prep Batch #...:** 0203235							
Mercury	94	(75 - 125)			SW846 7471A	07/21-07/24/00	DG1G110E
	93	(75 - 125)	1.2	(0-20)	SW846 7471A	07/21-07/24/00	DG1G110F

Dilution Factor: 1
Analysis Time..: 00:00

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G180113 **Work Order #...:** DG96N102-MS **Matrix.....:** SOLID
MS Lot-Sample #: F0G140302-005 DG96N103-MSD
Date Sampled...: 07/11/00 10:06 **Date Received..:** 07/14/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0203425 **Analysis Time..:** 12:53
Dilution Factor: 1 **% Moisture.....:** 0.0

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**84**	**(72 - 120)**			**SW846 8260B**
	85	**(72 - 120)**	**0.52**	**(0-24)**	**SW846 8260B**
Benzene	**94**	**(79 - 125)**			**SW846 8260B**
	99	**(79 - 125)**	**4.3**	**(0-21)**	**SW846 8260B**
Toluene	**96**	**(75 - 124)**			**SW846 8260B**
	97	**(75 - 124)**	**1.6**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**92**	**(81 - 119)**			**SW846 8260B**
	93	**(81 - 119)**	**1.5**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**109**	**(70 - 149)**			**SW846 8260B**
	118	**(70 - 149)**	**7.5**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	86	(73 - 109)
	84	(73 - 109)
Toluene-d8	98	(82 - 119)
	97	(82 - 119)
Dibromofluoromethane	92	(82 - 132)
	92	(82 - 132)
1,2-Dichloroethane-d4	106	(60 - 140)
	107	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F0G180113 **Work Order #...:** DGD45-SMP DGD45-DUP **Matrix.....:** SOLID

Date Sampled...: 07/17/00 10:45 **Date Received..:** 07/17/00

% Moisture.....: 31

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F0G180113-003	
	30.9	30.7	%	0.65	(0-0.0)	MCAWW 160.3 MOD	07/18-07/20/00	0200428

Dilution Factor: 1

Analysis Time..: 00:00

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/18/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 9:55:05
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G180113-001
PROJECT #: WORK ORDER: DGD3W
REPORT TO: Doug Marion RECEIVING DATE: 7/17/00
P.O. NUMBER: SAMPLING DATE: 7/17/00
SITE: Boeing ANALYTICAL DUE DATE: 7/24/00N
AMOUNT REC"D: LG REPORT DUE DATE: 7/24/00
STORAGE LOC: T2B PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:15
MATRIX: SOLID RECEIVING TIME: 15:30
SAMPLE ID: MW-1-3
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/18/00	0/00/00	1/13/01

PREP RC-0003, SEP RC-0020, CT SL-13021
(A-FS-Y9-01) DGD3W-1-01 Protocol: D QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/18/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 9:55:05
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G180113-002
PROJECT #: WORK ORDER: DGD44
REPORT TO: Doug Marion RECEIVING DATE: 7/17/00
P.O. NUMBER: SAMPLING DATE: 7/17/00
SITE: Boeing ANALYTICAL DUE DATE: 7/24/00N
AMOUNT REC"D: 120G REPORT DUE DATE: 7/24/00
STORAGE LOC: T2B PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 13:15
MATRIX: SOLID RECEIVING TIME: 15:30
SAMPLE ID: MW-2-2
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/18/00	0/00/00	1/13/01

PREP RC-0003, SEP RC-0020, CT SL-13021
(A-FS-Y9-01) DGD44-1-01 Protocol: D QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/18/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 9:55:05
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G180113-003
PROJECT #: WORK ORDER: DGD45
REPORT TO: Doug Marion RECEIVING DATE: 7/17/00
P.O. NUMBER: SAMPLING DATE: 7/17/00
SITE: Boeing ANALYTICAL DUE DATE: 7/24/00N
AMOUNT REC"D: 250G,2X120G REPORT DUE DATE: 7/24/00
STORAGE LOC: V10,T2B PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:45
MATRIX: SOLID RECEIVING TIME: 15:30
SAMPLE ID: MW-1-16
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/18/00	0/00/00	10/24/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGD45-1-01 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/18/00	7/31/00	9/09/00
SONICATION - Low Level				
(A-13-SG-01) DGD45-1-02 Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/18/00	7/31/00	9/09/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGD45-1-03 Protocol: B QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/18/00	0/00/00	7/31/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGD45-1-04 Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/18/00	0/00/00	7/31/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGD45-1-05 Protocol: B QC Program: STANDARD TEST SET				
~~GROSS A/B BY GFPC EPA 900.0 MOD~~	~~06~~	~~7/18/00~~	~~0/00/00~~	~~1/13/01~~ MSZ 7/19/00
PREP RC-0003, SEP RC-0020, CT SL-13021				
(A-FS-Y9-01) DGD45-1-06 Protocol: D QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/18/00	0/00/00	7/31/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGD45-1-07 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/18/00	0/00/00	7/31/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGD45-1-08 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/18/00	7/31/00	9/09/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				

(A-0B-HS-01) DGD45-1-09 Protocol: B QC Program: STANDARD TEST SET

Inductively Coupled Plasma (6010B Trace) 06 7/18/00 0/00/00 1/13/01
METALS, TOTAL - Soils
MT6010_S AG,AS,BA,CD,CR,PB,SE
(A-46-QM-01) DGD45 Protocol: B QC Program: STANDARD TEST SET

Mercury (7471A, Cold Vapor) - Solids 06 7/18/00 0/00/00 8/14/00
METALS, TOTAL (Method Exclusive) - Solids
M7471_S HG
(A-70-O9-01) DGD45 Protocol: B QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/18/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 9:55:05
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G180113-004
PROJECT #: WORK ORDER: DGD5J
REPORT TO: Doug Marion RECEIVING DATE: 7/17/00
P.O. NUMBER: SAMPLING DATE: 7/17/00
SITE: Boeing ANALYTICAL DUE DATE: 7/24/00N
AMOUNT REC"D: 250G,2X120G REPORT DUE DATE: 7/24/00
STORAGE LOC: V10,T2B PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 13:35
MATRIX: SOLID RECEIVING TIME: 15:30
SAMPLE ID: MW-2-7
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/18/00	0/00/00	10/24/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGD5J-1-01 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/18/00	7/31/00	9/09/00
SONICATION - Low Level				
(A-13-SG-01) DGD5J-1-02 Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/18/00	7/31/00	9/09/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGD5J-1-03 Protocol: B QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/18/00	0/00/00	7/31/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGD5J-1-04 Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/18/00	0/00/00	7/31/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGD5J-1-05 Protocol: B QC Program: STANDARD TEST SET				
~~GROSS A/B BY GFPC EPA 900.0 MOD~~	~~06~~	~~7/18/00~~	~~0/00/00~~	~~1/13/01~~
PREP RC-0003, SEP RC-0020, CT SL-13021				
(A-FS-Y9-01) DGD5J-1-06 Protocol: D QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/18/00	0/00/00	7/31/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGD5J-1-07 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/18/00	0/00/00	7/31/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGD5J-1-08 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/18/00	7/31/00	9/09/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				

MJL 7/19/00

(A-0B-HS-01) DGD5J-1-09 Protocol: B QC Program: STANDARD TEST SET

Inductively Coupled Plasma (6010B Trace) 06 7/18/00 0/00/00 1/13/01
METALS, TOTAL - Soils
MT6010_S AG,AS,BA,CD,CR,PB,SE
(A-46-QM-01) DGD5J Protocol: B QC Program: STANDARD TEST SET

Mercury (7471A, Cold Vapor) - Solids 06 7/18/00 0/00/00 8/14/00
METALS, TOTAL (Method Exclusive) - Solids
M7471_S HG
(A-70-O9-01) DGD5J Protocol: B QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/18/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 9:55:05
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G180113-005
PROJECT #: WORK ORDER: DGD6J
REPORT TO: Doug Marion RECEIVING DATE: 7/17/00
P.O. NUMBER: SAMPLING DATE: 7/17/00
SITE: Boeing ANALYTICAL DUE DATE: 7/24/00N
AMOUNT REC"D: 2X40ML REPORT DUE DATE: 7/24/00
STORAGE LOC: V6C PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME:
MATRIX: WATER RECEIVING TIME: 15:30
SAMPLE ID: TRIP BLANK
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/18/00	0/00/00	7/31/00

PURGE AND TRAP - 25 mL purge (Waters)
STL: VOA CLP 3/90
(I-25-QK-01) DGD6J-1-01 Protocol: A QC Program: STANDARD TEST SET

LOT# F0G180113

[redacted]

Chain of Custody Record

6 COR 190 QUOTE 37419

Quanterra

QUA-4124

Client: ESE	Project Manager: DOUG MARIAN	Date: 7/17/00	Chain Of Custody Number: 47048
Address: 3199 RIVERPORT TECH	Telephone Number (Area Code)/Fax Number: (314) 209-5900	Lab Number:	Page ___ of ___
City: ST. LOUIS; State: MO; Zip Code: 63043	Site Contact: DENNIS BRINKLEY		
Project Name: BOEING	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

	Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOC 8260	TPH 8015	PCB 8082	PAH 8310	RCRA 8 METALS	RADIATION 900	CANIDE SW846 9010
1	MW-1-3	7/17/00	1015	SOIL	32 oz	GLASS	1	ICE	LG						X	
3	MW-1-16	↓	1045	↓	16 oz	↓	3	↓	2506, 2x1206	X	X	X	X	X		X
2	MW-2-2	↓	1315	↓	4 oz	↓	1	↓	1206						X	
4	MW-2-7	↓	1335	↓	16 oz	↓	3	↓	2506, 2x1206	X	X	X	X	X		X
5	TRIP BLANK	7/17/00							2x 40mL	X						

Special Instructions: SCREEN ALL SAMPLES FOR RADIATION, HOLD RADIATION SAMPLE FROM MW-1- AND MW-2-

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ___ Months

Turn Around Time Required: ☐ Normal ☐ Rush 7 DAY

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/17/00		1. Received By: Jody L Watson STL	7/17/00	1530
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Committed to *Your* Success

SW 07.18.00

Lot No.: F0G180113

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: ESE

Quote No: 37419 SW 07.18.00

Shipper/No: Client

Date: 7/18/00 Time: 1530

Initiated by: SW

RFA/COC Numbers: N/A

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below)

☒ **No variances were noted during sample receipt.**

☒ **Cooler Temperature Upon Receipt in °C:** 6°

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: _____

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is".

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) _____ Date: 7/18/00

Project Management Review: _____ Date: 7/19/00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

ANALYTICAL REPORT

Boeing

Lot #: F0G190309

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

August 2, 2000

Case Narrative
LOT NUMBER: **F0G190309**

This report contains the analytical results for the 19 samples received under chain of custody by STL St. Louis on July 19, 2000. These samples are associated with your Boeing project.

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

Observations/Nonconformances
Nonconformance F00935

Affected Samples:
1: B27E2-12

Affected Methods:
8015 MOD

Case Narrative Details:
Due to high analyte concentrations, the surrogate and spike compounds were diluted out in the MS/MSD.

Corrective Action:
None.

Nonconformance F00943

Affected Samples:
3: B27S3-22 19: MW-7-RINSATE

Affected Methods:
8310

Case Narrative Details:
Sample 003 and 019 had low surrogate recoveries. The LCS associated with this batch had low spike recoveries for fluorene only. The LCSD was good. The surrogate recoveries for sample 003 were evaluated against real time control limits and is found to be acceptable. Insufficient sample remained to reextract and reanalyze sample 019. A LCS/LCSD was done instead of a MS/MSD due to a lack of sample volume.

Corrective Action:
None.

Nonconformance F00955

Affected Samples:
3: B27S3-22

Affected Methods:
8015 MOD Extractable

Case Narrative Details:
The RPD is outside the stated control limits for the MS/MSD performed on this sample..

Corrective Action:
None.

Nonconformance F00971

Affected Samples:
16: MW-7-7

Affected Methods:
8015 MOD Volatile

Case Narrative Details:
The surrogate compound(s) exceeded stated control limits for the sample MS-7-7. The sample was analyzed a second time. Results of the reanalysis confirmed the possibility ofa matrix interference.

Corrective Action:
None.

Nonconformance F00979

Affected Samples:
19: MW-7-RINSATE

Affected Methods:
8015 MOD Volatile

Case Narrative Details:
A MS/MSD was not performed on this QC batch due to insufficient sample volume received. A LCS/LCSD was performed instead.

Corrective Action:
None.

Nonconformance F00982

Affected Samples:
19: MW-7-RINSATE

Affected Methods:
8310

Case Narrative Details:
A MS/MSD was not performed on this QC batch due to insufficient sample volume received.
A LCS/LCSD was performed instead.

Corrective Action:
None.

METHODS SUMMARY

F0G190309

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 8015 Mod.
Gross Alpha/Beta by GFPC Th230/Sr90-Y90 cal	DOE RP-710 MOD	
Gross Alpha/Beta by GFPC Th230/Sr90-Y90 cal	SW846 9310 MOD	
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3520
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 8082
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

DOE "DOE METHODS FOR EVALUATING ENVIRONMENTAL AND WASTE MANAGEMENT SAMPLES" OCTOBER 1994 US DEPARTMENT OF ENERGY

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G190309

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGGFE	001	B27E2-12	07/19/00	10:35
DGGFJ	002	B27S2-8	07/19/00	13:02
DGGFM	003	B27S3-22	07/19/00	14:02
DGGFQ	004	B21S1-12	07/19/00	15:35
DGGFV	005	B27S1-5	07/19/00	14:32
DGGG7	006	TRIP BLANK	07/19/00	16:00
DGGGF	007	MW-5-12	07/18/00	13:10
DGGHA	008	MW-4-16	07/18/00	09:30
DGGHG	009	MW-4-2	07/18/00	09:00
DGGHL	010	MW-5-2	07/18/00	12:45
DGGHQ	011	MW-8-2	07/16/00	14:25
DGGHR	012	MW-8-14	07/18/00	15:00
DGGHT	013	MW-6-2	07/19/00	09:15
DGGHV	014	MW-6-13	07/19/00	09:55
DGGHX	016	MW-7-7	07/19/00	13:05
DGGJ2	018	MW-3-12	07/19/00	15:35
DGGLK	019	MW-7-RINSATE	07/19/00	13:55

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E2-12

GC Semivolatiles

Lot-Sample #...:	F0G190309-001	**Work Order #...:**	DGGFE10E	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 10:35	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/26/00		
Prep Batch #...:	0204133	**Analysis Time..:**	11:47		
Dilution Factor:	10				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**4500**	**320**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	0.0 DIL	(10 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E2-12

GC Volatiles

Lot-Sample #...:	F0G190309-001	**Work Order #...:**	DGGFE10D	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 10:35	**Date Received..:**	07/19/00		
Prep Date.....:	07/25/00	**Analysis Date..:**	07/25/00		
Prep Batch #...:	0210375	**Analysis Time..:**	17:56		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.24**	**0.13**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	72	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E2-12

GC Semivolatiles

Lot-Sample #...: F0G190309-001 **Work Order #...:** DGGFE10C **Matrix.....:** SOLID
Date Sampled...: 07/19/00 10:35 **Date Received..:** 07/19/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207361 **Analysis Time..:** 01:36
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(10 - 199)
Decachlorobiphenyl	88	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E2-12

GC/MS Volatiles

Lot-Sample #...: F0G190309-001 Work Order #...: DGGFE10F Matrix.....: SOLID
Date Sampled...: 07/19/00 10:35 Date Received..: 07/19/00
Prep Date.....: 07/21/00 Analysis Date..: 07/21/00
Prep Batch #...: 0205124 Analysis Time..: 10:43
Dilution Factor: 1
% Moisture.....: 21 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Trichloroethene	ND	6.3	ug/kg
Dibromochloromethane	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.3	ug/kg
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	99	(73 - 109)
Toluene-d8	102	(82 - 119)
Dibromofluoromethane	106	(82 - 132)
1,2-Dichloroethane-d4	111	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E2-12

GC/MS Volatiles

Lot-Sample #...: F0G190309-001 **Work Order #...:** DGGFE10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E2-12

HPLC

Lot-Sample #...: F0G190309-001 **Work Order #...:** DGGFE10A **Matrix.....:** SOLID
Date Sampled...: 07/19/00 10:35 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 10:01
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	**94**	**19**	**ug/kg**
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	**39**	**19**	**ug/kg**
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	**44**	**38**	**ug/kg**
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	65	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S2-8

GC Semivolatiles

Lot-Sample #...:	F0G190309-002	**Work Order #...:**	DGGFJ10E	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 13:02	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	01:29		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	67	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S2-8

GC Volatiles

Lot-Sample #...:	F0G190309-002	**Work Order #...:**	DGGFJ10D	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 13:02	**Date Received..:**	07/19/00		
Prep Date.....:	07/24/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0206578	**Analysis Time..:**	22:17		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	58	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S2-8

GC Semivolatiles

Lot-Sample #...: F0G190309-002 **Work Order #...:** DGGFJ10C **Matrix.....:** SOLID
Date Sampled...: 07/19/00 13:02 **Date Received..:** 07/19/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207361 **Analysis Time..:** 01:49
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(10 - 199)
Decachlorobiphenyl	99	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S2-8

GC/MS Volatiles

Lot-Sample #...: F0G190309-002 Work Order #...: DGGFJ10F Matrix.....: SOLID
Date Sampled...: 07/19/00 13:02 Date Received..: 07/19/00
Prep Date.....: 07/21/00 Analysis Date..: 07/21/00
Prep Batch #...: 0205124 Analysis Time..: 11:17
Dilution Factor: 1
% Moisture.....: 22 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	ND	26	ug/kg
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	82	(73 - 109)
Toluene-d8	94	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S2-8

GC/MS Volatiles

Lot-Sample #...: F0G190309-002 **Work Order #...:** DGGFJ10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S2-8

HPLC

Lot-Sample #...: F0G190309-002
Date Sampled...: 07/19/00 13:02
Prep Date.....: 07/20/00
Prep Batch #...: 0203377
Dilution Factor: 1
% Moisture.....: 22

Work Order #...: DGGFJ10A
Date Received..: 07/19/00
Analysis Date..: 07/24/00
Analysis Time..: 10:27

Method.....: SW846 8310

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	53	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3-22

GC Semivolatiles

Lot-Sample #...:	F0G190309-003	**Work Order #...:**	DGGFM10E	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 14:02	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	01:56		
Dilution Factor:	1				
% Moisture.....:	38	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	40	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	59	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3-22

GC Volatiles

Lot-Sample #...:	F0G190309-003	**Work Order #...:**	DGGFM10D	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 14:02	**Date Received..:**	07/19/00		
Prep Date.....:	07/25/00	**Analysis Date..:**	07/26/00		
Prep Batch #...:	0210375	**Analysis Time..:**	11:25		
Dilution Factor:	1				
% Moisture.....:	38	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.16	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	64	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3-22

GC Semivolatiles

Lot-Sample #...: F0G190309-003 Work Order #...: DGGFM10C Matrix.....: SOLID
Date Sampled...: 07/19/00 14:02 Date Received..: 07/19/00
Prep Date.....: 07/22/00 Analysis Date..: 07/27/00
Prep Batch #...: 0207361 Analysis Time..: 02:03
Dilution Factor: 1
% Moisture.....: 38 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	53	ug/kg
Aroclor 1221	ND	53	ug/kg
Aroclor 1232	ND	53	ug/kg
Aroclor 1242	ND	53	ug/kg
Aroclor 1248	ND	53	ug/kg
Aroclor 1254	ND	53	ug/kg
Aroclor 1260	ND	53	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	99	(10 - 199)
Decachlorobiphenyl	84	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3-22

GC/MS Volatiles

Lot-Sample #...: F0G190309-003 **Work Order #...:** DGGFM10F **Matrix.....:** SOLID
Date Sampled...: 07/19/00 14:02 **Date Received..:** 07/19/00
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0205124 **Analysis Time..:** 11:51
Dilution Factor: 1
% Moisture.....: 38 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	8.0	ug/kg
1,2-Dichloropropane	ND	8.0	ug/kg
cis-1,3-Dichloropropene	ND	8.0	ug/kg
Trichloroethene	ND	8.0	ug/kg
Dibromochloromethane	ND	8.0	ug/kg
1,1,2-Trichloroethane	ND	8.0	ug/kg
Benzene	ND	8.0	ug/kg
trans-1,3-Dichloropropene	ND	8.0	ug/kg
Bromoform	ND	8.0	ug/kg
4-Methyl-2-pentanone	ND	32	ug/kg
2-Hexanone	ND	32	ug/kg
Tetrachloroethene	ND	8.0	ug/kg
Toluene	ND	8.0	ug/kg
Chlorobenzene	ND	8.0	ug/kg
Ethylbenzene	ND	8.0	ug/kg
Styrene	ND	8.0	ug/kg
Chloromethane	ND	16	ug/kg
Bromomethane	ND	16	ug/kg
Vinyl chloride	ND	8.0	ug/kg
Chloroethane	ND	16	ug/kg
Methylene chloride	ND	8.0	ug/kg
Acetone	**58**	**32**	**ug/kg**
Carbon disulfide	ND	8.0	ug/kg
1,1-Dichloroethene	ND	8.0	ug/kg
1,1-Dichloroethane	ND	8.0	ug/kg
1,2-Dichloroethene (total)	ND	8.0	ug/kg
Chloroform	ND	8.0	ug/kg
1,2-Dichloroethane	ND	8.0	ug/kg
2-Butanone	ND	32	ug/kg
1,1,1-Trichloroethane	ND	8.0	ug/kg
Carbon tetrachloride	ND	8.0	ug/kg
Bromodichloromethane	ND	8.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	8.0	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	89	(73 - 109)
Toluene-d8	99	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3-22

GC/MS Volatiles

Lot-Sample #...: F0G190309-003 Work Order #...: DGGFM10F Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3-22

HPLC

Lot-Sample #...: F0G190309-003 **Work Order #...:** DGGFM10A **Matrix.....:** SOLID
Date Sampled...: 07/19/00 14:02 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 12:36
Dilution Factor: 1
% Moisture.....: 38 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	48	ug/kg
Acenaphthylene	ND	48	ug/kg
Anthracene	ND	48	ug/kg
Benzo(a)anthracene	ND	24	ug/kg
Benzo(a)pyrene	ND	24	ug/kg
Benzo(b)fluoranthene	ND	24	ug/kg
Benzo(ghi)perylene	ND	48	ug/kg
Benzo(k)fluoranthene	ND	24	ug/kg
Chrysene	**160**	**24**	**ug/kg**
Dibenz(a,h)anthracene	ND	48	ug/kg
Fluoranthene	ND	48	ug/kg
Fluorene	ND	48	ug/kg
Indeno(1,2,3-cd)pyrene	ND	24	ug/kg
Naphthalene	ND	48	ug/kg
Phenanthrene	ND	48	ug/kg
Pyrene	ND	48	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	42 *	(44 - 140)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B21S1-12

GC Semivolatiles

Lot-Sample #...:	F0G190309-004	**Work Order #...:**	DGGFQ10E	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 15:35	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	02:22		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	58	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B21S1-12

GC Volatiles

Lot-Sample #...:	F0G190309-004	**Work Order #...:**	DGGFQ10D	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 15:35	**Date Received..:**	07/19/00		
Prep Date.....:	07/24/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0206578	**Analysis Time..:**	23:28		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	67	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B21S1-12

GC Semivolatiles

Lot-Sample #...: F0G190309-004 Work Order #...: DGGFQ10C Matrix.....: SOLID
Date Sampled...: 07/19/00 15:35 Date Received..: 07/19/00
Prep Date.....: 07/22/00 Analysis Date..: 07/27/00
Prep Batch #...: 0207361 Analysis Time..: 02:16
Dilution Factor: 1
% Moisture.....: 22 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(10 - 199)
Decachlorobiphenyl	107	(10 - 200)

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B21S1-12

GC/MS Volatiles

Lot-Sample #...: F0G190309-004 **Work Order #...:** DGGFQ10F **Matrix.....:** SOLID
Date Sampled...: 07/19/00 15:35 **Date Received..:** 07/19/00
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0205124 **Analysis Time..:** 12:25
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	ND	26	ug/kg
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B21S1-12

GC/MS Volatiles

Lot-Sample #...: F0G190309-004 Work Order #...: DGGFQ10F Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B21S1-12

HPLC

Lot-Sample #...: F0G190309-004 **Work Order #...:** DGGFQ10A **Matrix.....:** SOLID
Date Sampled...: 07/19/00 15:35 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 13:01
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	39	ug/kg
Acenaphthylene	ND	39	ug/kg
Anthracene	ND	39	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	39	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	39	ug/kg
Fluoranthene	ND	39	ug/kg
Fluorene	ND	39	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	39	ug/kg
Phenanthrene	ND	39	ug/kg
Pyrene	ND	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	56	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S1-5

GC Semivolatiles

Lot-Sample #...:	F0G190309-005	**Work Order #...:**	DGGFV10E	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 14:32	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	02:49		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	61	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S1-5

GC Volatiles

Lot-Sample #...:	F0G190309-005	**Work Order #...:**	DGGFV10D	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 14:32	**Date Received..:**	07/19/00		
Prep Date.....:	07/24/00	**Analysis Date..:**	07/25/00		
Prep Batch #...:	0206578	**Analysis Time..:**	00:04		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	70	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S1-5

GC Semivolatiles

Lot-Sample #...: F0G190309-005 Work Order #...: DGGFV10C Matrix.....: SOLID
Date Sampled...: 07/19/00 14:32 Date Received..: 07/19/00
Prep Date.....: 07/22/00 Analysis Date..: 07/27/00
Prep Batch #...: 0207361 Analysis Time..: 02:30
Dilution Factor: 1
% Moisture.....: 21 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	108	(10 - 199)
Decachlorobiphenyl	95	(10 - 200)

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S1-5

GC/MS Volatiles

Lot-Sample #...: F0G190309-005 Work Order #...: DGGFV10F Matrix.....: SOLID
Date Sampled...: 07/19/00 14:32 Date Received..: 07/19/00
Prep Date.....: 07/21/00 Analysis Date..: 07/21/00
Prep Batch #...: 0205124 Analysis Time..: 12:58
Dilution Factor: 1
% Moisture.....: 21 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	97	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S1-5

GC/MS Volatiles

Lot-Sample #...: F0G190309-005 Work Order #...: DGGFV10F Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S1-5

HPLC

Lot-Sample #...: F0G190309-005 **Work Order #...:** DGGFV10A **Matrix.....:** SOLID
Date Sampled...: 07/19/00 14:32 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 13:27
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	52	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G190309-006 **Work Order #...:** DGGG7101 **Matrix.....:** WATER
Date Sampled...: 07/19/00 16:00 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0203114 **Analysis Time..:** 01:21
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.90 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	**2.1**	**1.0**	**ug/L**
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	93	(78 - 124)
Toluene-d8	108	(71 - 129)
Dibromofluoromethane	92	(74 - 135)
1,2-Dichloroethane-d4	92	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G190309-006 **Work Order #...:** DGGG7101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-12

GC Semivolatiles

Lot-Sample #...:	F0G190309-007	Work Order #...:	DGGGF10E	Matrix.....:	SOLID
Date Sampled...:	07/18/00 13:10	Date Received..:	07/19/00		
Prep Date.....:	07/21/00	Analysis Date..:	07/24/00		
Prep Batch #...:	0204133	Analysis Time..:	03:16		
Dilution Factor:	1				
% Moisture.....:	22	Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	60	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-12

GC Volatiles

Lot-Sample #...:	F0G190309-007	**Work Order #...:**	DGGGF10D	**Matrix.....:**	SOLID
Date Sampled...:	07/18/00 13:10	**Date Received..:**	07/19/00		
Prep Date.....:	07/24/00	**Analysis Date..:**	07/25/00		
Prep Batch #...:	0206578	**Analysis Time..:**	00:40		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	74	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-12

GC Semivolatiles

Lot-Sample #...: F0G190309-007 **Work Order #...:** DGGGF10C **Matrix.....:** SOLID
Date Sampled...: 07/18/00 13:10 **Date Received..:** 07/19/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207361 **Analysis Time..:** 02:44
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	68	(10 - 199)
Decachlorobiphenyl	93	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-12

GC/MS Volatiles

Lot-Sample #...: F0G190309-007 **Work Order #...:** DGGGF10H **Matrix.....:** SOLID
Date Sampled...: 07/18/00 13:10 **Date Received..:** 07/19/00
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0205124 **Analysis Time..:** 13:32
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	**15**	**6.4**	**ug/kg**
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	ND	26	ug/kg
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	79	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	96	(82 - 132)
1,2-Dichloroethane-d4	103	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-12

GC/MS Volatiles

Lot-Sample #...: F0G190309-007 Work Order #...: DGGGF10H Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-12

HPLC

Lot-Sample #...: F0G190309-007 **Work Order #...:** DGGGF10A **Matrix.....:** SOLID
Date Sampled...: 07/18/00 13:10 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 13:53
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	39	ug/kg
Acenaphthylene	ND	39	ug/kg
Anthracene	ND	39	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	39	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	39	ug/kg
Fluoranthene	ND	39	ug/kg
Fluorene	ND	39	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	39	ug/kg
Phenanthrene	ND	39	ug/kg
Pyrene	ND	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	58	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-16

GC Semivolatiles

Lot-Sample #...:	F0G190309-008	**Work Order #...:**	DGGHA10E	**Matrix.....:**	SOLID
Date Sampled...:	07/18/00 09:30	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	04:36		
Dilution Factor:	1				
% Moisture.....:	30	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	36	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	62	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-16

GC Volatiles

Lot-Sample #...:	F0G190309-008	**Work Order #...:**	DGGHA10D	**Matrix.....:**	SOLID
Date Sampled...:	07/18/00 09:30	**Date Received..:**	07/19/00		
Prep Date.....:	07/24/00	**Analysis Date..:**	07/25/00		
Prep Batch #...:	0206578	**Analysis Time..:**	01:16		
Dilution Factor:	1				
% Moisture.....:	30	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.14	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	64	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-16

GC Semivolatiles

Lot-Sample #...: F0G190309-008
Date Sampled...: 07/18/00 09:30
Prep Date.....: 07/22/00
Prep Batch #...: 0207361
Dilution Factor: 1
% Moisture.....: 30

Work Order #...: DGGHA10C
Date Received..: 07/19/00
Analysis Date..: 07/27/00
Analysis Time..: 02:57

Method.....: SW846 8082

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	47	ug/kg
Aroclor 1221	ND	47	ug/kg
Aroclor 1232	ND	47	ug/kg
Aroclor 1242	ND	47	ug/kg
Aroclor 1248	ND	47	ug/kg
Aroclor 1254	ND	47	ug/kg
Aroclor 1260	ND	47	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	69	(10 - 199)
Decachlorobiphenyl	78	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-16

GC/MS Volatiles

Lot-Sample #...: F0G190309-008 **Work Order #...:** DGGHA10H **Matrix.....:** SOLID
Date Sampled...: 07/18/00 09:30 **Date Received..:** 07/19/00
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0205124 **Analysis Time..:** 15:51
Dilution Factor: 1
% Moisture.....: 30 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	7.1	ug/kg
1,2-Dichloropropane	ND	7.1	ug/kg
cis-1,3-Dichloropropene	ND	7.1	ug/kg
Trichloroethene	ND	7.1	ug/kg
Dibromochloromethane	ND	7.1	ug/kg
1,1,2-Trichloroethane	ND	7.1	ug/kg
Benzene	ND	7.1	ug/kg
trans-1,3-Dichloropropene	ND	7.1	ug/kg
Bromoform	ND	7.1	ug/kg
4-Methyl-2-pentanone	ND	29	ug/kg
2-Hexanone	ND	29	ug/kg
Tetrachloroethene	ND	7.1	ug/kg
Toluene	ND	7.1	ug/kg
Chlorobenzene	ND	7.1	ug/kg
Ethylbenzene	ND	7.1	ug/kg
Styrene	ND	7.1	ug/kg
Chloromethane	ND	14	ug/kg
Bromomethane	ND	14	ug/kg
Vinyl chloride	ND	7.1	ug/kg
Chloroethane	ND	14	ug/kg
Methylene chloride	ND	7.1	ug/kg
Acetone	ND	29	ug/kg
Carbon disulfide	ND	7.1	ug/kg
1,1-Dichloroethene	ND	7.1	ug/kg
1,1-Dichloroethane	ND	7.1	ug/kg
1,2-Dichloroethene (total)	ND	7.1	ug/kg
Chloroform	ND	7.1	ug/kg
1,2-Dichloroethane	ND	7.1	ug/kg
2-Butanone	**10 J**	**29**	**ug/kg**
1,1,1-Trichloroethane	ND	7.1	ug/kg
Carbon tetrachloride	ND	7.1	ug/kg
Bromodichloromethane	ND	7.1	ug/kg
1,1,2,2-Tetrachloroethane	ND	7.1	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	87	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	104	(82 - 132)
1,2-Dichloroethane-d4	112	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-16

GC/MS Volatiles

Lot-Sample #...: F0G190309-008 Work Order #...: DGGHA10H Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-16

HPLC

Lot-Sample #...: F0G190309-008 **Work Order #...:** DGGHA10A **Matrix.....:** SOLID
Date Sampled...: 07/18/00 09:30 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 14:18
Dilution Factor: 1
% Moisture.....: 30 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	43	ug/kg
Acenaphthylene	ND	43	ug/kg
Anthracene	ND	43	ug/kg
Benzo(a)anthracene	ND	21	ug/kg
Benzo(a)pyrene	ND	21	ug/kg
Benzo(b)fluoranthene	**66**	**21**	**ug/kg**
Benzo(ghi)perylene	ND	43	ug/kg
Benzo(k)fluoranthene	ND	21	ug/kg
Chrysene	**44**	**21**	**ug/kg**
Dibenz(a,h)anthracene	ND	43	ug/kg
Fluoranthene	ND	43	ug/kg
Fluorene	ND	43	ug/kg
Indeno(1,2,3-cd)pyrene	ND	21	ug/kg
Naphthalene	ND	43	ug/kg
Phenanthrene	ND	43	ug/kg
Pyrene	ND	43	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	58	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-2

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G190309-009
Work Order: DGGHG
Matrix: SOLID

Date Collected: 07/18/00 0900
Date Received: 07/19/00 1638

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g		RP-710 MOD			
Gross Alpha	1.73E+01		5.0E+00	5.3E+00	07/21/00	07/26/00	0203154	
Gross Beta	2.26E+01		4.3E+00	5.0E+00	07/21/00	07/26/00	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-2

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G190309-010
Work Order: DGGHL
Matrix: SOLID

Date Collected: 07/18/00 1245
Date Received: 07/19/00 1638

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g		RP-710 MOD			
Gross Alpha	2.09E+01		5.1E+00	4.3E+00	07/21/00	07/26/00	0203154	
Gross Beta	1.89E+01		3.4E+00	3.5E+00	07/21/00	07/26/00	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-2

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G190309-011
Work Order: DGGHQ
Matrix: SOLID

Date Collected: 07/16/00 1425
Date Received: 07/19/00 1638

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g		RP-710 MOD			
Gross Alpha	1.18E+01		3.6E+00	3.4E+00	07/21/00	07/26/00	0203154	
Gross Beta	2.59E+01		4.3E+00	4.3E+00	07/21/00	07/26/00	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-14

GC Semivolatiles

Lot-Sample #...:	F0G190309-012	**Work Order #...:**	DGGHR10E	**Matrix.....:**	SOLID
Date Sampled...:	07/18/00 15:00	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	05:02		
Dilution Factor:	1				
% Moisture.....:	26	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	34	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	60	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-14

GC Volatiles

Lot-Sample #...:	F0G190309-012	**Work Order #...:**	DGGHR10D	**Matrix.....:**	SOLID
Date Sampled...:	07/18/00 15:00	**Date Received..:**	07/19/00		
Prep Date.....:	07/24/00	**Analysis Date..:**	07/25/00		
Prep Batch #...:	0206578	**Analysis Time..:**	01:51		
Dilution Factor:	1				
% Moisture.....:	26	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	71	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-14

GC Semivolatiles

Lot-Sample #...: F0G190309-012 Work Order #...: DGGHR10C Matrix.....: SOLID
Date Sampled...: 07/18/00 15:00 Date Received..: 07/19/00
Prep Date.....: 07/22/00 Analysis Date..: 07/27/00
Prep Batch #...: 0207361 Analysis Time..: 03:38
Dilution Factor: 1
% Moisture.....: 26 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	44	ug/kg
Aroclor 1221	ND	44	ug/kg
Aroclor 1232	ND	44	ug/kg
Aroclor 1242	ND	44	ug/kg
Aroclor 1248	ND	44	ug/kg
Aroclor 1254	ND	44	ug/kg
Aroclor 1260	ND	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(10 - 199)
Decachlorobiphenyl	89	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-14

GC/MS Volatiles

Lot-Sample #...: F0G190309-012 **Work Order #...:** DGGHR10H **Matrix.....:** SOLID
Date Sampled...: 07/18/00 15:00 **Date Received..:** 07/19/00
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0205124 **Analysis Time..:** 16:25
Dilution Factor: 1
% Moisture.....: 26 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.7	ug/kg
1,2-Dichloropropane	ND	6.7	ug/kg
cis-1,3-Dichloropropene	ND	6.7	ug/kg
Trichloroethene	ND	6.7	ug/kg
Dibromochloromethane	ND	6.7	ug/kg
1,1,2-Trichloroethane	ND	6.7	ug/kg
Benzene	ND	6.7	ug/kg
trans-1,3-Dichloropropene	ND	6.7	ug/kg
Bromoform	ND	6.7	ug/kg
4-Methyl-2-pentanone	ND	27	ug/kg
2-Hexanone	ND	27	ug/kg
Tetrachloroethene	ND	6.7	ug/kg
Toluene	ND	6.7	ug/kg
Chlorobenzene	ND	6.7	ug/kg
Ethylbenzene	ND	6.7	ug/kg
Styrene	ND	6.7	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.7	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.7	ug/kg
Acetone	ND	27	ug/kg
Carbon disulfide	ND	6.7	ug/kg
1,1-Dichloroethene	ND	6.7	ug/kg
1,1-Dichloroethane	ND	6.7	ug/kg
1,2-Dichloroethene (total)	ND	6.7	ug/kg
Chloroform	ND	6.7	ug/kg
1,2-Dichloroethane	ND	6.7	ug/kg
2-Butanone	**15 J**	**27**	**ug/kg**
1,1,1-Trichloroethane	ND	6.7	ug/kg
Carbon tetrachloride	ND	6.7	ug/kg
Bromodichloromethane	ND	6.7	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.7	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	107	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-14

GC/MS Volatiles

Lot-Sample #...: F0G190309-012 Work Order #...: DGGHR10H Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-14

HPLC

Lot-Sample #...: F0G190309-012 **Work Order #...:** DGGHR10A **Matrix.....:** SOLID
Date Sampled...: 07/18/00 15:00 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 14:44
Dilution Factor: 1
% Moisture.....: 26 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	40	ug/kg
Acenaphthylene	ND	40	ug/kg
Anthracene	ND	40	ug/kg
Benzo(a)anthracene	ND	20	ug/kg
Benzo(a)pyrene	ND	20	ug/kg
Benzo(b)fluoranthene	ND	20	ug/kg
Benzo(ghi)perylene	ND	40	ug/kg
Benzo(k)fluoranthene	ND	20	ug/kg
Chrysene	ND	20	ug/kg
Dibenz(a,h)anthracene	ND	40	ug/kg
Fluoranthene	ND	40	ug/kg
Fluorene	ND	40	ug/kg
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg
Naphthalene	ND	40	ug/kg
Phenanthrene	ND	40	ug/kg
Pyrene	ND	40	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	55	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-2

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G190309-013
Work Order: DGGHT
Matrix: SOLID

Date Collected: 07/19/00 0915
Date Received: 07/19/00 1638

Parameter	Result	Qual	Total Uncert. (2 σ+/-)		MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD				pCi/g		RP-710 MOD			
Gross Alpha	1.57E+01		4.5E+00		4.5E+00	07/21/00	07/26/00	0203154	
Gross Beta	2.16E+01		3.8E+00		4.1E+00	07/21/00	07/26/00	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-13

GC Semivolatiles

Lot-Sample #...:	F0G190309-014	**Work Order #...:**	DGGHV10E	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 09:55	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	05:29		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	62	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-13

GC Volatiles

Lot-Sample #...:	F0G190309-014	**Work Order #...:**	DGGHV10D	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 09:55	**Date Received..:**	07/19/00		
Prep Date.....:	07/25/00	**Analysis Date..:**	07/25/00		
Prep Batch #...:	0210375	**Analysis Time..:**	18:32		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	94	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-13

GC Semivolatiles

Lot-Sample #...: F0G190309-014 **Work Order #...:** DGGHV10C **Matrix.....:** SOLID
Date Sampled...: 07/19/00 09:55 **Date Received..:** 07/19/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207361 **Analysis Time..:** 03:52
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	99	(10 - 199)
Decachlorobiphenyl	100	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-13

GC/MS Volatiles

Lot-Sample #...: F0G190309-014
Date Sampled...: 07/19/00 09:55
Prep Date.....: 07/21/00
Prep Batch #...: 0205124
Dilution Factor: 1
% Moisture.....: 22

Work Order #...: DGGHV10H
Date Received..: 07/19/00
Analysis Date..: 07/21/00
Analysis Time..: 16:59

Method.....: SW846 8260B

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	ND	26	ug/kg
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	**12 J**	**26**	**ug/kg**
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	86	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	102	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-13

GC/MS Volatiles

Lot-Sample #...: F0G190309-014 **Work Order #...:** DGGHV10H **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-13

HPLC

Lot-Sample #...: F0G190309-014 Work Order #...: DGGHV10A Matrix.....: SOLID
Date Sampled...: 07/19/00 09:55 Date Received..: 07/19/00
Prep Date.....: 07/20/00 Analysis Date..: 07/24/00
Prep Batch #...: 0203377 Analysis Time..: 15:10
Dilution Factor: 1
% Moisture.....: 22 Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	53	(44 - 140)

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

GC Semivolatiles

Lot-Sample #...:	F0G190309-016	**Work Order #...:**	DGGHX10E	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 13:05	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	05:56		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	31	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	61	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

GC Volatiles

Lot-Sample #...:	F0G190309-016	Work Order #...:	DGGHX10D	Matrix.....:	SOLID
Date Sampled...:	07/19/00 13:05	Date Received..:	07/19/00		
Prep Date.....:	07/25/00	Analysis Date..:	07/25/00		
Prep Batch #...:	0210375	Analysis Time..:	19:08		
Dilution Factor:	1				
% Moisture.....:	21	Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	0.66	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	92	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

GC Semivolatiles

Lot-Sample #...: F0G190309-016 **Work Order #...:** DGGHX10C **Matrix.....:** SOLID
Date Sampled...: 07/19/00 13:05 **Date Received..:** 07/19/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207361 **Analysis Time..:** 04:06
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	68	(10 - 199)
Decachlorobiphenyl	65	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

GC/MS Volatiles

Lot-Sample #...: F0G190309-016 **Work Order #...:** DGGHX10H **Matrix.....:** SOLID
Date Sampled...: 07/19/00 13:05 **Date Received..:** 07/19/00
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0205124 **Analysis Time..:** 17:33
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Trichloroethene	ND	6.3	ug/kg
Dibromochloromethane	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.3	ug/kg
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
2-Butanone	**15 J**	**25**	**ug/kg**
1,1,1-Trichloroethane	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

GC/MS Volatiles

Lot-Sample #...: F0G190309-016 Work Order #...: DGGHX10H Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

HPLC

Lot-Sample #...: F0G190309-016 **Work Order #...:** DGGHX10A **Matrix.....:** SOLID
Date Sampled...: 07/19/00 13:05 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 15:36
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	**210**	**19**	**ug/kg**
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	55	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G190309-016
Work Order: DGGHX
Matrix: SOLID

Date Collected: 07/19/00 1305
Date Received: 07/19/00 1638

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g		RP-710 MOD			
Gross Alpha	1.03E+01		3.7E+00	4.2E+00	07/21/00	07/26/00	0203154	
Gross Beta	2.22E+01		4.1E+00	4.4E+00	07/21/00	07/26/00	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

GC Semivolatiles

Lot-Sample #...:	F0G190309-018	**Work Order #...:**	DGGJ210E	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 15:35	**Date Received..:**	07/19/00		
Prep Date.....:	07/21/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204133	**Analysis Time..:**	06:22		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	52	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

GC Volatiles

Lot-Sample #...:	F0G190309-018	**Work Order #...:**	DGGJ210D	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 15:35	**Date Received..:**	07/19/00		
Prep Date.....:	07/25/00	**Analysis Date..:**	07/25/00		
Prep Batch #...:	0210375	**Analysis Time..:**	19:44		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	91	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

GC Semivolatiles

Lot-Sample #...: F0G190309-018 Work Order #...: DGGJ210C Matrix.....: SOLID
Date Sampled...: 07/19/00 15:35 Date Received..: 07/19/00
Prep Date.....: 07/22/00 Analysis Date..: 07/27/00
Prep Batch #...: 0207361 Analysis Time..: 04:19
Dilution Factor: 1
% Moisture.....: 21 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(10 - 199)
Decachlorobiphenyl	87	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

GC/MS Volatiles

Lot-Sample #...: F0G190309-018 **Work Order #...:** DGGJ210F **Matrix.....:** SOLID
Date Sampled...: 07/19/00 15:35 **Date Received..:** 07/19/00
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0205124 **Analysis Time..:** 18:07
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Trichloroethene	**1.9 J**	**6.3**	**ug/kg**
Dibromochloromethane	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.3	ug/kg
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	**250**	**6.3**	**ug/kg**
Chloroform	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	93	(82 - 119)
Dibromofluoromethane	97	(82 - 132)
1,2-Dichloroethane-d4	107	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

GC/MS Volatiles

Lot-Sample #...: F0G190309-018 Work Order #...: DGGJ210F Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

HPLC

Lot-Sample #...: F0G190309-018 **Work Order #...:** DGGJ210A **Matrix.....:** SOLID
Date Sampled...: 07/19/00 15:35 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0203377 **Analysis Time..:** 16:09
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G190309-018
Work Order: DGGJ2
Matrix: SOLID

Date Collected: 07/19/00 1535
Date Received: 07/19/00 1638

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g		RP-710 MOD			
Gross Alpha	1.07E+01		4.0E+00	5.0E+00	07/21/00	07/26/00	0203154	
Gross Beta	2.27E+01		3.9E+00	4.1E+00	07/21/00	07/26/00	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

GC Semivolatiles

Lot-Sample #...: F0G190309-019 **Work Order #...:** DGGLK10F **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 15:49
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	70	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

GC Volatiles

Lot-Sample #...: F0G190309-019 **Work Order #...:** DGGLK10G **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210430 **Analysis Time..:** 20:20
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	92	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

GC Semivolatiles

Lot-Sample #...: F0G190309-019 **Work Order #...:** DGGLK102 **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0205091 **Analysis Time..:** 22:56
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(12 - 167)
Decachlorobiphenyl	25	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

GC/MS Volatiles

Lot-Sample #...: F0G190309-019 **Work Order #...:** DGGLK101 **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0203114 **Analysis Time..:** 01:59
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.43 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.61 J,B**	**1.0**	**ug/L**
Acetone	**6.0 J**	**10**	**ug/L**
Carbon disulfide	**1.5**	**1.0**	**ug/L**
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	**1.3**	**1.0**	**ug/L**
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	**0.55 J**	**1.0**	**ug/L**
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	94	(78 - 124)
Toluene-d8	96	(71 - 129)
Dibromofluoromethane	96	(74 - 135)
1,2-Dichloroethane-d4	98	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

GC/MS Volatiles

Lot-Sample #...: F0G190309-019 Work Order #...: DGGLK101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

HPLC

Lot-Sample #...: F0G190309-019 **Work Order #...:** DGGLK103 **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0207538 **Analysis Time..:** 16:26
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	24 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

HPLC

Lot-Sample #...: F0G190309-019 **Work Order #...:** DGGLK203 **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207538 **Analysis Time..:** 16:09
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	23 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G190309-019
Work Order: DGGLK
Matrix: WATER

Date Collected: 07/19/00 1355
Date Received: 07/19/00 1638

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/L**	**9310 MOD**			
Gross Alpha	-9E-02	U	4.6E-01	9.2E-01	07/24/00	07/26/00	0206228	
Gross Beta	7E-02	U	9.4E-01	1.6E+00	07/24/00	07/26/00	0206228	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-12

General Chemistry

Lot-Sample #...: F0G190309-007 **Work Order #...:** DGGGF **Matrix.....:** SOLID
Date Sampled...: 07/18/00 13:10 **Date Received..:** 07/19/00
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.64	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**22.1**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/20-07/21/00**	**0202443**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.064	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1		Analysis Time..: 16:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-16

General Chemistry

Lot-Sample #...: F0G190309-008 **Work Order #...:** DGGHA **Matrix.....:** SOLID
Date Sampled...: 07/18/00 09:30 **Date Received..:** 07/19/00
% Moisture.....: 30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.71	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**29.9**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/20-07/21/00**	**0202443**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.071	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1		Analysis Time..: 16:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-14

General Chemistry

Lot-Sample #...: F0G190309-012 **Work Order #...:** DGGHR **Matrix.....:** SOLID
Date Sampled...: 07/18/00 15:00 **Date Received..:** 07/19/00
% Moisture.....: 26

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.67	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**25.5**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/20-07/21/00**	**0202443**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.067	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1		Analysis Time..: 16:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-13

General Chemistry

Lot-Sample #...: F0G190309-014 **Work Order #...:** DGGHV **Matrix.....:** SOLID
Date Sampled...: 07/19/00 09:55 **Date Received..:** 07/19/00
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.64	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**21.9**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/20-07/21/00**	**0202443**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.064	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1		Analysis Time..: 16:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

General Chemistry

Lot-Sample #...: F0G190309-016 **Work Order #...:** DGGHX **Matrix.....:** SOLID
Date Sampled...: 07/19/00 13:05 **Date Received..:** 07/19/00
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.63	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**20.5**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/20-07/21/00**	**0202443**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.063	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1		Analysis Time..: 16:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

General Chemistry

Lot-Sample #...: F0G190309-018 Work Order #...: DGGJ2 Matrix.....: SOLID
Date Sampled...: 07/19/00 15:35 Date Received..: 07/19/00
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.62	mg/kg	SW846 9012A	07/25-07/26/00	0208311
		Dilution Factor: 1		Analysis Time..: 11:00		
Percent Moisture	**21.0**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/20-07/21/00**	**0202443**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.063	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1		Analysis Time..: 16:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

General Chemistry

Lot-Sample #...: F0G190309-019 **Work Order #...:** DGGLK **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/25-07/26/00	0208218
		Dilution Factor: 1		Analysis Time..: 09:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	07/21-07/22/00	0204109
		Dilution Factor: 1		Analysis Time..: 16:15		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E2-12

TOTAL Metals

Lot-Sample #...: F0G190309-001 Matrix.....: SOLID
Date Sampled...: 07/19/00 10:35 Date Received..: 07/19/00
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFE101
		Dilution Factor: 1		Analysis Time..: 11:04		
Arsenic	9.4	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFE102
		Dilution Factor: 1		Analysis Time..: 11:04		
Barium	176	25.2	mg/kg	SW846 6010B	07/21-07/23/00	DGGFE103
		Dilution Factor: 1		Analysis Time..: 11:04		
Cadmium	1.2	0.63	mg/kg	SW846 6010B	07/21-07/23/00	DGGFE104
		Dilution Factor: 1		Analysis Time..: 11:04		
Chromium	17.2	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFE105
		Dilution Factor: 1		Analysis Time..: 11:04		
Lead	10.4	0.38	mg/kg	SW846 6010B	07/21-07/23/00	DGGFE106
		Dilution Factor: 1		Analysis Time..: 11:04		
Selenium	ND	0.63	mg/kg	SW846 6010B	07/21-07/23/00	DGGFE107
		Dilution Factor: 1		Analysis Time..: 11:04		
Prep Batch #...: 0203235						
Mercury	0.025 B	0.042	mg/kg	SW846 7471A	07/21/00	DGGFE108
		Dilution Factor: 1		Analysis Time..: 15:26		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S2-8

TOTAL Metals

Lot-Sample #...: F0G190309-002 Matrix.....: SOLID
Date Sampled...: 07/19/00 13:02 Date Received..: 07/19/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFJ101
		Dilution Factor: 1		Analysis Time..: 11:09		
Arsenic	7.0	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFJ102
		Dilution Factor: 1		Analysis Time..: 11:09		
Barium	108	25.5	mg/kg	SW846 6010B	07/21-07/23/00	DGGFJ103
		Dilution Factor: 1		Analysis Time..: 11:09		
Cadmium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGFJ104
		Dilution Factor: 1		Analysis Time..: 11:09		
Chromium	16.0	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFJ105
		Dilution Factor: 1		Analysis Time..: 11:09		
Lead	10.5	0.38	mg/kg	SW846 6010B	07/21-07/23/00	DGGFJ106
		Dilution Factor: 1		Analysis Time..: 11:09		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGFJ107
		Dilution Factor: 1		Analysis Time..: 11:09		
Prep Batch #...: 0203235						
Mercury	0.029 B	0.042	mg/kg	SW846 7471A	07/21/00	DGGFJ108
		Dilution Factor: 1		Analysis Time..: 15:28		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3-22

TOTAL Metals

Lot-Sample #...: F0G190309-003 Matrix.....: SOLID
Date Sampled...: 07/19/00 14:02 Date Received..: 07/19/00
% Moisture.....: 38

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.6	mg/kg	SW846 6010B	07/21-07/23/00	DGGFM101
		Dilution Factor: 1		Analysis Time..: 11:13		
Arsenic	7.5	1.6	mg/kg	SW846 6010B	07/21-07/23/00	DGGFM102
		Dilution Factor: 1		Analysis Time..: 11:13		
Barium	104	32.0	mg/kg	SW846 6010B	07/21-07/23/00	DGGFM103
		Dilution Factor: 1		Analysis Time..: 11:13		
Cadmium	0.050 B	0.80	mg/kg	SW846 6010B	07/21-07/23/00	DGGFM104
		Dilution Factor: 1		Analysis Time..: 11:13		
Chromium	15.3	1.6	mg/kg	SW846 6010B	07/21-07/23/00	DGGFM105
		Dilution Factor: 1		Analysis Time..: 11:13		
Lead	8.0	0.48	mg/kg	SW846 6010B	07/21-07/23/00	DGGFM106
		Dilution Factor: 1		Analysis Time..: 11:13		
Selenium	ND	0.80	mg/kg	SW846 6010B	07/21-07/23/00	DGGFM107
		Dilution Factor: 1		Analysis Time..: 11:13		
Prep Batch #...: 0203235						
Mercury	0.021 B	0.053	mg/kg	SW846 7471A	07/21/00	DGGFM108
		Dilution Factor: 1		Analysis Time..: 15:31		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B21S1-12

TOTAL Metals

Lot-Sample #...: F0G190309-004 **Matrix.....:** SOLID
Date Sampled...: 07/19/00 15:35 **Date Received..:** 07/19/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFQ101
		Dilution Factor: 1		Analysis Time..: 11:18		
Arsenic	**3.1**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGFQ102**
		Dilution Factor: 1		Analysis Time..: 11:18		
Barium	**68.3**	**25.7**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGFQ103**
		Dilution Factor: 1		Analysis Time..: 11:18		
Cadmium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGFQ104
		Dilution Factor: 1		Analysis Time..: 11:18		
Chromium	**12.4**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGFQ105**
		Dilution Factor: 1		Analysis Time..: 11:18		
Lead	**8.1**	**0.39**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGFQ106**
		Dilution Factor: 1		Analysis Time..: 11:18		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGFQ107
		Dilution Factor: 1		Analysis Time..: 11:18		
Prep Batch #...: 0203235						
Mercury	**0.015 B**	**0.043**	**mg/kg**	**SW846 7471A**	**07/21/00**	**DGGFQ108**
		Dilution Factor: 1		Analysis Time..: 15:38		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S1-5

TOTAL Metals

Lot-Sample #...: F0G190309-005 Matrix.....: SOLID
Date Sampled...: 07/19/00 14:32 Date Received..: 07/19/00
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFV101
		Dilution Factor: 1		Analysis Time..: 11:22		
Arsenic	2.2	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFV102
		Dilution Factor: 1		Analysis Time..: 11:22		
Barium	75.4	25.5	mg/kg	SW846 6010B	07/21-07/23/00	DGGFV103
		Dilution Factor: 1		Analysis Time..: 11:22		
Cadmium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGFV104
		Dilution Factor: 1		Analysis Time..: 11:22		
Chromium	10.7	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGFV105
		Dilution Factor: 1		Analysis Time..: 11:22		
Lead	6.4	0.38	mg/kg	SW846 6010B	07/21-07/23/00	DGGFV106
		Dilution Factor: 1		Analysis Time..: 11:22		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGFV107
		Dilution Factor: 1		Analysis Time..: 11:22		
Prep Batch #...: 0203235						
Mercury	0.011 B	0.042	mg/kg	SW846 7471A	07/21/00	DGGFV108
		Dilution Factor: 1		Analysis Time..: 15:40		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-5-12

TOTAL Metals

Lot-Sample #...: F0G190309-007 **Matrix.....:** SOLID
Date Sampled...: 07/18/00 13:10 **Date Received..:** 07/19/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGGF101
		Dilution Factor: 1		Analysis Time..: 11:27		
Arsenic	**8.2**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGGF102**
		Dilution Factor: 1		Analysis Time..: 11:27		
Barium	**84.4**	**25.7**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGGF103**
		Dilution Factor: 1		Analysis Time..: 11:27		
Cadmium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGGF104
		Dilution Factor: 1		Analysis Time..: 11:27		
Chromium	**14.5**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGGF105**
		Dilution Factor: 1		Analysis Time..: 11:27		
Lead	**8.6**	**0.39**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGGF106**
		Dilution Factor: 1		Analysis Time..: 11:27		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGGF107
		Dilution Factor: 1		Analysis Time..: 11:27		
Prep Batch #...: 0203235						
Mercury	**0.016 B**	**0.043**	**mg/kg**	**SW846 7471A**	**07/21/00**	**DGGGF108**
		Dilution Factor: 1		Analysis Time..: 15:43		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-4-16

TOTAL Metals

Lot-Sample #...: F0G190309-008 **Matrix.....:** SOLID
Date Sampled...: 07/18/00 09:30 **Date Received..:** 07/19/00
% Moisture.....: 30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.4	mg/kg	SW846 6010B	07/21-07/23/00	DGGHA101
		Dilution Factor: 1		Analysis Time..: 11:31		
Arsenic	**4.5**	**1.4**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHA102**
		Dilution Factor: 1		Analysis Time..: 11:31		
Barium	**59.6**	**28.5**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHA103**
		Dilution Factor: 1		Analysis Time..: 11:31		
Cadmium	ND	0.71	mg/kg	SW846 6010B	07/21-07/23/00	DGGHA104
		Dilution Factor: 1		Analysis Time..: 11:31		
Chromium	**11.8**	**1.4**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHA105**
		Dilution Factor: 1		Analysis Time..: 11:31		
Lead	**8.2**	**0.43**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHA106**
		Dilution Factor: 1		Analysis Time..: 11:31		
Selenium	ND	0.71	mg/kg	SW846 6010B	07/21-07/23/00	DGGHA107
		Dilution Factor: 1		Analysis Time..: 11:31		
Prep Batch #...: 0203235						
Mercury	**0.014 B**	**0.047**	**mg/kg**	**SW846 7471A**	**07/21/00**	**DGGHA108**
		Dilution Factor: 1		Analysis Time..: 15:45		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-8-14

TOTAL Metals

Lot-Sample #...: F0G190309-012 **Matrix.....:** SOLID
Date Sampled...: 07/18/00 15:00 **Date Received..:** 07/19/00
% Moisture.....: 26

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGHR101
		Dilution Factor: 1		Analysis Time..: 11:36		
Arsenic	**5.8**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHR102**
		Dilution Factor: 1		Analysis Time..: 11:36		
Barium	**107**	**26.9**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHR103**
		Dilution Factor: 1		Analysis Time..: 11:36		
Cadmium	ND	0.67	mg/kg	SW846 6010B	07/21-07/23/00	DGGHR104
		Dilution Factor: 1		Analysis Time..: 11:36		
Chromium	**18.1**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHR105**
		Dilution Factor: 1		Analysis Time..: 11:36		
Lead	**11.9**	**0.40**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHR106**
		Dilution Factor: 1		Analysis Time..: 11:36		
Selenium	ND	0.67	mg/kg	SW846 6010B	07/21-07/23/00	DGGHR107
		Dilution Factor: 1		Analysis Time..: 11:36		
Prep Batch #...: 0203235						
Mercury	**0.018 B**	**0.045**	**mg/kg**	**SW846 7471A**	**07/21/00**	**DGGHR108**
		Dilution Factor: 1		Analysis Time..: 15:47		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-6-13

TOTAL Metals

Lot-Sample #...: F0G190309-014 Matrix.....: SOLID
Date Sampled...: 07/19/00 09:55 Date Received..: 07/19/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGHV101
		Dilution Factor: 1		Analysis Time..: 11:40		
Arsenic	17.7	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGHV102
		Dilution Factor: 1		Analysis Time..: 11:40		
Barium	195	25.6	mg/kg	SW846 6010B	07/21-07/23/00	DGGHV103
		Dilution Factor: 1		Analysis Time..: 11:40		
Cadmium	0.12 B	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGHV104
		Dilution Factor: 1		Analysis Time..: 11:40		
Chromium	15.0	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGHV105
		Dilution Factor: 1		Analysis Time..: 11:40		
Lead	8.4	0.38	mg/kg	SW846 6010B	07/21-07/23/00	DGGHV106
		Dilution Factor: 1		Analysis Time..: 11:40		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/21-07/23/00	DGGHV107
		Dilution Factor: 1		Analysis Time..: 11:40		
Prep Batch #...: 0203235						
Mercury	0.021 B	0.043	mg/kg	SW846 7471A	07/21/00	DGGHV108
		Dilution Factor: 1		Analysis Time..: 15:50		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-7

TOTAL Metals

Lot-Sample #...: F0G190309-016 **Matrix.....:** SOLID
Date Sampled...: 07/19/00 13:05 **Date Received..:** 07/19/00
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGHX101
		Dilution Factor: 1		Analysis Time..: 11:45		
Arsenic	**5.5**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHX102**
		Dilution Factor: 1		Analysis Time..: 11:45		
Barium	**137**	**25.2**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHX103**
		Dilution Factor: 1		Analysis Time..: 11:45		
Cadmium	ND	0.63	mg/kg	SW846 6010B	07/21-07/23/00	DGGHX104
		Dilution Factor: 1		Analysis Time..: 11:45		
Chromium	**13.5**	**1.3**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHX105**
		Dilution Factor: 1		Analysis Time..: 11:45		
Lead	**7.4**	**0.38**	**mg/kg**	**SW846 6010B**	**07/21-07/23/00**	**DGGHX106**
		Dilution Factor: 1		Analysis Time..: 11:45		
Selenium	ND	0.63	mg/kg	SW846 6010B	07/21-07/23/00	DGGHX107
		Dilution Factor: 1		Analysis Time..: 11:45		
Prep Batch #...: 0203235						
Mercury	**0.022 B**	**0.042**	**mg/kg**	**SW846 7471A**	**07/21/00**	**DGGHX108**
		Dilution Factor: 1		Analysis Time..: 15:52		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-3-12

TOTAL Metals

Lot-Sample #...: F0G190309-018 Matrix.....: SOLID
Date Sampled...: 07/19/00 15:35 Date Received..: 07/19/00
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0203211						
Silver	ND	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGJ2101
		Dilution Factor: 1		Analysis Time..: 11:59		
Arsenic	9.0	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGJ2102
		Dilution Factor: 1		Analysis Time..: 11:59		
Barium	103	25.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGJ2103
		Dilution Factor: 1		Analysis Time..: 11:59		
Cadmium	ND	0.63	mg/kg	SW846 6010B	07/21-07/23/00	DGGJ2104
		Dilution Factor: 1		Analysis Time..: 11:59		
Chromium	21.0	1.3	mg/kg	SW846 6010B	07/21-07/23/00	DGGJ2105
		Dilution Factor: 1		Analysis Time..: 11:59		
Lead	9.8	0.38	mg/kg	SW846 6010B	07/21-07/23/00	DGGJ2106
		Dilution Factor: 1		Analysis Time..: 11:59		
Selenium	0.66	0.63	mg/kg	SW846 6010B	07/21-07/23/00	DGGJ2107
		Dilution Factor: 1		Analysis Time..: 11:59		
Prep Batch #...: 0203235						
Mercury	0.021 B	0.042	mg/kg	SW846 7471A	07/21/00	DGGJ2108
		Dilution Factor: 1		Analysis Time..: 15:54		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW-7-RINSATE

TOTAL Metals

Lot-Sample #...: F0G190309-019 **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206325						
Mercury	**0.094 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGGLK10E**
		Dilution Factor: 1		Analysis Time..: 18:48		
Prep Batch #...: 0206351						
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGGLK10A
		Dilution Factor: 1		Analysis Time..: 17:27		
Arsenic	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGGLK106
		Dilution Factor: 1		Analysis Time..: 17:27		
Barium	**2.6 B**	**200**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGGLK107**
		Dilution Factor: 1		Analysis Time..: 17:27		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGGLK10C
		Dilution Factor: 1		Analysis Time..: 17:27		
Chromium	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGGLK10D
		Dilution Factor: 1		Analysis Time..: 17:27		
Lead	**4.1**	**3.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGGLK108**
		Dilution Factor: 1		Analysis Time..: 17:27		
Selenium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGGLK109
		Dilution Factor: 1		Analysis Time..: 17:27		

NOTE(S):

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G190309
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY DOE RP-710 MOD			pCi/g	RP-710 MOD			F0G210000-154B	
Gross Alpha	-4E-02	U ?	2.2E+00	4.3E+00	07/21/00	07/26/00	0203154	
Gross Beta	9E-01	U	2.5E+00	4.3E+00	07/21/00	07/26/00	0203154	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

? For informational purposes only. The result does not follow significant figures SOP
U Result is less than the sample detection limit.

METHOD BLANK REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G190309
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			**pCi/L**	**9310 MOD**			**F0G240000-228B**	
Gross Alpha	-2.7E-01	U	4.6E-01	10E-01	07/24/00	07/27/00	0206228	
Gross Beta	4E-02	U ?	1.1E+00	1.9E+00	07/24/00	07/27/00	0206228	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

? For informational purposes only. The result does not follow significant figures SOP
U Result is less than the sample detection limit.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G190309
MB Lot-Sample #: F0G210000-114
Analysis Date..: 07/20/00
Dilution Factor: 1

Work Order #...: DGK9J101
Prep Date.....: 07/20/00
Prep Batch #...: 0203114

Matrix.....: WATER
Analysis Time..: 16:04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**1.1**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	103	(78 - 124)
Toluene-d8	96	(71 - 129)
Dibromofluoromethane	90	(74 - 135)
1,2-Dichloroethane-d4	110	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G190309 **Work Order #...:** DGK9J101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G190309
MB Lot-Sample #: F0G210000-377
Analysis Date..: 07/24/00
Dilution Factor: 1

Work Order #...: DGLFP101
Prep Date.....: 07/20/00
Prep Batch #...: 0203377

Matrix.....: SOLID
Analysis Time..: 07:27

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	30	ug/kg	SW846 8310
Acenaphthylene	ND	30	ug/kg	SW846 8310
Anthracene	ND	30	ug/kg	SW846 8310
Benzo(a)anthracene	ND	15	ug/kg	SW846 8310
Benzo(a)pyrene	ND	15	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	15	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	30	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	15	ug/kg	SW846 8310
Chrysene	ND	15	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	30	ug/kg	SW846 8310
Fluoranthene	ND	30	ug/kg	SW846 8310
Fluorene	ND	30	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	15	ug/kg	SW846 8310
Naphthalene	ND	30	ug/kg	SW846 8310
Phenanthrene	ND	30	ug/kg	SW846 8310
Pyrene	ND	30	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G190309
MB Lot-Sample #: F0G230000-091
Work Order #...: DGNED101
Matrix.....: WATER
Prep Date.....: 07/20/00
Analysis Time..: 16:01
Analysis Date..: 07/25/00
Prep Batch #...: 0205091
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	52	(12 - 167)
Decachlorobiphenyl	37	(10 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G190309
MB Lot-Sample #: F0G230000-124
Work Order #...: DGNG2101
Matrix.....: SOLID
Prep Date.....: 07/21/00
Analysis Time..: 09:33
Analysis Date..: 07/21/00
Prep Batch #...: 0205124
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	79	(73 - 109)
Toluene-d8	92	(82 - 119)
Dibromofluoromethane	97	(82 - 132)
1,2-Dichloroethane-d4	104	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G190309 **Work Order #...:** DGNG2101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G190309
MB Lot-Sample #: F0G220000-133
Analysis Date..: 07/23/00
Dilution Factor: 1

Work Order #...: DGN7L101
Prep Date.....: 07/21/00
Prep Batch #...: 0204133

Matrix.....: SOLID
Analysis Time..: 23:16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	25	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	69	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G190309
MB Lot-Sample #: F0G240000-578
Analysis Date..: 07/24/00
Dilution Factor: 1

Work Order #...: DGPR4101
Prep Date.....: 07/24/00
Prep Batch #...: 0206578

Matrix.....: SOLID
Analysis Time..: 12:30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G190309 **Work Order #...:** DGQVN101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G250000-361
Prep Date.....: 07/22/00 **Analysis Time..:** 01:08
Analysis Date..: 07/27/00 **Prep Batch #...:** 0207361
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	121	(10 - 199)
Decachlorobiphenyl	121	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G190309
MB Lot-Sample #: F0G250000-538
Analysis Date..: 07/26/00
Dilution Factor: 1

Work Order #...: DGRKR101
Prep Date.....: 07/25/00
Prep Batch #...: 0207538

Matrix.....: WATER
Analysis Time..: 15:09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	5.0	ug/L	SW846 8310
Acenaphthylene	ND	5.0	ug/L	SW846 8310
Anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)pyrene	ND	5.0	ug/L	SW846 8310
Benzo(b)fluoranthene	ND	5.0	ug/L	SW846 8310
Benzo(ghi)perylene	ND	5.0	ug/L	SW846 8310
Benzo(k)fluoranthene	ND	5.0	ug/L	SW846 8310
Chrysene	ND	5.0	ug/L	SW846 8310
Dibenz(a,h)anthracene	ND	5.0	ug/L	SW846 8310
Fluoranthene	ND	5.0	ug/L	SW846 8310
Fluorene	ND	5.0	ug/L	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L	SW846 8310
Naphthalene	ND	5.0	ug/L	SW846 8310
Phenanthrene	ND	5.0	ug/L	SW846 8310
Pyrene	ND	5.0	ug/L	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G190309
MB Lot-Sample #: F0G260000-467
Analysis Date..: 07/26/00
Dilution Factor: 1

Work Order #...: DGV7A101
Prep Date.....: 07/25/00
Prep Batch #...: 0208467

Matrix.....: WATER
Analysis Time..: 14:30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	0.50	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	69	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G190309
MB Lot-Sample #: F0G280000-430
Analysis Date..: 07/25/00
Dilution Factor: 1

Work Order #...: DH1J3101
Prep Date.....: 07/25/00
Prep Batch #...: 0210430

Matrix.....: WATER
Analysis Time..: 15:10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	99	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G190309
MB Lot-Sample #: F0G280000-375
Analysis Date..: 07/25/00
Dilution Factor: 1

Work Order #...: DH197101
Prep Date.....: 07/25/00
Prep Batch #...: 0210375

Matrix.....: SOLID
Analysis Time..: 15:10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G190309 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DGJ4W101		MB Lot-Sample #:	F0G200000-398	
	ND	0.50	mg/kg	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1				
		Analysis Time..: 12:00				
***Cyanide, Amenable		Work Order #: DGTD3101		MB Lot-Sample #:	F0G260000-311	
	ND	0.50	mg/kg	SW846 9012A	07/25-07/26/00	0208311
		Dilution Factor: 1				
		Analysis Time..: 11:00				
Reactive Cyanide		Work Order #: DGN18101		MB Lot-Sample #:	F0G220000-108	
	ND	0.050	mg/kg	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1				
		Analysis Time..: 16:15				

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NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G190309 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G210000-211 **Prep Batch #...:** 0203211						
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX102
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Barium	ND	20.0	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX103
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX104
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Chromium	ND	1.0	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX105
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Lead	ND	0.30	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX106
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX107
		Dilution Factor: 1				
		Analysis Time..: 10:17				
Silver	ND	1.0	mg/kg	SW846 6010B	07/21-07/23/00	DGKNX101
		Dilution Factor: 1				
		Analysis Time..: 10:17				
MB Lot-Sample #: F0G210000-235 **Prep Batch #...:** 0203235						
Mercury	ND	0.033	mg/kg	SW846 7471A	07/21/00	DGKR9101
		Dilution Factor: 1				
		Analysis Time..: 15:09				
Mercury	ND	0.033	mg/kg	SW846 7471A	07/21-07/24/00	DGNRK101
		Dilution Factor: 1				
		Analysis Time..: 00:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G190309

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DGT2Q101		MB Lot-Sample #:	F0G260000-218	
	ND	5.0	ug/L	SW846 9012A	07/25-07/26/00	0208218
		Dilution Factor: 1				
		Analysis Time..: 09:00				
Reactive Cyanide		Work Order #: DGN1C101		MB Lot-Sample #:	F0G220000-109	
	ND	0.050	mg/kg	SW846 7.3.3	07/21-07/22/00	0204109
		Dilution Factor: 1				
		Analysis Time..: 16:15				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G190309 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G240000-325 **Prep Batch #...:** 0206325						
Mercury	**0.099 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGP37101**
		Dilution Factor: 1				
		Analysis Time..: 18:31				
MB Lot-Sample #: F0G240000-351 **Prep Batch #...:** 0206351						
Arsenic	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52104
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Barium	ND	200	ug/L	SW846 6010B	07/24-07/25/00	DGP52105
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Cadmium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52102
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Chromium	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52103
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Lead	ND	3.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52106
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Selenium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52107
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52101
		Dilution Factor: 1				
		Analysis Time..: 17:17				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G190309
LCS Lot-Sample#: F0G250000-538
Prep Date.....: 07/25/00
Prep Batch #...: 0207538
Dilution Factor: 1

Work Order #...: DGRKR102-LCS
DGRKR103-LCSD
Analysis Date..: 07/27/00
Analysis Time..: 15:17

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**59**	**(45 - 134)**			**SW846 8310**
	74	**(45 - 134)**	**23**	**(0-82)**	**SW846 8310**
Acenaphthylene	**50**	**(46 - 124)**			**SW846 8310**
	66	**(46 - 124)**	**27**	**(0-56)**	**SW846 8310**
Anthracene	**59**	**(28 - 158)**			**SW846 8310**
	68	**(28 - 158)**	**13**	**(0-46)**	**SW846 8310**
Benzo(a)anthracene	**71**	**(52 - 132)**			**SW846 8310**
	79	**(52 - 132)**	**11**	**(0-43)**	**SW846 8310**
Benzo(a)pyrene	**73**	**(22 - 117)**			**SW846 8310**
	83	**(22 - 117)**	**13**	**(0-67)**	**SW846 8310**
Benzo(b)fluoranthene	**78**	**(39 - 109)**			**SW846 8310**
	90	**(39 - 109)**	**14**	**(0-47)**	**SW846 8310**
Benzo(ghi)perylene	**72**	**(10 - 115)**			**SW846 8310**
	83	**(10 - 115)**	**14**	**(0-72)**	**SW846 8310**
Benzo(k)fluoranthene	**70**	**(25 - 116)**			**SW846 8310**
	80	**(25 - 116)**	**13**	**(0-50)**	**SW846 8310**
Chrysene	**72**	**(29 - 130)**			**SW846 8310**
	79	**(29 - 130)**	**10**	**(0-76)**	**SW846 8310**
Dibenz(a,h)anthracene	**72**	**(10 - 122)**			**SW846 8310**
	82	**(10 - 122)**	**13**	**(0-62)**	**SW846 8310**
Fluoranthene	**69**	**(36 - 126)**			**SW846 8310**
	80	**(36 - 126)**	**15**	**(0-43)**	**SW846 8310**
Fluorene	**48 a**	**(52 - 128)**			**SW846 8310**
	69	**(52 - 128)**	**35**	**(0-60)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**74**	**(10 - 101)**			**SW846 8310**
	85	**(10 - 101)**	**14**	**(0-66)**	**SW846 8310**
Naphthalene	**42**	**(42 - 102)**			**SW846 8310**
	62	**(42 - 102)**	**38**	**(0-44)**	**SW846 8310**
Phenanthrene	**62**	**(49 - 126)**			**SW846 8310**
	74	**(49 - 126)**	**18**	**(0-50)**	**SW846 8310**
Pyrene	**58**	**(14 - 116)**			**SW846 8310**
	69	**(14 - 116)**	**17**	**(0-46)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	61	(27 - 128)
	68	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G190309 **Work Order #...:** DGV7A102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0G260000-467 DGV7A103-LCSD
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 14:56
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**64**	**(10 - 148)**			**SW846 8015 MOD**
	70	**(10 - 148)**	**9.3**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	78	(10 - 150)
	87	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G190309 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DGJ4W102-LCS/DGJ4W103-LCSD				LCS Lot-Sample#: F0G200000-398	
	95	(80 - 120)			SW846 9012A	07/20-07/21/00	0202398
	98	(80 - 120)	2.5	(0-30)	SW846 9012A	07/20-07/21/00	0202398
		Dilution Factor: 1					
Cyanide, Total		WO#:DGTDJ102-LCS/DGTDJ103-LCSD				LCS Lot-Sample#: F0G260000-311	
	102	(80 - 120)			SW846 9012A	07/25-07/26/00	0208311
	101	(80 - 120)	0.79	(0-30)	SW846 9012A	07/25-07/26/00	0208311
		Dilution Factor: 1					
Reactive Cyanide		WO#:DGN18102-LCS/DGN18103-LCSD				LCS Lot-Sample#: F0G220000-108	
	9.6 N	(0.0- 0.0)			SW846 7.3.3	07/21-07/22/00	0204108
	10 N,*	(0.0- 0.0)	8.0	(0-0.0)	SW846 7.3.3	07/21-07/22/00	0204108
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G190309 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Arsenic	108	(72 - 128)			SW846 6010B	07/21-07/23/00	0203211
	111	(72 - 128)	2.3	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Barium	100	(77 - 122)			SW846 6010B	07/21-07/23/00	0203211
	104	(77 - 122)	4.1	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Cadmium	102	(77 - 122)			SW846 6010B	07/21-07/23/00	0203211
	108	(77 - 122)	6.3	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Chromium	94	(77 - 123)			SW846 6010B	07/21-07/23/00	0203211
	98	(77 - 123)	4.1	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Lead	105	(76 - 124)			SW846 6010B	07/21-07/23/00	0203211
	107	(76 - 124)	1.5	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Selenium	104	(74 - 126)			SW846 6010B	07/21-07/23/00	0203211
	106	(74 - 126)	2.3	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Silver	109	(75 - 126)			SW846 6010B	07/21-07/23/00	0203211
	114	(75 - 126)	4.2	(0-20)	SW846 6010B	07/21-07/23/00	0203211
		Dilution Factor: 1					
Mercury	84	(58 - 142)			SW846 7471A	07/21/00	0203235
	88	(58 - 142)	5.0	(0-20)	SW846 7471A	07/21/00	0203235
		Dilution Factor: 5					
Mercury	75	(58 - 142)			SW846 7471A	07/21-07/24/00	0203235
	70	(58 - 142)	6.9	(0-20)	SW846 7471A	07/21-07/24/00	0203235
		Dilution Factor: 5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G190309 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DGT2Q102-LCS/DGT2Q103-LCSD				LCS Lot-Sample#: F0G260000-218	
	102	(80 - 120)			SW846 9012A	07/25-07/26/00	0208218
	103	(80 - 120)	0.97	(0-20)	SW846 9012A	07/25-07/26/00	0208218
		Dilution Factor: 1					
Reactive Cyanide		WO#:DGN1C102-LCS/DGN1C103-LCSD				LCS Lot-Sample#: F0G220000-109	
	9.6 N	(0.0- 0.0)			SW846 7.3.3	07/21-07/22/00	0204109
	10 N,*	(0.0- 0.0)	8.0	(0-0.0)	SW846 7.3.3	07/21-07/22/00	0204109
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G190309

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	102	(80 - 120)			SW846 7470A	07/25/00	0206325
	99	(80 - 120)	3.4	(0-20)	SW846 7470A	07/25/00	0206325

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Laboratory Control Sample Report

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G190309
Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
GROSS A/B BY DOE RP-710 MOD		pCi/g		RP-710 MOD		F0G210000-154C	
Gross Alpha	2.71E+01	2.49E+01	5.3E+00	3.7E+00		92	48 - 147
Gross Beta	2.68E+01	3.16E+01	4.9E+00	4.5E+00		118	68 - 145
	Batch #:	0203154		AnalysisDate	07/26/00		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample Report

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G190309
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
GROSS A/B BY GFPC SW846 9310 MOD		pCi/L		9310 MOD			F0G240000-228C
Gross Alpha	4.50E+01	4.64E+01	5.4E+00	1.1E+00		103	67 - 125
	Batch #:	0206228		**AnalysisDate**	07/27/00		
GROSS A/B BY GFPC SW846 9310 MOD		pCi/L		9310 MOD			F0G240000-228C
Gross Beta	9.16E+01	7.47E+01	7.9E+00	2.0E+00		82	64 - 125
	Batch #:	0206228		**AnalysisDate**	07/27/00		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G190309 **Work Order #...:** DGK9J102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G210000-114
Prep Date.....: 07/20/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0203114 **Analysis Time..:** 16:41
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**98**	**(71 - 120)**	**SW846 8260B**
Benzene	**96**	**(76 - 127)**	**SW846 8260B**
Toluene	**96**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**97**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**95**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	99	(78 - 124)
Toluene-d8	111	(71 - 129)
Dibromofluoromethane	88	(74 - 135)
1,2-Dichloroethane-d4	108	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G190309
LCS Lot-Sample#: F0G210000-377
Prep Date.....: 07/20/00
Prep Batch #...: 0203377
Dilution Factor: 1

Work Order #...: DGLFP102
Analysis Date..: 07/24/00
Analysis Time..: 07:53

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**77**	**(22 - 109)**	**SW846 8310**
Acenaphthylene	**71**	**(9.0- 125)**	**SW846 8310**
Anthracene	**58**	**(45 - 110)**	**SW846 8310**
Benzo(a)anthracene	**70**	**(43 - 132)**	**SW846 8310**
Benzo(a)pyrene	**68**	**(24 - 156)**	**SW846 8310**
Benzo(b)fluoranthene	**77**	**(46 - 132)**	**SW846 8310**
Benzo(ghi)perylene	**72**	**(50 - 104)**	**SW846 8310**
Benzo(k)fluoranthene	**70**	**(47 - 126)**	**SW846 8310**
Chrysene	**68**	**(39 - 142)**	**SW846 8310**
Dibenz(a,h)anthracene	**70**	**(52 - 110)**	**SW846 8310**
Fluoranthene	**72**	**(16 - 131)**	**SW846 8310**
Fluorene	**64**	**(40 - 108)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**74**	**(49 - 124)**	**SW846 8310**
Naphthalene	**84**	**(20 - 115)**	**SW846 8310**
Phenanthrene	**67**	**(50 - 103)**	**SW846 8310**
Pyrene	**59**	**(48 - 100)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	61	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G190309 **Work Order #...:** DGNED102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G230000-091
Prep Date.....: 07/20/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0205091 **Analysis Time..:** 20:53
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**107**	**(58 - 125)**	**SW846 8082**
Aroclor 1260	**109**	**(58 - 124)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	102	(39 - 153)
Decachlorobiphenyl	72	(10 - 127)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G190309 **Work Order #...:** DGNG2102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G230000-124
Prep Date.....: 07/21/00 **Analysis Date..:** 07/21/00
Prep Batch #...: 0205124 **Analysis Time..:** 10:06
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**82**	**(72 - 120)**	**SW846 8260B**
Benzene	**94**	**(79 - 125)**	**SW846 8260B**
Toluene	**91**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**89**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**110**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	108	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G190309 **Work Order #...:** DGN7L102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G220000-133
Prep Date.....: 07/21/00 **Analysis Date..:** 07/23/00
Prep Batch #...: 0204133 **Analysis Time..:** 23:42
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**76**	**(10 - 164)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	76	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G190309 **Work Order #...:** DGPR4102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G240000-578
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0206578 **Analysis Time..:** 13:41
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**128**	**(50 - 150)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	114	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G190309 **Work Order #...:** DGQVN102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G250000-361
Prep Date.....: 07/22/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207361 **Analysis Time..:** 01:22
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**119**	**(74 - 127)**	**SW846 8082**
Aroclor 1260	**112**	**(74 - 129)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	130	(62 - 162)
Decachlorobiphenyl	133	(53 - 145)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G190309 **Work Order #...:** DH1J3102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G280000-430
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210430 **Analysis Time..:** 15:45
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**130**	**(70 - 130)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	118	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G190309 **Work Order #...:** DH197102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G280000-375
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210375 **Analysis Time..:** 15:45
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**130**	**(50 - 150)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	118	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G190309 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F0G240000-351 **Prep Batch #...:** 0206351					
Chromium	101	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210A
Arsenic	103	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210C
Barium	106	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210D
Lead	100	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210E
Selenium	102	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210F
Silver	103	(49 - 135)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP52108
Cadmium	102	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP52109

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G190309
MS Lot-Sample #: F0G180113-003
Date Sampled...: 07/17/00 10:45
Prep Date.....: 07/20/00
Prep Batch #...: 0203377
Dilution Factor: 1

Work Order #...: DGD4510N-MS
DGD4510P-MSD
Date Received..: 07/17/00
Analysis Date..: 07/24/00
Analysis Time..: 08:44
% Moisture.....: 31

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	106	(22 - 109)			SW846 8310
	82	(22 - 109)	26	(0-35)	SW846 8310
Acenaphthylene	65	(9.0- 125)			SW846 8310
	65	(9.0- 125)	1.0	(0-35)	SW846 8310
Anthracene	55	(45 - 110)			SW846 8310
	56	(45 - 110)	0.32	(0-35)	SW846 8310
Benzo(a)anthracene	61	(28 - 121)			SW846 8310
	64	(28 - 121)	6.0	(0-35)	SW846 8310
Benzo(a)pyrene	61	(13 - 136)			SW846 8310
	62	(13 - 136)	1.9	(0-35)	SW846 8310
Benzo(b)fluoranthene	77	(28 - 124)			SW846 8310
	81	(28 - 124)	5.5	(0-35)	SW846 8310
Benzo(ghi)perylene	60	(50 - 104)			SW846 8310
	63	(50 - 104)	5.8	(0-35)	SW846 8310
Benzo(k)fluoranthene	61	(29 - 116)			SW846 8310
	63	(29 - 116)	3.7	(0-35)	SW846 8310
Chrysene	0.0 a	(10 - 173)			SW846 8310
	0.0 a	(10 - 173)	0.0	(0-35)	SW846 8310
Dibenz(a,h)anthracene	61	(52 - 110)			SW846 8310
	64	(52 - 110)	5.0	(0-35)	SW846 8310
Fluoranthene	64	(16 - 131)			SW846 8310
	69	(16 - 131)	8.0	(0-35)	SW846 8310
Fluorene	62	(40 - 108)			SW846 8310
	63	(40 - 108)	0.72	(0-35)	SW846 8310
Indeno(1,2,3-cd)pyrene	63	(29 - 117)			SW846 8310
	65	(29 - 117)	2.2	(0-35)	SW846 8310
Naphthalene	73	(20 - 115)			SW846 8310
	72	(20 - 115)	1.2	(0-35)	SW846 8310
Phenanthrene	62	(50 - 103)			SW846 8310
	66	(50 - 103)	6.2	(0-35)	SW846 8310
Pyrene	60	(48 - 100)			SW846 8310
	66	(48 - 100)	9.4	(0-35)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	51	(44 - 140)
	52	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G190309 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 13:35 **Date Received..:** 07/17/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G180113-004 **Prep Batch #...:** 0203211							
Arsenic	102	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10M
	99	(75 - 125)	2.8	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10N
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Barium	116	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10P
	107	(75 - 125)	6.3	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10Q
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Cadmium	95	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10R
	92	(75 - 125)	2.9	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10T
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Chromium	182 N	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10U
	188 N	(75 - 125)	2.2	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10V
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Lead	100	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10W
	100	(75 - 125)	0.78	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10X
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Selenium	97	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J110
	93	(75 - 125)	3.3	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J111
		Dilution Factor: 1					
		Analysis Time..: 10:40					
Silver	82	(75 - 125)			SW846 6010B	07/21-07/23/00	DGD5J10K
	79	(75 - 125)	3.6	(0-20)	SW846 6010B	07/21-07/23/00	DGD5J10L
		Dilution Factor: 1					
		Analysis Time..: 10:40					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G190309 **Work Order #...:** DGEDD105-MS **Matrix.....:** SOLID
MS Lot-Sample #: F0G180228-001 DGEDD106-MSD
Date Sampled...: 07/12/00 09:25 **Date Received..:** 07/17/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207361 **Analysis Time..:** 06:36
Dilution Factor: 1 **% Moisture.....:** 1.2

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**104**	**(10 - 200)**			**SW846 8082**
	103	**(10 - 200)**	**0.98**	**(0-20)**	**SW846 8082**
Aroclor 1260	**125**	**(10 - 183)**			**SW846 8082**
	114	**(10 - 183)**	**9.2**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	109	(10 - 199)
	110	(10 - 199)
Decachlorobiphenyl	102	(10 - 200)
	106	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G190309 **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G190309-019 **Prep Batch #...:** 0206351							
Arsenic	102	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10Q
	102	(75 - 125)	0.60	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10R
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Barium	106	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10T
	106	(75 - 125)	0.35	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10U
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Cadmium	101	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10L
	101	(75 - 125)	0.15	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10M
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Chromium	99	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10N
	100	(75 - 125)	0.63	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10P
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Lead	99	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10V
	99	(75 - 125)	0.55	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10W
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Selenium	100	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10X
	100	(75 - 125)	0.28	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK110
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Silver	103	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10J
	102	(75 - 125)	0.70	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10K
		Dilution Factor: 1					
		Analysis Time..: 17:31					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G190309 **Matrix.....:** WATER
Date Sampled...: 07/18/00 14:41 **Date Received..:** 07/20/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G210255-001 **Prep Batch #...:** 0206325							
Mercury	92	(75 - 125)			SW846 7470A	07/25/00	DGLQL102
	92	(75 - 125)	0.98	(0-20)	SW846 7470A	07/25/00	DGLQL103

Dilution Factor: 1
Analysis Time..: 18:52

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G190309 **Matrix.....:** SOLID
Date Sampled...: 07/06/00 09:20 **Date Received..:** 07/10/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G110200-001 **Prep Batch #...:** 0203235							
Mercury	94	(75 - 125)			SW846 7471A	07/21-07/24/00	DG1G110E
	93	(75 - 125)	1.2	(0-20)	SW846 7471A	07/21-07/24/00	DG1G110F

Dilution Factor: 1
Analysis Time..: 00:00

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F0G190309 **Work Order #...:** DGFJA-SMP DGFJA-DUP **Matrix.....:** SOLID

Date Sampled...: 07/14/00 11:00 **Date Received..:** 07/19/00

% Moisture.....: 3.4

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F0G190196-001	
	3.4	3.4	%	0.88	(0-0.0)	MCAWW 160.3 MOD	07/20-07/21/00	0202443

Dilution Factor: 1

Analysis Time..: 00:00

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F0G190309 **Work Order #...:** DGGHG-SMP DGGHG-DUP **Matrix.....:** SOLID

Date Sampled...: 07/18/00 09:00 **Date Received..:** 07/19/00

% Moisture.....: 23

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
						SD Lot-Sample #:	F0G190309-009	
Percent Moisture	22.9	22.7	%	1.2	(0-0.0)	MCAWW 160.3 MOD	07/20-07/21/00	0202478

Dilution Factor: 1

Analysis Time..: 00:00

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/20/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 10:31:38
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G190309-001
PROJECT #: WORK ORDER: DGGFE
REPORT TO: Doug Marion RECEIVING DATE: 7/19/00
P.O. NUMBER: SAMPLING DATE: 7/19/00
SITE: Boeing ANALYTICAL DUE DATE: 7/26/00N
AMOUNT REC"D: 2X250G,120G REPORT DUE DATE: 7/29/00
STORAGE LOC: T2E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:35
MATRIX: SOLID RECEIVING TIME: 16:38
SAMPLE ID: B27E2-12
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/15/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGFE Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/16/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGFE Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/26/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGFE-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/02/00	9/11/00
SONICATION - Low Level				
(A-13-SG-01) DGGFE-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/19/00	8/02/00	9/11/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGFE-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGFE-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/02/00	9/11/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGFE-1-0E Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGFE-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G,120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B27S2-8 - BOTTLE ID.
CHAIN SAYS -9
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-002
WORK ORDER: DGGFJ
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 13:02
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
✓ Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/15/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGFJ Protocol: B QC Program: STANDARD TEST SET				
✓ Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/16/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGFJ Protocol: B QC Program: STANDARD TEST SET				
✓ Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/26/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGFJ-1-09 Protocol: B QC Program: STANDARD TEST SET				
✓ Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/02/00	9/11/00
SONICATION - Low Level				
(A-13-SG-01) DGGFJ-1-0A Protocol: B QC Program: STANDARD TEST SET				
✓ PCBs (8082)	06	7/19/00	8/02/00	9/11/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGFJ-1-0C Protocol: B QC Program: STANDARD TEST SET				
✓ Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGFJ-1-0D Protocol: B QC Program: STANDARD TEST SET				
✓ Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/02/00	9/11/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGFJ-1-0E Protocol: B QC Program: STANDARD TEST SET				
✓ Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGFJ-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/20/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 10:31:38
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G190309-003
PROJECT #: WORK ORDER: DGGFM
REPORT TO: Doug Marion RECEIVING DATE: 7/19/00
P.O. NUMBER: SAMPLING DATE: 7/19/00
SITE: Boeing ANALYTICAL DUE DATE: 7/26/00N
AMOUNT REC"D: 2X250G,120G REPORT DUE DATE: 7/29/00
STORAGE LOC: T2E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 14:02
MATRIX: SOLID RECEIVING TIME: 16:38
SAMPLE ID: B27S3-22
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
✓Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/15/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGFM Protocol: B QC Program: STANDARD TEST SET				
✓Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/16/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGFM Protocol: B QC Program: STANDARD TEST SET				
✓Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/26/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGFM-1-09 Protocol: B QC Program: STANDARD TEST SET				
✓Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/02/00	9/11/00
SONICATION - Low Level				
(A-13-SG-01) DGGFM-1-0A Protocol: B QC Program: STANDARD TEST SET				
✓PCBs (8082)	06	7/19/00	8/02/00	9/11/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGFM-1-0C Protocol: B QC Program: STANDARD TEST SET				
✓Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGFM-1-0D Protocol: B QC Program: STANDARD TEST SET				
✓ Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/02/00	9/11/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGFM-1-0E Protocol: B QC Program: STANDARD TEST SET				
✓Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGFM-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300
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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G,120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B21S1-12
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-004
WORK ORDER: DGGFQ
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 14:35 15:35
RECEIVING TIME: ~~16:38~~
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/15/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGFQ Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/16/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-09-01) DGGFQ Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/26/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGFQ-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/02/00	9/11/00
SONICATION - Low Level				
(A-13-SG-01) DGGFQ-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/19/00	8/02/00	9/11/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGFQ-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGFQ-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/02/00	9/11/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGFQ-1-0E Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGFQ-1-0F Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G,120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B21S1-5 B27S1-5
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-005
WORK ORDER: DGGFV
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 14:32
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Soils MT6010_S AG,AS,BA,CD,CR,PB,SE (A-46-QM-01) DGGFV Protocol: B QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	1/15/01
Mercury (7471A, Cold Vapor) - Solids METALS, TOTAL (Method Exclusive) - Solids M7471_S HG (A-70-O9-01) DGGFV Protocol: B QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	8/16/00
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGGFV-1-09 Protocol: B QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	10/26/00
Hydrocarbons, Polynuclear Aromatic (HPLC SONICATION - Low Level (A-13-SG-01) DGGFV-1-0A Protocol: B QC Program: STANDARD TEST SET	06	7/19/00	8/02/00	9/11/00
PCBs (8082) SONICATION w/ACID STRIP (PCB) (A-71-QH-01) DGGFV-1-0C Protocol: B QC Program: STANDARD TEST SET	06	7/19/00	8/02/00	9/11/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGGFV-1-0D Protocol: B QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	8/02/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGGFV-1-0E Protocol: B QC Program: STANDARD TEST SET	06	7/19/00	8/02/00	9/11/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGGFV-1-0F Protocol: B QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	8/02/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 3X40ML
STORAGE LOC: V6H
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: TRIP BLANK
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-006
WORK ORDER: DGGG7
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 16:00
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/02/00

PURGE AND TRAP - 25 mL purge (Waters)
STL: VOA CLP 3/90
(I-25-QK-01) DGGG7-1-01 Protocol: A QC Program: STANDARD TEST SET

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X120G,250G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-5-12
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-007
WORK ORDER: DGGGF
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/18/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 13:10
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/14/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGGF Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/15/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGGF Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/25/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGGF-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/01/00	9/10/00
SONICATION - Low Level				
(A-13-SG-01) DGGGF-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/19/00	8/01/00	9/10/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGGF-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/01/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGGF-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/01/00	9/10/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGGF-1-0E Protocol: B QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/19/00	0/00/00	8/01/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGGGF-1-0F Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X120G,250G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-5-12
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-007
WORK ORDER: DGGGF
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/18/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 13:10
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
√ Cyanide, Total tomated)	06	7/19/00	0/00/00	8/01/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGGGF-1-0G Protocol: B QC Program: STANDARD TEST SET				
√ Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/01/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGGF-1-0H Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/20/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 10:31:38
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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G190309-008
PROJECT #: WORK ORDER: DGGHA
REPORT TO: Doug Marion RECEIVING DATE: 7/19/00
P.O. NUMBER: SAMPLING DATE: 7/18/00
SITE: Boeing ANALYTICAL DUE DATE: 7/26/00N
AMOUNT REC"D: 2X120G,250G REPORT DUE DATE: 7/29/00
STORAGE LOC: T2E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 9:30
MATRIX: SOLID RECEIVING TIME: 16:38
SAMPLE ID: MW-4-16
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/14/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGHA Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/15/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGHA Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/25/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGHA-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/01/00	9/10/00
SONICATION - Low Level				
(A-13-SG-01) DGGHA-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/19/00	8/01/00	9/10/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGHA-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/01/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGHA-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/01/00	9/10/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGHA-1-0E Protocol: B QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/19/00	0/00/00	8/01/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGGHA-1-0F Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X120G,250G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-4-16
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-008
WORK ORDER: DGGHA
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/18/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 9:30
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Cyanide, Total tomated)	06	7/19/00	0/00/00	8/01/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGGHA-1-0G Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/01/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGHA-1-0H Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-4-2
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-009
WORK ORDER: DGGHG
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/18/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 9:00
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/20/00	0/00/00	1/14/01
PREP RC-0003, SEP RC-0020, CT SL-13021				
(A-FS-Y9-01) DGGHG-1-03 Protocol: D QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/25/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGHG-1-02 Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-5-2
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-010
WORK ORDER: DGGHL
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/18/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 12:45
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/20/00	0/00/00	1/14/01
PREP RC-0003, SEP RC-0020, CT SL-13021				
(A-FS-Y9-01) DGGHL-1-03 Protocol: D QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/25/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGHL-1-02 Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-8-2
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-011
WORK ORDER: DGGHQ
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/16/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 14:25
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/23/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGHQ-1-02 Protocol: B QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/20/00	0/00/00	1/12/01
PREP RC-0003, SEP RC-0020, CT SL-13021				
(A-FS-Y9-01) DGGHQ-1-03 Protocol: D QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/20/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 10:31:38
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G190309-012
PROJECT #: WORK ORDER: DGGHR
REPORT TO: Doug Marion RECEIVING DATE: 7/19/00
P.O. NUMBER: SAMPLING DATE: 7/18/00
SITE: Boeing ANALYTICAL DUE DATE: 7/26/00N
AMOUNT REC"D: 2X120G,250G REPORT DUE DATE: 7/29/00
STORAGE LOC: T2E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 15:00
MATRIX: SOLID RECEIVING TIME: 16:38
SAMPLE ID: MW-8-14
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/14/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGHR Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/15/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGHR Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/25/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGHR-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/01/00	9/10/00
SONICATION - Low Level				
(A-13-SG-01) DGGHR-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/19/00	8/01/00	9/10/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGHR-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/01/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGHR-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/01/00	9/10/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGHR-1-0E Protocol: B QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/19/00	0/00/00	8/01/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGGHR-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/20/00
Page 2 CLIENT ANALYSIS SUMMARY Time: 10:31:38
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G190309-012
PROJECT #: WORK ORDER: DGGHR
REPORT TO: Doug Marion RECEIVING DATE: 7/19/00
P.O. NUMBER: SAMPLING DATE: 7/18/00
SITE: Boeing ANALYTICAL DUE DATE: 7/26/00N
AMOUNT REC"D: 2X120G,250G REPORT DUE DATE: 7/29/00
STORAGE LOC: T2E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 15:00
MATRIX: SOLID RECEIVING TIME: 16:38
SAMPLE ID: MW-8-14
QC PACKAGE: CLP SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
✓Cyanide, Total tomated)	06	7/19/00	0/00/00	8/01/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGGHR-1-0G Protocol: B QC Program: STANDARD TEST SET				
✓ Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/01/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGHR-1-0H Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-6-2
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-013
WORK ORDER: DGGHT
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 9:15
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/26/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGHT-1-01 Protocol: B QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/20/00	0/00/00	1/15/01
PREP RC-0003, SEP RC-0020, CT SL-13021				
(A-FS-Y9-01) DGGHT-1-02 Protocol: D QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X120G,250G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-6-13
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-014
WORK ORDER: DGGHV
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 9:55
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
✓Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/15/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGHV Protocol: B QC Program: STANDARD TEST SET				
✓Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/16/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGHV Protocol: B QC Program: STANDARD TEST SET				
✓Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/26/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGHV-1-09 Protocol: B QC Program: STANDARD TEST SET				
✓Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/02/00	9/11/00
SONICATION - Low Level				
(A-13-SG-01) DGGHV-1-0A Protocol: B QC Program: STANDARD TEST SET				
✓PCBs (8082)	06	7/19/00	8/02/00	9/11/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGHV-1-0C Protocol: B QC Program: STANDARD TEST SET				
✓Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGHV-1-0D Protocol: B QC Program: STANDARD TEST SET				
✓Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/02/00	9/11/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGHV-1-0E Protocol: B QC Program: STANDARD TEST SET				
✓Reactive Cyanide 3)	06	7/19/00	0/00/00	8/02/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGGHV-1-0F Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X120G,250G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-6-13
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-014
WORK ORDER: DGGHV
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 9:55
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
✓Cyanide, Total tomated)	06	7/19/00	0/00/00	8/02/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGGHV-1-0G Protocol: B QC Program: STANDARD TEST SET				
✓ Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGHV-1-0H Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX:
SAMPLE ID: MW-7-2
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-015
WORK ORDER: DGGHW
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 12:00
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE

HOLD

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X120G,250G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-7-7
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-016
WORK ORDER: DGGHX
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 13:05
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/15/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGHX Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/16/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGHX Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/26/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGHX-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/02/00	9/11/00
SONICATION - Low Level				
(A-13-SG-01) DGGHX-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/19/00	8/02/00	9/11/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGHX-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGHX-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/02/00	9/11/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGHX-1-0E Protocol: B QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/19/00	0/00/00	8/02/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGGHX-1-0F Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X120G,250G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-7-7
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-016
WORK ORDER: DGGHX
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 13:05
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Cyanide, Total tomated)	06	7/19/00	0/00/00	8/02/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGGHX-1-0G Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGHX-1-0H Protocol: B QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/20/00	0/00/00	1/15/01
PREP RC-0003, SEP RC-0020, CT SL-13021				
(A-FS-Y9-01) DGGHX-1-0J Protocol: D QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX:
SAMPLE ID: MW-3-2
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-017
WORK ORDER: DGGJ1
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 15:12
RECEIVING TIME: 16:38

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hold				

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SEVERN TRENT LABORATORIES, INC.
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 16:36:30
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X120G,250G
STORAGE LOC: T2E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: MW-3-12
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-018
WORK ORDER: DGGJ2
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 15:35
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/19/00	0/00/00	1/15/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGGJ2 Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/19/00	0/00/00	8/16/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGGJ2 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/19/00	0/00/00	10/26/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGGJ2-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/19/00	8/02/00	9/11/00
SONICATION - Low Level				
(A-13-SG-01) DGGJ2-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/19/00	8/02/00	9/11/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGGJ2-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGGJ2-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/19/00	8/02/00	9/11/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGGJ2-1-0E Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGGJ2-1-0F Protocol: B QC Program: STANDARD TEST SET				

GROSS A/B BY GFPC EPA 900.0 MOD 06 7/20/00 0/00/00 1/15/01
PREP RC-0003, SEP RC-0020, CT SL-13021
(A-FS-Y9-01) DGGJ2-1-0G Protocol: D QC Program: STANDARD TEST SET

Reactive Cyanide 3) 06 7/20/00 0/00/00 8/02/00
DISTILLATION, MACRO - Acid
(A-08-GI-01) DGGJ2-1-0H Protocol: B QC Program: STANDARD TEST SET

Cyanide, Total tomated) 06 7/20/00 0/00/00 8/02/00
DISTILLATION, MICRO/MIDI - Acid
(A-06-QP-01) DGGJ2-1-0J Protocol: B QC Program: STANDARD TEST SET

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 3XLG,40ML,500P,250P
STORAGE LOC: T2E,V6H
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: MW-7-RINSATE
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-019
WORK ORDER: DGGLK
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 13:55
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGGLK-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	8/02/00
PCBs (8082) LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal STL: Aroclors (I-60-QH-01) DGGLK-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/19/00	7/26/00	9/04/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGGLK-1-03 Protocol: A QC Program: STANDARD TEST SET	06	7/19/00	7/26/00	9/04/00
Cyanide, Total tomated) DISTILLATION, MICRO/MIDI - Acid (I-06-QP-01) DGGLK-1-04 Protocol: A QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	8/02/00
Reactive Cyanide 3) DISTILLATION, MACRO - Acid (I-08-GI-01) DGGLK-1-05 Protocol: A QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	8/02/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGGLK Protocol: A QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	1/15/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGGLK Protocol: A QC Program: STANDARD TEST SET	06	7/19/00	0/00/00	8/16/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGGLK-1-0F Protocol: A QC Program: STANDARD TEST SET	06	7/19/00	7/26/00	9/04/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/20/00
Time: 10:31:38
User Id.: QPGMR

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 3XLG,40ML,500P,250P
STORAGE LOC: T2E,V6H
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: MW-7-RINSATE
QC PACKAGE: CLP
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G190309-019
WORK ORDER: DGGLK
RECEIVING DATE: 7/19/00
SAMPLING DATE: 7/19/00
ANALYTICAL DUE DATE: 7/26/00N
REPORT DUE DATE: 7/29/00
PRIORITY: 07
SAMPLING TIME: 13:55
RECEIVING TIME: 16:38
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/19/00	0/00/00	8/02/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGGLK-1-0G Protocol: A QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/20/00	0/00/00	1/15/01
PREP & SEP RC-0020, CT SL-13021				
(I-FR-Y9-01) DGGLK-1-0H Protocol: D QC Program: STANDARD TEST SET				

Chain of Custody Record

Quanterra

QUA-4124

Client	Project Manager	Date	Chain Of Custody Number
ESE	DOUG MARION	7/19/00	47049

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of
	(314) 209-5900		

City	State	Zip Code	Site Contact

Project Name	Carrier/Waybill Number
BOEING	

Contract/Purchase Order/Quote No.

	Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOC	PAH	TPH	TOTAL RCRA METAL	PCB	CYANIDE TOTAL	CYANIDE REACTIVE			RAD		
7	MW-5-12	7/18/00	1310	SOIL	250 G	2x120G			✓	X	X	X	X	X	X	X					HOLD RAD
8	MW-4-16	7/18/00	930	SOIL	↓				✓	X	X	X	X	X	X	X					HOLD RAD
9	MW-4-2	7/18/00	900	SOIL	120G				✓										X		
10	MW-5-2	7/18/00	1245	SOIL	↓				✓										X		
11	MW-8-2	7/18/00	1425	SOIL	↓				✓										X		
12	MW-8-14	7/18/00	1500	SOIL	↓				✓	X	X	X	X	X	X	X					HOLD RAD
13	MW-6-2	7/19/00	915	SOIL	250 G	2x120			✓										X		
14	MW-6-13	7/19/00	955	SOIL	120				✓	X	X	X	X	X	X	X					HOLD RAD
15	MW-7-2	7/19/00	1200	SOIL	250	2x120			✓												HOLD RAD
16	MW-7-7	7/19/00	1305	SOIL	120				✓	X	X	X	X	X	X	X			X		
17	MW-3-2	7/19/00	1512	SOIL	250	2x120															HOLD RAD
18	MW-3-12	7/19/00	1535	SOIL	120					X	X	X	X	X	X	X			X		
					250	2x120															
19	MW-7-RINSATE	7/19/00	1355	WATER	40ml 3x LG 500P 250P					X	X	X	X	X	X	X			X		

Special Instructions

Possible Hazard Identification	Sample Disposal
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Turn Around Time Required	QC Level	Project Specific (Specify)
☐ Normal ☐ Rush	☐ I. ☐ II. ☐ III.	

	Date	Time		Date	Time
1. Relinquished By [signature]	7/19/00	1619	1. Received By [signature]	7/19/00	1619
2. Relinquished By [signature]	7/19/00	1638	2. Received By [signature] STL	07.19.00	1638
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

STL ST. LOUIS

LOT# F0G190309

179

Chain of Custody Record

Quanterra

QUA-4124

Client: ESE	Project Manager: Doug Marian / Dennis Brinkley	Date: 7/19/00	Chain Of Custody Number: 47088
Address: 3199 Riverport Tech Center	Telephone Number (Area Code)/Fax Number: 314-209-5900	Lab Number:	Page ____ of ____
City: Md. Hts. State: MO Zip Code:	Site Contact: Chris Tedder		
Project Name: Boeing	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

	Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOC	TPH	PAH	Metals	PCBs
1	B27E2-12	7-19-00	1035	Soil	4 oz	4 oz G	1	—		X				
	B27E2-12		1035		18 oz	9 oz G	2	—			X	X	X	X
2	B27S2-9		1302		4 oz	4 oz G	1	—		X				
	B27S2-9		1302		18 oz	9 oz G	2	—			X	X	X	X
3	B27S3-22		1402		4 oz	4 oz G	1	—		X				
	B27S3-22		1402		18 oz	9 oz G	2	—			X	X	X	X
4	B27S1-5		1432		4 oz	4 oz G	1	—		X				
	B27S1-5		1432		18 oz	9 oz G	2	—			X	X	X	X
5	B21S1-12		1535		4 oz	4 oz G	1	—		X				
	B21S1-12		1535		18 oz	9 oz G	2	—			X	X	X	X
6	Trip Blank	7-19-00	1600	H_2O	2x40	40 ml	2	HCl	X3	X				

B27S2-8 2x2506 1x1206 Didnt Receive B22S2-9

Special Instructions: Talk to John Powell about correct methods / turnaround

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months

Turn Around Time Required: [ ] Normal [ ] Rush

QC Level: [ ] I. [ ] II. [ ] III.

Project Specific (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/19/00	1638	1. Received By: [signature] STL	07.19.00	1638
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

STL ST. LOUIS

LOT# F0G190309

180

RUSH REQUEST CONFIRMATION

This is to confirm the lab's commitment to the turnaround times, for the samples, tests and dates, stated above. Changes in dates, tests or samples will require reconfirmation of the lab's commitment.

Quote Number:	***37419***	***Request Date/Proj Mgr:*** *7/17/00, Mark Loeb*

Client:	*Environmental Science & Engineering, Inc.*		
Client Contact:	*Doug Marion*	***Project:***	*Boeing*
Fax	*(314)209-5929*	***Tele:***	*(314) 209-5900*

Analysis	*Matrix*	*No of Samples*	*Price per Test*	*Est. Date to Lab*	*Calendar Days TAT Requested*	*Fax Due Date*
Gross Alpha/Beta	Soil	4	per contract	07/17/00	7	07/24/00
VOC 8260	Soil	2	per contract	07/17/00	7	07/24/00
TPH 8015 Gas and Diesel	Soil	2	per contract	07/17/00	7	07/24/00
PCB 8082	Soil	2	per contract	07/17/00	7	07/24/00
PAH 8310	Soil	2	per contract	07/17/00	7	07/24/00
RCRA Metals	Soil	2	per contract	07/17/00	7	07/24/00
Cyanide / Total and Reactives.	Soil	2	per contract	07/17/00	7	07/24/00

Department Approvals:

Org Prep	**Wet**
GC	**Metals**
MS Semi	**Rad**
VOA	**Lab Manager**
Reporting	

Committed to *Your* Success

Lot No.: F0G190309

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: ESE

Quote No: 37419

Shipper/No: Client

Date: 7/19/00 Time: 1638

Initiated by: SW

RFA/COC Numbers: ~~47049~~, SW
47049, 47068, ~~47089~~

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below) _____

☐ **No variances were noted during sample receipt.**

☐ **Cooler Temperature Upon Receipt in °C:** 15°, 10°

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: Samples were freshly taken
ice still frozen
Didn't Receive B2752-9, but did Recive B2752-8
Thats not on COC, 3x40ml not 2xml

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [signature] Date: 7/19/00

Project Management Review: [signature] Date: 7/20/00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

ANALYTICAL REPORT

REVISED

Boeing

Lot #: F0G190315

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

August 16, 2000

Case Narrative
LOT NUMBER: **F0G190315**
REVISED

This report contains the analytical results for the two samples received under chain of custody by STL St. Louis on July 19, 2000. These samples are associated with your Boeing project.

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

Observations/Nonconformances

Nonconformance F01004

Affected Samples:
1: B20E1-6 2: B20E2-8

Affected Methods:
OA-2

Case Narrative Details:
Due to high concentrations of analytes, the surrogates were diluted out in the samples listed.

Corrective Action:
None.

Nonconformance F01125
Affected Samples:
1: B20E1-6 2: B20E2-8

Affected Methods:
OA-1 BTEX

Case Narrative Details:
For Sample Lot #F0G190315, the results for soil samples -001 and -002 (ID #s B20E2-8 and B20E1-6) show identical (BTEX) OA-1 results for both samples. The report indicates both samples were run at 17:28 hrs on 7/24/00.

Corrective Action:
The laboratory needs to verify whether other results are available for one of the samples.

Results of this verification did prove that results from the same analytical run were inadvertently uploaded into two different files.

METHODS SUMMARY

F0G190315

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Determination of Volatile Petroleum Hydrocarbon	OA-1 OA-1	
Extractable Petroleum Products	OA-2 OA-2	
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Volatile Organics OA-1 (Iowa)	OA-1 OA-1	

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

OA-1 "Method for Determination of Volatile Petroleum Hydrocarbons (Gasoline)", Revision July 1, 1991, University Hygienic Laboratory, Iowa City, Iowa.

OA-2 "Extractable Petroleum Products (and Related Low Volatility Organic Compounds)", Revision July 1, 1991 University Hygienic Laboratory, Iowa City, Iowa.

SAMPLE SUMMARY

F0G190315

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGGLP	001	B20E1-6	07/19/00	11:05
DGGLV	002	B20E2-8	07/19/00	11:35

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B20E1-6

GC Volatiles

Lot-Sample #...: F0G190315-001 **Work Order #...:** DGGLP105 **Matrix.....:** SOLID
Date Sampled...: 07/19/00 11:05 **Date Received..:** 07/19/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0213586 **Analysis Time..:** 17:28
Dilution Factor: 125
% Moisture.....: 23 **Method.....:** OA-1 OA-1

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	160	ug/kg
Ethylbenzene	**3200**	**160**	**ug/kg**
m-Xylene & p-Xylene	ND	160	ug/kg
o-Xylene	**1200**	**160**	**ug/kg**
Toluene	ND	160	ug/kg
Xylenes (total)	**1200**	**330**	**ug/kg**
MTBE	ND	160	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	115	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B20E1-6

GC Semivolatiles

Lot-Sample #...:	F0G190315-001	**Work Order #...:**	DGGLP107	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 11:05	**Date Received..:**	07/19/00		
Prep Date.....:	07/25/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0214103	**Analysis Time..:**	09:28		
Dilution Factor:	10				
% Moisture.....:	23	**Method.....:**	OA-2 OA-2		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**170**	**39**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	0.0 DIL	(10 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B20E1-6

GC Semivolatiles

Lot-Sample #...: F0G190315-001 **Work Order #...:** DGGLP106 **Matrix.....:** SOLID
Date Sampled...: 07/19/00 11:05 **Date Received..:** 07/19/00
Prep Date.....: 07/20/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0213568 **Analysis Time..:** 15:01
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** OA-1 OA-1

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	97	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B20E2-8

GC Volatiles

Lot-Sample #...: F0G190315-002 **Work Order #...:** DGGLV105 **Matrix.....:** SOLID
Date Sampled...: 07/19/00 11:35 **Date Received..:** 07/19/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0213587 **Analysis Time..:** 16:52
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** OA-1 OA-1

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.3	ug/kg
Ethylbenzene	ND	1.3	ug/kg
m-Xylene & p-Xylene	ND	1.3	ug/kg
o-Xylene	ND	1.3	ug/kg
Toluene	ND	1.3	ug/kg
Xylenes (total)	ND	2.6	ug/kg
MTBE	ND	1.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	106	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B20E2-8

GC Semivolatiles

Lot-Sample #...:	F0G190315-002	**Work Order #...:**	DGGLV107	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 11:35	**Date Received..:**	07/19/00		
Prep Date.....:	07/25/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0214103	**Analysis Time..:**	09:54		
Dilution Factor:	10				
% Moisture.....:	23	**Method.....:**	OA-2 OA-2		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**490**	**39**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	0.0 DIL	(10 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B20E2-8

GC Semivolatiles

Lot-Sample #...:	F0G190315-002	**Work Order #...:**	DGGLV106	**Matrix.....:**	SOLID
Date Sampled...:	07/19/00 11:35	**Date Received..:**	07/19/00		
Prep Date.....:	07/20/00	**Analysis Date..:**	07/20/00		
Prep Batch #...:	0213570	**Analysis Time..:**	18:35		
Dilution Factor:	125				
% Moisture.....:	23	**Method.....:**	OA-1 OA-1		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**320**	**16**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	96	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B20E1-6

General Chemistry

Lot-Sample #...: F0G190315-001 **Work Order #...:** DGGLP **Matrix.....:** SOLID
Date Sampled...: 07/19/00 11:05 **Date Received..:** 07/19/00
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**23.5**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/21-07/24/00**	**0203204**

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B20E2-8

General Chemistry

Lot-Sample #...: F0G190315-002 **Work Order #...:** DGGLV **Matrix.....:** SOLID
Date Sampled...: 07/19/00 11:35 **Date Received..:** 07/19/00
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**22.9**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/21-07/24/00**	**0203204**

Dilution Factor: 1 Analysis Time..: 00:00

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G190315
MB Lot-Sample #: F0G310000-570
Analysis Date..: 07/20/00
Dilution Factor: 125

Work Order #...: DH4HJ101
Prep Date.....: 07/20/00
Prep Batch #...: 0213570

Matrix.....: SOLID
Analysis Time..: 12:54

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	12	mg/kg	OA-1 OA-1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G190315
MB Lot-Sample #: F0G310000-568

Work Order #...: DH4H5101

Matrix.....: SOLID

Prep Date.....: 07/20/00
Prep Batch #...: 0213568

Analysis Time..: 12:54

Analysis Date..: 07/20/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	OA-1 OA-1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G190315
MB Lot-Sample #: F0G310000-586
Work Order #...: DH4JL101
Matrix.....: SOLID
Prep Date.....: 07/24/00
Analysis Time..: 12:30
Analysis Date..: 07/24/00
Prep Batch #...: 0213586
Dilution Factor: 125

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	120	ug/kg	OA-1 OA-1
Ethylbenzene	ND	120	ug/kg	OA-1 OA-1
m-Xylene & p-Xylene	ND	120	ug/kg	OA-1 OA-1
o-Xylene	ND	120	ug/kg	OA-1 OA-1
Toluene	ND	120	ug/kg	OA-1 OA-1
Xylenes (total)	ND	250	ug/kg	OA-1 OA-1
MTBE	ND	120	ug/kg	OA-1 OA-1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	117	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G190315
MB Lot-Sample #: F0G310000-587

Work Order #...: DH4JM101

Matrix.....: SOLID

Prep Date.....: 07/24/00
Prep Batch #...: 0213587

Analysis Time..: 12:30

Analysis Date..: 07/24/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/kg	OA-1 OA-1
Ethylbenzene	ND	1.0	ug/kg	OA-1 OA-1
m-Xylene & p-Xylene	ND	1.0	ug/kg	OA-1 OA-1
o-Xylene	ND	1.0	ug/kg	OA-1 OA-1
Toluene	ND	1.0	ug/kg	OA-1 OA-1
Xylenes (total)	ND	2.0	ug/kg	OA-1 OA-1
MTBE	ND	1.0	ug/kg	OA-1 OA-1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	116	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G190315
MB Lot-Sample #: F0H010000-103
Work Order #...: DH4NG101
Matrix.....: SOLID
Prep Date.....: 07/25/00
Analysis Time..: 20:04
Analysis Date..: 07/27/00
Prep Batch #...: 0214103
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	3.0	mg/kg	OA-2 OA-2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	70	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G190315 **Work Order #...:** DH4HJ102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G310000-570
Prep Date.....: 07/20/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0213570 **Analysis Time..:** 13:29
Dilution Factor: 125

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**124**	**(50 - 150)**	**OA-1 OA-1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	116	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G190315 **Work Order #...:** DH4H5102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G310000-568
Prep Date.....: 07/20/00 **Analysis Date..:** 07/20/00
Prep Batch #...: 0213568 **Analysis Time..:** 13:29
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**124**	**(50 - 150)**	**OA-1 OA-1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	116	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G190315 **Work Order #...:** DH4JL102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G310000-586
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0213586 **Analysis Time..:** 13:05
Dilution Factor: 125

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**112**	**(50 - 150)**	**OA-1 OA-1**
Ethylbenzene	**111**	**(50 - 150)**	**OA-1 OA-1**
m-Xylene & p-Xylene	**112**	**(50 - 150)**	**OA-1 OA-1**
o-Xylene	**111**	**(50 - 150)**	**OA-1 OA-1**
Toluene	**107**	**(50 - 150)**	**OA-1 OA-1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	117	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G190315 **Work Order #...:** DH4JM102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G310000-587
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0213587 **Analysis Time..:** 13:05
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**112**	**(50 - 150)**	**OA-1 OA-1**
Ethylbenzene	**111**	**(50 - 150)**	**OA-1 OA-1**
m-Xylene & p-Xylene	**112**	**(50 - 150)**	**OA-1 OA-1**
o-Xylene	**111**	**(50 - 150)**	**OA-1 OA-1**
Toluene	**107**	**(50 - 150)**	**OA-1 OA-1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	117	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G190315 **Work Order #...:** DH4NG102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0H010000-103
Prep Date.....: 07/25/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0214103 **Analysis Time..:** 20:31
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**75**	**(10 - 164)**	**OA-2 OA-2**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	86	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F0G190315 **Work Order #...:** DGEF3-SMP DGEF3-DUP **Matrix.....:** SOLID

Date Sampled...: 07/17/00 09:30 **Date Received..:** 07/18/00

% Moisture.....: 8.1

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F0G180238-001	
	8.1	8.2	%	1.1	(0-0.0)	MCAWW 160.3 MOD	07/21-07/24/00	0203204

Dilution Factor: 1

Analysis Time..: 00:00

ANALYTICAL REPORT

Boeing

Lot #: F0G220120

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

August 1, 2000

METHODS SUMMARY

F0G220120

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 8015 Mod.
Gross Alpha/Beta by GFPC Th230/Sr90-Y90 cal	DOE RP-710 MOD	
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3520
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 8082
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

DOE "DOE METHODS FOR EVALUATING ENVIRONMENTAL AND WASTE MANAGEMENT SAMPLES" OCTOBER 1994 US DEPARTMENT OF ENERGY

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G220120

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGMW9	001	B27S2	07/20/00	08:30
DGMWH	002	B27E1-9	07/20/00	10:20
DGMWX	003	B29E1-17	07/20/00	
DGMX3	004	EPE2-2	07/20/00	13:50
DGMXJ	005	EPE1-2	07/20/00	14:30
DGMXN	006	B27S1	07/20/00	15:15
DGMXX	007	B21S1	07/20/00	15:45
DGN02	008	B29E1	07/20/00	16:00
DGN05	009	TRIP BLANK	07/20/00	16:00
DGN06	010	B27E2W	07/20/00	14:10
DGN09	011	B27S3W	07/20/00	15:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3W

GC Volatiles

Lot-Sample #...: F0G220120-011 **Work Order #...:** DGN0910E **Matrix.....:** WATER
Date Sampled...: 07/20/00 15:45 **Date Received..:** 07/21/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0210429 **Analysis Time..:** 03:49
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	83	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3W

GC Semivolatiles

Lot-Sample #...: F0G220120-011 **Work Order #...:** DGN09102 **Matrix.....:** WATER
Date Sampled...: 07/20/00 15:45 **Date Received..:** 07/21/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0207537 **Analysis Time..:** 22:58
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.4	ug/L
Aroclor 1221	ND	1.4	ug/L
Aroclor 1232	ND	1.4	ug/L
Aroclor 1242	ND	1.4	ug/L
Aroclor 1248	ND	1.4	ug/L
Aroclor 1254	ND	1.4	ug/L
Aroclor 1260	ND	1.4	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	56	(12 - 167)
Decachlorobiphenyl	44	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3W

GC Semivolatiles

Lot-Sample #...: F0G220120-011 **Work Order #...:** DGN0910D **Matrix.....:** WATER
Date Sampled...: 07/20/00 15:45 **Date Received..:** 07/21/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 20:27
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	65	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3W

GC/MS Volatiles

Lot-Sample #...: F0G220120-011 **Work Order #...:** DGN09101 **Matrix.....:** WATER
Date Sampled...: 07/20/00 15:45 **Date Received..:** 07/21/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0208219 **Analysis Time..:** 12:26
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	**4.4 J**	**10**	**ug/L**
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**3.4**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	86	(78 - 124)
Toluene-d8	112	(71 - 129)
Dibromofluoromethane	81	(74 - 135)
1,2-Dichloroethane-d4	81	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3W

GC/MS Volatiles

Lot-Sample #...: F0G220120-011 Work Order #...: DGN09101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3W

HPLC

Lot-Sample #...: F0G220120-011 **Work Order #...:** DGN09103 **Matrix.....:** WATER
Date Sampled...: 07/20/00 15:45 **Date Received..:** 07/21/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207538 **Analysis Time..:** 02:32
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	40	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27S3W

TOTAL Metals

Lot-Sample #...: F0G220120-011 **Matrix.....:** WATER
Date Sampled...: 07/20/00 15:45 **Date Received..:** 07/21/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206325						
Mercury	**0.091 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGN0910C**
		Dilution Factor: 1		Analysis Time..: 19:10		
Prep Batch #...: 0206351						
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGN09108
		Dilution Factor: 1		Analysis Time..: 18:35		
Arsenic	**28.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN09104**
		Dilution Factor: 1		Analysis Time..: 18:35		
Barium	**1050**	**200**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN09105**
		Dilution Factor: 1		Analysis Time..: 18:35		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGN09109
		Dilution Factor: 1		Analysis Time..: 18:35		
Chromium	**7.4 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN0910A**
		Dilution Factor: 1		Analysis Time..: 18:35		
Lead	**3.2**	**3.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN09106**
		Dilution Factor: 1		Analysis Time..: 18:35		
Selenium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGN09107
		Dilution Factor: 1		Analysis Time..: 18:35		

NOTE(S):

B Estimated result. Result is less than RL.

ANALYTICAL REPORT

Boeing

Lot #: F0G220156

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

July 31, 2000

Case Narrative
LOT NUMBER: **F0G220156**

This report contains the analytical results for the 19 samples received under chain of custody by STL St. Louis on July 22, 2000. These samples are associated with your Boeing project.

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

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Observations/Nonconformances
Nonconformance F00958

Affected Samples:
8: B27I5-W 11: B27I7-W

Affected Methods:
8260B

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead. This is for all waters in lot.

The samples listed had a pH >2.

Corrective Action:
None.

Nonconformance F00971

Affected Samples:
7: B27E1W 10: B27I1-W
16: B27I1-12

Affected Methods:
8015 MOD Volatiles

Case Narrative:
Due to matrix interference, the surrogate recoveries exceeded stated control limits for the sample(s) listed. They were reanalyzed. Results of the reanalysis confirmed the matrix interference. Results for both analyses are included in this report.

Corrective Action:
None.

Nonconformance F00979

Affected Samples:

1: B29E1W	2: B21S1W
7: B27E1W	8: B27I5-W
9: B27I8-W	10: B27I1-W
11: B27I7-W	

Affected Methods:
8015 MOD Extractables

Case Narrative Details:
A LCS/LCSD was done instead of a MS/MSD due to insufficient sample volume.

Corrective Action:
None.

Nonconformance F00980

Affected Samples:

7: B27E1W	8: B27I5-W
9: B27I8-W	10: B27I1-W
11: B27I7-W	

Affected Methods:
8082

Case Narrative Details:
A LCS/LCSD was done instead of a MS/MSD due to insufficient sample volume.

Corrective Action:
None.

Nonconformance F00981 and F00982

Affected Samples:

7: B27E1W	8: B27I5-W
9: B27I8-W	10: B27I1-W
11: B27I7-W	

Affected Methods:
8310

Case Narrative Details:
The surrogates are out low on the listed samples. The LCS had low spike recoveries for Fluorene. The LCSD associated with this QC Batch is in control. A LCS/LCSD was done instead of a MS/MSD due to insufficient sample volume. Insufficient sample volume remained for corrective action.

Nonconformance F00992

Affected Samples:
4: EPE1W

Affected Methods:
9310 MOD Gross Alpha Beta

Case Narrative Details:
The Minimum Detectable Amount (MDA) was not met due to reduction of sample aliquot used for analysis. The reduction of sample size aliquot was due to high residue mass native in the sample. The data will be reported with MDA's achieved.

Corrective Action:
None.

METHODS SUMMARY

F0G220156

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 8015 Mod.
Gross Alpha/Beta by GFPC Th230/Sr90 Y90 cal	SW846 9310 MOD	
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3520
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 8082
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G220156

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGN7K	001	B29E1W	07/21/00	14:20
DGN7M	002	B21S1W	07/21/00	14:35
DGN7P	003	B27I2-W	07/21/00	15:45
DGN7Q	004	EPE1W	07/21/00	15:05
DGN7R	005	EPE2W	07/21/00	14:45
DGN7T	006	TRIP BLANK	07/21/00	
DGN80	007	B27E1W	07/21/00	14:00
DGN82	008	B27I5-W	07/21/00	15:25
DGN84	009	B27I8-W	07/21/00	16:25
DGN85	010	B27I1-W	07/21/00	16:05
DGN86	011	B27I7-W	07/21/00	16:48
DGN88	012	B27I5-14	07/21/00	09:17
DGN8E	013	B27I3-12	07/21/00	09:40
DGN8H	014	B27I4-5	07/21/00	09:55
DGN8K	015	B27I2-11	07/21/00	10:25
DGN8L	016	B27I1-12	07/21/00	10:55
DGN8M	017	B27I8-15	07/21/00	11:40
DGN8N	018	B27I7-3	07/21/00	13:23
DGN8P	019	B27I7-14	07/21/00	13:33

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29E1W

GC Semivolatiles

Lot-Sample #...: F0G220156-001 **Work Order #...:** DGN7K101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:20 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 21:47
Dilution Factor: 1
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	77	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B21S1W

GC Semivolatiles

Lot-Sample #...: F0G220156-002 **Work Order #...:** DGN7M101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:35 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 22:14
Dilution Factor: 1
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	70	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-003 **Work Order #...:** DGN7P101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 15:45 **Date Received..:** 07/22/00
Prep Date.....: 07/27/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0210144 **Analysis Time..:** 16:00
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**180 E**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**18**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	**1.5**	**1.0**	**ug/L**
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**270 E**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	107	(78 - 124)
Toluene-d8	92	(71 - 129)
Dibromofluoromethane	108	(74 - 135)
1,2-Dichloroethane-d4	101	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-003 **Work Order #...:** DGN7P101 **Matrix.....:** WATER

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-003 **Work Order #...:** DGN7P201 **Matrix.....:** WATER
Date Sampled...: 07/21/00 15:45 **Date Received..:** 07/22/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 11:11
Dilution Factor: 20

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	20	ug/L
1,2-Dichloropropane	ND	20	ug/L
cis-1,3-Dichloropropene	ND	20	ug/L
Trichloroethene	**200 D**	**20**	**ug/L**
Dibromochloromethane	ND	20	ug/L
1,1,2-Trichloroethane	ND	20	ug/L
Benzene	ND	20	ug/L
trans-1,3-Dichloropropene	ND	20	ug/L
Bromoform	ND	20	ug/L
4-Methyl-2-pentanone	ND	100	ug/L
2-Hexanone	ND	100	ug/L
Tetrachloroethene	ND	20	ug/L
Toluene	ND	20	ug/L
Chlorobenzene	ND	20	ug/L
Ethylbenzene	ND	20	ug/L
Styrene	ND	20	ug/L
Chloromethane	ND	40	ug/L
Bromomethane	ND	40	ug/L
Vinyl chloride	**20 J,D**	**40**	**ug/L**
Chloroethane	ND	40	ug/L
Methylene chloride	**8.6 J,D,B**	**20**	**ug/L**
Acetone	ND	200	ug/L
Carbon disulfide	ND	20	ug/L
1,1-Dichloroethene	ND	20	ug/L
1,1-Dichloroethane	ND	20	ug/L
1,2-Dichloroethene (total)	**290 D**	**20**	**ug/L**
Chloroform	ND	20	ug/L
1,2-Dichloroethane	ND	20	ug/L
2-Butanone	ND	100	ug/L
1,1,1-Trichloroethane	ND	20	ug/L
Carbon tetrachloride	ND	20	ug/L
Bromodichloromethane	ND	20	ug/L
1,1,2,2-Tetrachloroethane	ND	20	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	92	(71 - 129)
Dibromofluoromethane	106	(74 - 135)
1,2-Dichloroethane-d4	90	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-003 **Work Order #...:** DGN7P201 **Matrix.....:** WATER

NOTE(S):

D Result was obtained from the analysis of a dilution.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EPE1W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G220156-004
Work Order: DGN7Q
Matrix: WATER

Date Collected: 07/21/00 1505
Date Received: 07/22/00 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/L**	**9310 MOD**			
Gross Alpha	1.8E+01	U	2.1E+01	3.4E+01	07/24/00	07/27/00	0206228	
Gross Beta	**3.7E+01**		**1.9E+01**	**2.9E+01**	**07/24/00**	**07/27/00**	**0206228**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EPE2W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G220156-005
Work Order: DGN7R
Matrix: WATER

Date Collected: 07/21/00 1445
Date Received: 07/22/00 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			pCi/L		9310 MOD			
Gross Alpha	3.2E+01		1.8E+01	2.4E+01	07/24/00	07/27/00	0206228	
Gross Beta	4.4E+01		1.6E+01	2.3E+01	07/24/00	07/27/00	0206228	

NOTE(S)

Data are incomplete without the case narrative.
MDC is determined by instrument performance only.
Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G220156-006 **Work Order #...:** DGN7T101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 **Date Received..:** 07/22/00
Prep Date.....: 07/27/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0210144 **Analysis Time..:** 15:23
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.81 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	**0.57 J**	**1.0**	**ug/L**
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	100	(78 - 124)
Toluene-d8	110	(71 - 129)
Dibromofluoromethane	95	(74 - 135)
1,2-Dichloroethane-d4	87	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G220156-006 **Work Order #...:** DGN7T101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

GC Semivolatiles

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN8010D **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:00 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 22:40
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	63	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

GC Volatiles

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN8020E **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:00 **Date Received..:** 07/22/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210429 **Analysis Time..:** 20:39
Dilution Factor: 1
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.45**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	5190 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

GC Volatiles

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN8010E **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:00 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210430 **Analysis Time..:** 20:56
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.48**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	5370 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

GC Semivolatiles

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN80102 **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:00 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0207537 **Analysis Time..:** 23:12
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	2.8	ug/L
Aroclor 1221	ND	2.8	ug/L
Aroclor 1232	ND	2.8	ug/L
Aroclor 1242	ND	2.8	ug/L
Aroclor 1248	ND	2.8	ug/L
Aroclor 1254	ND	2.8	ug/L
Aroclor 1260	ND	2.8	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	141	(12 - 167)
Decachlorobiphenyl	40	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

GC/MS Volatiles

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN80101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:00 **Date Received..:** 07/22/00
Prep Date.....: 07/27/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0210144 **Analysis Time..:** 16:37
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**640 E**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	**1.3**	**1.0**	**ug/L**
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	**3.5**	**1.0**	**ug/L**
Toluene	**0.36 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**1.1 J**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	**0.58 J**	**1.0**	**ug/L**
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**550 E**	**1.0**	**ug/L**
Chloroform	**2.0**	**1.0**	**ug/L**
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	**0.73 J**	**1.0**	**ug/L**
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	95	(78 - 124)
Toluene-d8	107	(71 - 129)
Dibromofluoromethane	98	(74 - 135)
1,2-Dichloroethane-d4	83	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

GC/MS Volatiles

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN80101 **Matrix.....:** WATER

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

GC/MS Volatiles

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN80201 **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:00 **Date Received..:** 07/22/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 13:01
Dilution Factor: 100

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	100	ug/L
1,2-Dichloropropane	ND	100	ug/L
cis-1,3-Dichloropropene	ND	100	ug/L
Trichloroethene	**2700 D**	**100**	**ug/L**
Dibromochloromethane	ND	100	ug/L
1,1,2-Trichloroethane	ND	100	ug/L
Benzene	ND	100	ug/L
trans-1,3-Dichloropropene	ND	100	ug/L
Bromoform	ND	100	ug/L
4-Methyl-2-pentanone	ND	500	ug/L
2-Hexanone	ND	500	ug/L
Tetrachloroethene	ND	100	ug/L
Toluene	ND	100	ug/L
Chlorobenzene	ND	100	ug/L
Ethylbenzene	ND	100	ug/L
Styrene	ND	100	ug/L
Chloromethane	ND	200	ug/L
Bromomethane	ND	200	ug/L
Vinyl chloride	ND	200	ug/L
Chloroethane	ND	200	ug/L
Methylene chloride	**91 J,D,B**	**100**	**ug/L**
Acetone	ND	1000	ug/L
Carbon disulfide	ND	100	ug/L
1,1-Dichloroethene	ND	100	ug/L
1,1-Dichloroethane	ND	100	ug/L
1,2-Dichloroethene (total)	**740 D**	**100**	**ug/L**
Chloroform	ND	100	ug/L
1,2-Dichloroethane	ND	100	ug/L
2-Butanone	ND	500	ug/L
1,1,1-Trichloroethane	ND	100	ug/L
Carbon tetrachloride	ND	100	ug/L
Bromodichloromethane	ND	100	ug/L
1,1,2,2-Tetrachloroethane	ND	100	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(78 - 124)
Toluene-d8	91	(71 - 129)
Dibromofluoromethane	101	(74 - 135)
1,2-Dichloroethane-d4	94	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

GC/MS Volatiles

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN80201 **Matrix.....:** WATER

NOTE(S):

D Result was obtained from the analysis of a dilution.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

HPLC

Lot-Sample #...: F0G220156-007 **Work Order #...:** DGN80103 **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:00 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0207538 **Analysis Time..:** 22:41
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	15 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-W

GC Semivolatiles

Lot-Sample #...: F0G220156-008 **Work Order #...:** DGN8210D **Matrix.....:** WATER
Date Sampled...: 07/21/00 15:25 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 23:07
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	51	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-W

GC Volatiles

Lot-Sample #...: F0G220156-008 **Work Order #...:** DGN8210E **Matrix.....:** WATER
Date Sampled...: 07/21/00 15:25 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210430 **Analysis Time..:** 21:32
Dilution Factor: 1
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	89	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-W

GC Semivolatiles

Lot-Sample #...: F0G220156-008 **Work Order #...:** DGN82102 **Matrix.....:** WATER
Date Sampled...: 07/21/00 15:25 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0207537 **Analysis Time..:** 23:25
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	2.0	ug/L
Aroclor 1221	ND	2.0	ug/L
Aroclor 1232	ND	2.0	ug/L
Aroclor 1242	ND	2.0	ug/L
Aroclor 1248	ND	2.0	ug/L
Aroclor 1254	ND	2.0	ug/L
Aroclor 1260	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	114	(12 - 167)
Decachlorobiphenyl	77	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-008 **Work Order #...:** DGN82101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 15:25 **Date Received..:** 07/22/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 10:34
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**7.4**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.50 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**0.81 J**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	105	(71 - 129)
Dibromofluoromethane	106	(74 - 135)
1,2-Dichloroethane-d4	78	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-008 **Work Order #...:** DGN82101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-W

HPLC

Lot-Sample #...: F0G220156-008 **Work Order #...:** DGN82103 **Matrix.....:** WATER
Date Sampled...: 07/21/00 15:25 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0207538 **Analysis Time..:** 23:07
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	20 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-W

GC Semivolatiles

Lot-Sample #...: F0G220156-009 **Work Order #...:** DGN8410D **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:25 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 23:34
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	60	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-W

GC Volatiles

Lot-Sample #...: F0G220156-009 **Work Order #...:** DGN8410E **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:25 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210430 **Analysis Time..:** 23:19
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	73	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-W

GC Semivolatiles

Lot-Sample #...: F0G220156-009 **Work Order #...:** DGN84102 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:25 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0207537 **Analysis Time..:** 23:39
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	2.0	ug/L
Aroclor 1221	ND	2.0	ug/L
Aroclor 1232	ND	2.0	ug/L
Aroclor 1242	ND	2.0	ug/L
Aroclor 1248	ND	2.0	ug/L
Aroclor 1254	ND	2.0	ug/L
Aroclor 1260	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	115	(12 - 167)
Decachlorobiphenyl	71	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-009 **Work Order #...:** DGN84101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:25 **Date Received..:** 07/22/00
Prep Date.....: 07/27/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0210144 **Analysis Time..:** 17:49
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**0.25 J**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.38 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.60 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**0.38 J**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	101	(78 - 124)
Toluene-d8	105	(71 - 129)
Dibromofluoromethane	98	(74 - 135)
1,2-Dichloroethane-d4	85	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-009 **Work Order #...:** DGN84101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-W

HPLC

Lot-Sample #...: F0G220156-009 **Work Order #...:** DGN84103 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:25 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0207538 **Analysis Time..:** 23:33
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	20 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

GC Semivolatiles

Lot-Sample #...: F0G220156-010 **Work Order #...:** DGN8510D **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:05 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0208467 **Analysis Time..:** 00:00
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	61	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

GC Volatiles

Lot-Sample #...: F0G220156-010 **Work Order #...:** DGN8520E **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:05 **Date Received..:** 07/22/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210429 **Analysis Time..:** 21:15
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.57**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	1440 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

GC Volatiles

Lot-Sample #...: F0G220156-010 **Work Order #...:** DGN8510E **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:05 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210430 **Analysis Time..:** 23:55
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.52**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	1460 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

GC Semivolatiles

Lot-Sample #...: F0G220156-010 **Work Order #...:** DGN85102 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:05 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207537 **Analysis Time..:** 00:20
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	2.0	ug/L
Aroclor 1221	ND	2.0	ug/L
Aroclor 1232	ND	2.0	ug/L
Aroclor 1242	ND	2.0	ug/L
Aroclor 1248	ND	2.0	ug/L
Aroclor 1254	ND	2.0	ug/L
Aroclor 1260	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	136	(12 - 167)
Decachlorobiphenyl	75	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-010 **Work Order #...:** DGN85101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:05 **Date Received..:** 07/22/00
Prep Date.....: 07/27/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0210144 **Analysis Time..:** 18:26
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**430 E**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**31**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.60 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	**2.0**	**1.0**	**ug/L**
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**400 E**	**1.0**	**ug/L**
Chloroform	**0.92 J**	**1.0**	**ug/L**
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	95	(71 - 129)
Dibromofluoromethane	104	(74 - 135)
1,2-Dichloroethane-d4	100	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-010 **Work Order #...:** DGN85101 **Matrix.....:** WATER

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-010 **Work Order #...:** DGN85201 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:05 **Date Received..:** 07/22/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 12:24
Dilution Factor: 50

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	50	ug/L
1,2-Dichloropropane	ND	50	ug/L
cis-1,3-Dichloropropene	ND	50	ug/L
Trichloroethene	**620 D**	**50**	**ug/L**
Dibromochloromethane	ND	50	ug/L
1,1,2-Trichloroethane	ND	50	ug/L
Benzene	ND	50	ug/L
trans-1,3-Dichloropropene	ND	50	ug/L
Bromoform	ND	50	ug/L
4-Methyl 2 pentanone	ND	250	ug/L
2-Hexanone	ND	250	ug/L
Tetrachloroethene	ND	50	ug/L
Toluene	ND	50	ug/L
Chlorobenzene	ND	50	ug/L
Ethylbenzene	ND	50	ug/L
Styrene	ND	50	ug/L
Chloromethane	ND	100	ug/L
Bromomethane	ND	100	ug/L
Vinyl chloride	**15 J,D**	**100**	**ug/L**
Chloroethane	ND	100	ug/L
Methylene chloride	**40 J,D,B**	**50**	**ug/L**
Acetone	ND	500	ug/L
Carbon disulfide	ND	50	ug/L
1,1-Dichloroethene	ND	50	ug/L
1,1-Dichloroethane	ND	50	ug/L
1,2-Dichloroethene (total)	**290 D**	**50**	**ug/L**
Chloroform	ND	50	ug/L
1,2-Dichloroethane	ND	50	ug/L
2-Butanone	ND	250	ug/L
1,1,1-Trichloroethane	ND	50	ug/L
Carbon tetrachloride	ND	50	ug/L
Bromodichloromethane	ND	50	ug/L
1,1,2,2-Tetrachloroethane	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	91	(71 - 129)
Dibromofluoromethane	101	(74 - 135)
1,2-Dichloroethane-d4	97	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-010 **Work Order #...:** DGN85201 **Matrix.....:** WATER

NOTE(S):

D Result was obtained from the analysis of a dilution.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-W

HPLC

Lot-Sample #...: F0G220156-010
Date Sampled...: 07/21/00 16:05
Prep Date.....: 07/25/00
Prep Batch #...: 0207538
Dilution Factor: 1

Work Order #...: DGN85103
Date Received..: 07/22/00
Analysis Date..: 07/28/00
Analysis Time..: 23:58

Matrix.....: WATER

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	11 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-W

GC Semivolatiles

Lot-Sample #...: F0G220156-011 Work Order #...: DGN8610D Matrix.....: WATER
Date Sampled...: 07/21/00 16:48 Date Received..: 07/22/00
Prep Date.....: 07/25/00 Analysis Date..: 07/27/00
Prep Batch #...: 0208467 Analysis Time..: 00:27
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	8.5	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	128	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-W

GC Volatiles

Lot-Sample #...: F0G220156-011 **Work Order #...:** DGN8610E **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:48 **Date Received..:** 07/22/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210429 **Analysis Time..:** 21:51
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	99	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-W

GC Semivolatiles

Lot-Sample #...: F0G220156-011 **Work Order #...:** DGN86102 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:48 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207537 **Analysis Time..:** 00:34
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	2.0	ug/L
Aroclor 1221	ND	2.0	ug/L
Aroclor 1232	ND	2.0	ug/L
Aroclor 1242	ND	2.0	ug/L
Aroclor 1248	ND	2.0	ug/L
Aroclor 1254	ND	2.0	ug/L
Aroclor 1260	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	108	(12 - 167)
Decachlorobiphenyl	102	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-011 **Work Order #...:** DGN86101 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:48 **Date Received..:** 07/22/00
Prep Date.....: 07/27/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0210144 **Analysis Time..:** 19:03
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**0.46 J**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.47 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	102	(78 - 124)
Toluene-d8	94	(71 - 129)
Dibromofluoromethane	95	(74 - 135)
1,2-Dichloroethane-d4	89	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-W

GC/MS Volatiles

Lot-Sample #...: F0G220156-011 **Work Order #...:** DGN86101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-W

HPLC

Lot-Sample #...: F0G220156-011 **Work Order #...:** DGN86103 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:48 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207538 **Analysis Time..:** 00:24
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	15 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-14

GC Semivolatiles

Lot-Sample #...: F0G220156-012 **Work Order #...:** DGN8810F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:17 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0204160 **Analysis Time..:** 08:35
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	31	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	70	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-14

GC Volatiles

Lot-Sample #...: F0G220156-012 **Work Order #...:** DGN8810E **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:17 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210375 **Analysis Time..:** 01:07
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.12	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	70	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-14

GC Semivolatiles

Lot-Sample #...: F0G220156-012 **Work Order #...:** DGN8810D **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:17 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207536 **Analysis Time..:** 01:42
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	103	(10 - 199)
Decachlorobiphenyl	122	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-14

GC/MS Volatiles

Lot-Sample #...: F0G220156-012 **Work Order #...:** DGN8810G **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:17 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 13:59
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.2	ug/kg
1,2-Dichloropropane	ND	6.2	ug/kg
cis-1,3-Dichloropropene	ND	6.2	ug/kg
Trichloroethene	ND	6.2	ug/kg
Dibromochloromethane	ND	6.2	ug/kg
1,1,2-Trichloroethane	ND	6.2	ug/kg
Benzene	ND	6.2	ug/kg
trans-1,3-Dichloropropene	ND	6.2	ug/kg
Bromoform	ND	6.2	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.2	ug/kg
Toluene	ND	6.2	ug/kg
Chlorobenzene	ND	6.2	ug/kg
Ethylbenzene	ND	6.2	ug/kg
Styrene	ND	6.2	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	6.2	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	6.2	ug/kg
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.2	ug/kg
1,1-Dichloroethene	ND	6.2	ug/kg
1,1-Dichloroethane	ND	6.2	ug/kg
1,2-Dichloroethene (total)	ND	6.2	ug/kg
Chloroform	ND	6.2	ug/kg
1,2-Dichloroethane	ND	6.2	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.2	ug/kg
Carbon tetrachloride	ND	6.2	ug/kg
Bromodichloromethane	ND	6.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	87	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	104	(82 - 132)
1,2-Dichloroethane-d4	107	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-14

GC/MS Volatiles

Lot-Sample #...: F0G220156-012 **Work Order #...:** DGN8810G **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-14

HPLC

Lot-Sample #...: F0G220156-012 **Work Order #...:** DGN8810C **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:17 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0205178 **Analysis Time..:** 19:09
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	37	ug/kg
Acenaphthylene	ND	37	ug/kg
Anthracene	ND	37	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	37	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	37	ug/kg
Fluoranthene	ND	37	ug/kg
Fluorene	ND	37	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	37	ug/kg
Phenanthrene	ND	37	ug/kg
Pyrene	ND	37	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	61	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I3-12

GC Semivolatiles

Lot-Sample #...:	F0G220156-013	**Work Order #...:**	DGN8E10E	**Matrix.....:**	SOLID
Date Sampled...:	07/21/00 09:40	**Date Received..:**	07/22/00		
Prep Date.....:	07/22/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204160	**Analysis Time..:**	10:49		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	66	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I3-12

GC Volatiles

Lot-Sample #...: F0G220156-013 **Work Order #...:** DGN8E10D **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:40 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210375 **Analysis Time..:** 01:43
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	93	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I3-12

GC Semivolatiles

Lot-Sample #...: F0G220156-013 **Work Order #...:** DGN8E10C **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:40 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207536 **Analysis Time..:** 01:56
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	105	(10 - 199)
Decachlorobiphenyl	107	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I3-12

GC/MS Volatiles

Lot-Sample #...: F0G220156-013 **Work Order #...:** DGN8E10F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:40 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 14:33
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	**5.5 J**	**6.4**	**ug/kg**
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	ND	26	ug/kg
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	**11 J,B**	**26**	**ug/kg**
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	85	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I3-12

GC/MS Volatiles

Lot-Sample #...: F0G220156-013 **Work Order #...:** DGN8E10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I3-12

HPLC

Lot-Sample #...: F0G220156-013 **Work Order #...:** DGN8E10A **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:40 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0205178 **Analysis Time..:** 21:18
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	63	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I4-5

GC Semivolatiles

Lot-Sample #...: F0G220156-014 **Work Order #...:** DGN8H10E **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:55 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0204160 **Analysis Time..:** 11:15
Dilution Factor: 1
% Moisture.....: 19 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	31	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	74	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I4-5

GC Volatiles

Lot-Sample #...: F0G220156-014 **Work Order #...:** DGN8H10D **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:55 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210375 **Analysis Time..:** 02:19
Dilution Factor: 1
% Moisture.....: 19 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.12	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	76	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I4-5

GC Semivolatiles

Lot-Sample #...: F0G220156-014 **Work Order #...:** DGN8H10C **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:55 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207536 **Analysis Time..:** 02:10
Dilution Factor: 1
% Moisture.....: 19 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	141	(10 - 199)
Decachlorobiphenyl	119	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I4-5

GC/MS Volatiles

Lot-Sample #...: F0G220156-014 **Work Order #...:** DGN8H10F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:55 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 15:06
Dilution Factor: 1
% Moisture.....: 19 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.2	ug/kg
1,2-Dichloropropane	ND	6.2	ug/kg
cis-1,3-Dichloropropene	ND	6.2	ug/kg
Trichloroethene	ND	6.2	ug/kg
Dibromochloromethane	ND	6.2	ug/kg
1,1,2-Trichloroethane	ND	6.2	ug/kg
Benzene	ND	6.2	ug/kg
trans-1,3-Dichloropropene	ND	6.2	ug/kg
Bromoform	ND	6.2	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.2	ug/kg
Toluene	ND	6.2	ug/kg
Chlorobenzene	ND	6.2	ug/kg
Ethylbenzene	ND	6.2	ug/kg
Styrene	ND	6.2	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	6.2	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	6.2	ug/kg
Acetone	**82**	**25**	**ug/kg**
Carbon disulfide	ND	6.2	ug/kg
1,1-Dichloroethene	ND	6.2	ug/kg
1,1-Dichloroethane	ND	6.2	ug/kg
1,2-Dichloroethene (total)	ND	6.2	ug/kg
Chloroform	ND	6.2	ug/kg
1,2-Dichloroethane	ND	6.2	ug/kg
2-Butanone	**18 J,B**	**25**	**ug/kg**
1,1,1-Trichloroethane	ND	6.2	ug/kg
Carbon tetrachloride	ND	6.2	ug/kg
Bromodichloromethane	ND	6.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	92	(73 - 109)
Toluene-d8	100	(82 - 119)
Dibromofluoromethane	103	(82 - 132)
1,2-Dichloroethane-d4	112	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I4-5

GC/MS Volatiles

Lot-Sample #...: F0G220156-014 **Work Order #...:** DGN8H10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I4-5

HPLC

Lot-Sample #...: F0G220156-014 **Work Order #...:** DGN8H10A **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:55 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0205178 **Analysis Time..:** 21:43
Dilution Factor: 1
% Moisture.....: 19 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	37	ug/kg
Acenaphthylene	ND	37	ug/kg
Anthracene	ND	37	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	37	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	**72**	**19**	**ug/kg**
Dibenz(a,h)anthracene	ND	37	ug/kg
Fluoranthene	ND	37	ug/kg
Fluorene	ND	37	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	37	ug/kg
Phenanthrene	ND	37	ug/kg
Pyrene	ND	37	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	63	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-11

GC Semivolatiles

Lot-Sample #...:	F0G220156-015	**Work Order #...:**	DGN8K10E	**Matrix.....:**	SOLID
Date Sampled...:	07/21/00 10:25	**Date Received..:**	07/22/00		
Prep Date.....:	07/22/00	**Analysis Date..:**	07/24/00		
Prep Batch #...:	0204160	**Analysis Time..:**	11:42		
Dilution Factor:	1				
% Moisture.....:	25	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	33	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	78	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-11

GC Volatiles

Lot-Sample #...: F0G220156-015 **Work Order #...:** DGN8K10D **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:25 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210375 **Analysis Time..:** 02:54
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	91	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-11

GC Semivolatiles

Lot-Sample #...: F0G220156-015 **Work Order #...:** DGN8K10C **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:25 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207536 **Analysis Time..:** 02:23
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	44	ug/kg
Aroclor 1221	ND	44	ug/kg
Aroclor 1232	ND	44	ug/kg
Aroclor 1242	ND	44	ug/kg
Aroclor 1248	ND	44	ug/kg
Aroclor 1254	ND	44	ug/kg
Aroclor 1260	ND	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	113	(10 - 199)
Decachlorobiphenyl	116	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-11

GC/MS Volatiles

Lot-Sample #...: F0G220156-015 **Work Order #...:** DGN8K10F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:25 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 15:40
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.7	ug/kg
1,2-Dichloropropane	ND	6.7	ug/kg
cis-1,3-Dichloropropene	ND	6.7	ug/kg
Trichloroethene	**4.4 J**	**6.7**	**ug/kg**
Dibromochloromethane	ND	6.7	ug/kg
1,1,2-Trichloroethane	ND	6.7	ug/kg
Benzene	ND	6.7	ug/kg
trans-1,3-Dichloropropene	ND	6.7	ug/kg
Bromoform	ND	6.7	ug/kg
4-Methyl-2-pentanone	ND	27	ug/kg
2-Hexanone	ND	27	ug/kg
Tetrachloroethene	ND	6.7	ug/kg
Toluene	ND	6.7	ug/kg
Chlorobenzene	ND	6.7	ug/kg
Ethylbenzene	ND	6.7	ug/kg
Styrene	ND	6.7	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.7	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.7	ug/kg
Acetone	ND	27	ug/kg
Carbon disulfide	ND	6.7	ug/kg
1,1-Dichloroethene	ND	6.7	ug/kg
1,1-Dichloroethane	ND	6.7	ug/kg
1,2-Dichloroethene (total)	ND	6.7	ug/kg
Chloroform	ND	6.7	ug/kg
1,2-Dichloroethane	ND	6.7	ug/kg
2-Butanone	**14 J,B**	**27**	**ug/kg**
1,1,1-Trichloroethane	ND	6.7	ug/kg
Carbon tetrachloride	ND	6.7	ug/kg
Bromodichloromethane	ND	6.7	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.7	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	88	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	102	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-11

GC/MS Volatiles

Lot-Sample #...: F0G220156-015 **Work Order #...:** DGN8K10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-11

HPLC

Lot-Sample #...: F0G220156-015 **Work Order #...:** DGN8K10A **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:25 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0205178 **Analysis Time..:** 22:09
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	40	ug/kg
Acenaphthylene	ND	40	ug/kg
Anthracene	ND	40	ug/kg
Benzo(a)anthracene	ND	20	ug/kg
Benzo(a)pyrene	ND	20	ug/kg
Benzo(b)fluoranthene	ND	20	ug/kg
Benzo(ghi)perylene	ND	40	ug/kg
Benzo(k)fluoranthene	ND	20	ug/kg
Chrysene	ND	20	ug/kg
Dibenz(a,h)anthracene	ND	40	ug/kg
Fluoranthene	ND	40	ug/kg
Fluorene	ND	40	ug/kg
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg
Naphthalene	ND	40	ug/kg
Phenanthrene	ND	40	ug/kg
Pyrene	ND	40	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	63	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

GC Semivolatiles

Lot-Sample #...: F0G220156-016 **Work Order #...:** DGN8L10E **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:55 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0204160 **Analysis Time..:** 12:08
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	59	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

GC Volatiles

Lot-Sample #...: F0G220156-016 **Work Order #...:** DGN8L10D **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:55 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210375 **Analysis Time..:** 03:30
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	792 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

GC Volatiles

Lot-Sample #...:	F0G220156-016	**Work Order #...:**	DGN8L20D	**Matrix.....:**	SOLID
Date Sampled...:	07/21/00 10:55	**Date Received..:**	07/22/00		
Prep Date.....:	07/25/00	**Analysis Date..:**	07/26/00		
Prep Batch #...:	0210562	**Analysis Time..:**	22:27		
Dilution Factor:	1				
% Moisture.....:	23	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.15**	**0.13**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	477 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

GC Semivolatiles

Lot-Sample #...: F0G220156-016 **Work Order #...:** DGN8L10C **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:55 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207536 **Analysis Time..:** 02:37
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMTT	UNITS
Aroclor 1016	ND	43	ug/kg
Aroclor 1221	ND	43	ug/kg
Aroclor 1232	ND	43	ug/kg
Aroclor 1242	ND	43	ug/kg
Aroclor 1248	ND	43	ug/kg
Aroclor 1254	ND	43	ug/kg
Aroclor 1260	ND	43	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(10 - 199)
Decachlorobiphenyl	113	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

GC/MS Volatiles

Lot-Sample #...: F0G220156-016 **Work Order #...:** DGN8L10F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:55 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 16:14
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.5	ug/kg
1,2-Dichloropropane	ND	6.5	ug/kg
cis-1,3-Dichloropropene	ND	6.5	ug/kg
Trichloroethene	**460 E**	**6.5**	**ug/kg**
Dibromochloromethane	ND	6.5	ug/kg
1,1,2-Trichloroethane	ND	6.5	ug/kg
Benzene	ND	6.5	ug/kg
trans-1,3-Dichloropropene	ND	6.5	ug/kg
Bromoform	ND	6.5	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.5	ug/kg
Toluene	ND	6.5	ug/kg
Chlorobenzene	ND	6.5	ug/kg
Ethylbenzene	ND	6.5	ug/kg
Styrene	ND	6.5	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.5	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.5	ug/kg
Acetone	ND	26	ug/kg
Carbon disulfide	ND	6.5	ug/kg
1,1-Dichloroethene	ND	6.5	ug/kg
1,1-Dichloroethane	ND	6.5	ug/kg
1,2-Dichloroethene (total)	**6.1 J**	**6.5**	**ug/kg**
Chloroform	**2.1 J**	**6.5**	**ug/kg**
1,2-Dichloroethane	ND	6.5	ug/kg
2-Butanone	**12 J,B**	**26**	**ug/kg**
1,1,1-Trichloroethane	ND	6.5	ug/kg
Carbon tetrachloride	ND	6.5	ug/kg
Bromodichloromethane	ND	6.5	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.5	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	83	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

GC/MS Volatiles

Lot-Sample #...: F0G220156-016 **Work Order #...:** DGN8L10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

GC/MS Volatiles

Lot-Sample #...: F0G220156-016 **Work Order #...:** DGN8L20F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:55 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 18:30
Dilution Factor: 5
% Moisture.....: 23 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	32	ug/kg
1,2-Dichloropropane	ND	32	ug/kg
cis-1,3-Dichloropropene	ND	32	ug/kg
Trichloroethene	**290 D**	**32**	**ug/kg**
Dibromochloromethane	ND	32	ug/kg
1,1,2-Trichloroethane	ND	32	ug/kg
Benzene	ND	32	ug/kg
trans-1,3-Dichloropropene	ND	32	ug/kg
Bromoform	ND	32	ug/kg
4-Methyl-2-pentanone	ND	130	ug/kg
2-Hexanone	ND	130	ug/kg
Tetrachloroethene	ND	32	ug/kg
Toluene	ND	32	ug/kg
Chlorobenzene	ND	32	ug/kg
Ethylbenzene	ND	32	ug/kg
Styrene	ND	32	ug/kg
Chloromethane	ND	65	ug/kg
Bromomethane	ND	65	ug/kg
Vinyl chloride	ND	32	ug/kg
Chloroethane	ND	65	ug/kg
Methylene chloride	ND	32	ug/kg
Acetone	ND	130	ug/kg
Carbon disulfide	ND	32	ug/kg
1,1-Dichloroethene	ND	32	ug/kg
1,1-Dichloroethane	ND	32	ug/kg
1,2-Dichloroethene (total)	ND	32	ug/kg
Chloroform	ND	32	ug/kg
1,2-Dichloroethane	ND	32	ug/kg
2-Butanone	ND	130	ug/kg
1,1,1-Trichloroethane	ND	32	ug/kg
Carbon tetrachloride	ND	32	ug/kg
Bromodichloromethane	ND	32	ug/kg
1,1,2,2-Tetrachloroethane	ND	32	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	83	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	112	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

GC/MS Volatiles

Lot-Sample #...: F0G220156-016 **Work Order #...:** DGN8L20F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

HPLC

Lot-Sample #...: F0G220156-016 **Work Order #...:** DGN8L10A **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:55 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0205178 **Analysis Time..:** 22:35
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	39	ug/kg
Acenaphthylene	ND	39	ug/kg
Anthracene	ND	39	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	39	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	39	ug/kg
Fluoranthene	ND	39	ug/kg
Fluorene	ND	39	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	39	ug/kg
Phenanthrene	ND	39	ug/kg
Pyrene	ND	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-15

GC Semivolatiles

Lot-Sample #...: F0G220156-017 **Work Order #...:** DGN8M10E **Matrix.....:** SOLID
Date Sampled...: 07/21/00 11:40 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0204160 **Analysis Time..:** 12:34
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	33	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	73	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-15

GC Volatiles

Lot-Sample #...: F0G220156-017 **Work Order #...:** DGN8M10D **Matrix.....:** SOLID
Date Sampled...: 07/21/00 11:40 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210375 **Analysis Time..:** 04:06
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	93	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-15

GC Semivolatiles

Lot-Sample #...: F0G220156-017 Work Order #...: DGN8M10C Matrix.....: SOLID
Date Sampled...: 07/21/00 11:40 Date Received..: 07/22/00
Prep Date.....: 07/25/00 Analysis Date..: 07/29/00
Prep Batch #...: 0207536 Analysis Time..: 03:18
Dilution Factor: 1
% Moisture.....: 25 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	44	ug/kg
Aroclor 1221	ND	44	ug/kg
Aroclor 1232	ND	44	ug/kg
Aroclor 1242	ND	44	ug/kg
Aroclor 1248	ND	44	ug/kg
Aroclor 1254	ND	44	ug/kg
Aroclor 1260	ND	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96	(10 - 199)
Decachlorobiphenyl	112	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-15

GC/MS Volatiles

Lot-Sample #...: F0G220156-017 **Work Order #...:** DGN8M10F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 11:40 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 16:48
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.6	ug/kg
1,2-Dichloropropane	ND	6.6	ug/kg
cis-1,3-Dichloropropene	ND	6.6	ug/kg
Trichloroethene	ND	6.6	ug/kg
Dibromochloromethane	ND	6.6	ug/kg
1,1,2-Trichloroethane	ND	6.6	ug/kg
Benzene	ND	6.6	ug/kg
trans-1,3-Dichloropropene	ND	6.6	ug/kg
Bromoform	ND	6.6	ug/kg
4-Methyl-2-pentanone	ND	27	ug/kg
2-Hexanone	ND	27	ug/kg
Tetrachloroethene	ND	6.6	ug/kg
Toluene	ND	6.6	ug/kg
Chlorobenzene	ND	6.6	ug/kg
Ethylbenzene	ND	6.6	ug/kg
Styrene	ND	6.6	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.6	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.6	ug/kg
Acetone	ND	27	ug/kg
Carbon disulfide	ND	6.6	ug/kg
1,1-Dichloroethene	ND	6.6	ug/kg
1,1-Dichloroethane	ND	6.6	ug/kg
1,2-Dichloroethene (total)	ND	6.6	ug/kg
Chloroform	ND	6.6	ug/kg
1,2-Dichloroethane	ND	6.6	ug/kg
2-Butanone	**6.7 J,B**	**27**	**ug/kg**
1,1,1-Trichloroethane	ND	6.6	ug/kg
Carbon tetrachloride	ND	6.6	ug/kg
Bromodichloromethane	ND	6.6	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.6	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	85	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-15

GC/MS Volatiles

Lot-Sample #...: F0G220156-017 **Work Order #...:** DGN8M10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-15

HPLC

Lot-Sample #...: F0G220156-017 **Work Order #...:** DGN8M10A **Matrix.....:** SOLID
Date Sampled...: 07/21/00 11:40 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0205178 **Analysis Time..:** 23:00
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	40	ug/kg
Acenaphthylene	ND	40	ug/kg
Anthracene	ND	40	ug/kg
Benzo(a)anthracene	ND	20	ug/kg
Benzo(a)pyrene	ND	20	ug/kg
Benzo(b)fluoranthene	ND	20	ug/kg
Benzo(ghi)perylene	ND	40	ug/kg
Benzo(k)fluoranthene	ND	20	ug/kg
Chrysene	ND	20	ug/kg
Dibenz(a,h)anthracene	ND	40	ug/kg
Fluoranthene	ND	40	ug/kg
Fluorene	ND	40	ug/kg
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg
Naphthalene	ND	40	ug/kg
Phenanthrene	ND	40	ug/kg
Pyrene	ND	40	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	62	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-3

GC Semivolatiles

Lot-Sample #...: F0G220156-018 **Work Order #...:** DGN8N10E **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:23 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0204160 **Analysis Time..:** 13:01
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	33	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	80	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-3

GC Volatiles

Lot-Sample #...: F0G220156-018 **Work Order #...:** DGN8N10D **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:23 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210375 **Analysis Time..:** 04:42
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	55	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-3

GC Semivolatiles

Lot-Sample #...: F0G220156-018 **Work Order #...:** DGN8N10C **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:23 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207536 **Analysis Time..:** 03:31
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	44	ug/kg
Aroclor 1221	ND	44	ug/kg
Aroclor 1232	ND	44	ug/kg
Aroclor 1242	ND	44	ug/kg
Aroclor 1248	ND	44	ug/kg
Aroclor 1254	ND	44	ug/kg
Aroclor 1260	ND	44	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	121	(10 - 199)
Decachlorobiphenyl	116	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-3

GC/MS Volatiles

Lot-Sample #...: F0G220156-018 **Work Order #...:** DGN8N10F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:23 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 17:22
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.6	ug/kg
1,2-Dichloropropane	ND	6.6	ug/kg
cis-1,3-Dichloropropene	ND	6.6	ug/kg
Trichloroethene	ND	6.6	ug/kg
Dibromochloromethane	ND	6.6	ug/kg
1,1,2-Trichloroethane	ND	6.6	ug/kg
Benzene	ND	6.6	ug/kg
trans-1,3-Dichloropropene	ND	6.6	ug/kg
Bromoform	ND	6.6	ug/kg
4-Methyl-2-pentanone	ND	27	ug/kg
2-Hexanone	ND	27	ug/kg
Tetrachloroethene	ND	6.6	ug/kg
Toluene	ND	6.6	ug/kg
Chlorobenzene	ND	6.6	ug/kg
Ethylbenzene	ND	6.6	ug/kg
Styrene	ND	6.6	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.6	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.6	ug/kg
Acetone	ND	27	ug/kg
Carbon disulfide	ND	6.6	ug/kg
1,1-Dichloroethene	ND	6.6	ug/kg
1,1-Dichloroethane	ND	6.6	ug/kg
1,2-Dichloroethene (total)	ND	6.6	ug/kg
Chloroform	ND	6.6	ug/kg
1,2-Dichloroethane	ND	6.6	ug/kg
2-Butanone	**8.9 J,B**	**27**	**ug/kg**
1,1,1-Trichloroethane	ND	6.6	ug/kg
Carbon tetrachloride	ND	6.6	ug/kg
Bromodichloromethane	ND	6.6	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.6	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	92	(73 - 109)
Toluene-d8	100	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-3

GC/MS Volatiles

Lot-Sample #...: F0G220156-018 **Work Order #...:** DGN8N10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-3

HPLC

Lot-Sample #...: F0G220156-018 **Work Order #...:** DGN8N10A **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:23 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0205178 **Analysis Time..:** 23:26
Dilution Factor: 1
% Moisture.....: 25 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	40	ug/kg
Acenaphthylene	ND	40	ug/kg
Anthracene	ND	40	ug/kg
Benzo(a)anthracene	ND	20	ug/kg
Benzo(a)pyrene	ND	20	ug/kg
Benzo(b)fluoranthene	ND	20	ug/kg
Benzo(ghi)perylene	ND	40	ug/kg
Benzo(k)fluoranthene	ND	20	ug/kg
Chrysene	ND	20	ug/kg
Dibenz(a,h)anthracene	ND	40	ug/kg
Fluoranthene	ND	40	ug/kg
Fluorene	ND	40	ug/kg
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg
Naphthalene	ND	40	ug/kg
Phenanthrene	ND	40	ug/kg
Pyrene	ND	40	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	59	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-14

GC Semivolatiles

Lot-Sample #...: F0G220156-019 **Work Order #...:** DGN8P10E **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:33 **Date Received..:** 07/22/00
Prep Date.....: 07/22/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0204160 **Analysis Time..:** 13:27
Dilution Factor: 1
% Moisture.....: 18 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	31	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	66	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-14

GC Volatiles

Lot-Sample #...: F0G220156-019 **Work Order #...:** DGN8P10D **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:33 **Date Received..:** 07/22/00
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210562 **Analysis Time..:** 23:03
Dilution Factor: 1
% Moisture.....: 18 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.12	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	78	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-14

GC/MS Volatiles

Lot-Sample #...: F0G220156-019 **Work Order #...:** DGN8P10F **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:33 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 17:56
Dilution Factor: 1
% Moisture.....: 18 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.1	ug/kg
1,2-Dichloropropane	ND	6.1	ug/kg
cis-1,3-Dichloropropene	ND	6.1	ug/kg
Trichloroethene	ND	6.1	ug/kg
Dibromochloromethane	ND	6.1	ug/kg
1,1,2-Trichloroethane	ND	6.1	ug/kg
Benzene	ND	6.1	ug/kg
trans-1,3-Dichloropropene	ND	6.1	ug/kg
Bromoform	ND	6.1	ug/kg
4 Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	6.1	ug/kg
Toluene	ND	6.1	ug/kg
Chlorobenzene	ND	6.1	ug/kg
Ethylbenzene	ND	6.1	ug/kg
Styrene	ND	6.1	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	6.1	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	6.1	ug/kg
Acetone	ND	24	ug/kg
Carbon disulfide	ND	6.1	ug/kg
1,1-Dichloroethene	ND	6.1	ug/kg
1,1-Dichloroethane	ND	6.1	ug/kg
1,2-Dichloroethene (total)	ND	6.1	ug/kg
Chloroform	ND	6.1	ug/kg
1,2-Dichloroethane	ND	6.1	ug/kg
2-Butanone	**12 J,B**	**24**	**ug/kg**
1,1,1-Trichloroethane	ND	6.1	ug/kg
Carbon tetrachloride	ND	6.1	ug/kg
Bromodichloromethane	ND	6.1	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-14

GC/MS Volatiles

Lot-Sample #...: F0G220156-019 **Work Order #...:** DGN8P10F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27E1W

TOTAL Metals

Lot-Sample #...: F0G220156-007 **Matrix.....:** WATER
Date Sampled...: 07/21/00 14:00 **Date Received..:** 07/22/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206325						
Mercury	**0.23**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGN8010C**
		Dilution Factor: 1		Analysis Time..: 19:17		
Prep Batch #...: 0206351						
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGN80108
		Dilution Factor: 1		Analysis Time..: 17:45		
Arsenic	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGN80104
		Dilution Factor: 1		Analysis Time..: 17:45		
Barium	**421**	**200**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN80105**
		Dilution Factor: 1		Analysis Time..: 17:45		
Cadmium	**1.6 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN80109**
		Dilution Factor: 1		Analysis Time..: 17:45		
Chromium	**49000**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN8010A**
		Dilution Factor: 1		Analysis Time..: 17:45		
Lead	**24.2**	**3.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN80106**
		Dilution Factor: 1		Analysis Time..: 17:45		
Selenium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGN80107
		Dilution Factor: 1		Analysis Time..: 17:45		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-W

TOTAL Metals

Lot-Sample #...: F0G220156-008 **Matrix.....:** WATER
Date Sampled...: 07/21/00 15:25 **Date Received..:** 07/22/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206325						
Mercury	**0.15 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGN8210C**
		Dilution Factor: 1		Analysis Time..: 19:20		
Prep Batch #...: 0206351						
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGN82108
		Dilution Factor: 1		Analysis Time..: 17:50		
Arsenic	**16.2**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN82104**
		Dilution Factor: 1		Analysis Time..: 17:50		
Barium	**2500**	**200**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN82105**
		Dilution Factor: 1		Analysis Time..: 17:50		
Cadmium	**2.2 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN82109**
		Dilution Factor: 1		Analysis Time..: 17:50		
Chromium	**68.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN8210A**
		Dilution Factor: 1		Analysis Time..: 17:50		
Lead	**35.4**	**3.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN82106**
		Dilution Factor: 1		Analysis Time..: 17:50		
Selenium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGN82107
		Dilution Factor: 1		Analysis Time..: 17:50		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-W

TOTAL Metals

Lot-Sample #...: F0G220156-009 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:25 **Date Received..:** 07/22/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206325						
Mercury	**0.15 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGN8410C**
		Dilution Factor: 1		Analysis Time..: 19:22		
Prep Batch #...: 0206351						
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGN84108
		Dilution Factor: 1		Analysis Time..: 18:04		
Arsenic	**64.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN84104**
		Dilution Factor: 1		Analysis Time..: 18:04		
Barium	**703**	**200**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN84105**
		Dilution Factor: 1		Analysis Time..: 18:04		
Cadmium	**5.0**	**5.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN84109**
		Dilution Factor: 1		Analysis Time..: 18:04		
Chromium	**90.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN8410A**
		Dilution Factor: 1		Analysis Time..: 18:04		
Lead	**29.4**	**3.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN84106**
		Dilution Factor: 1		Analysis Time..: 18:04		
Selenium	**4.1 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN84107**
		Dilution Factor: 1		Analysis Time..: 18:04		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27T1-W

TOTAL Metals

Lot-Sample #...: F0G220156-010 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:05 **Date Received..:** 07/22/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206325						
Mercury	**0.20**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGN8510C**
		Dilution Factor: 1		Analysis Time..: 19:24		
Prep Batch #...: 0206351						
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGN85108
		Dilution Factor: 1		Analysis Time..: 18:08		
Arsenic	**33.3**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN85104**
		Dilution Factor: 1		Analysis Time..: 18:08		
Barium	**1250**	**200**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN85105**
		Dilution Factor: 1		Analysis Time..: 18:08		
Cadmium	**0.41 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN85109**
		Dilution Factor: 1		Analysis Time..: 18:08		
Chromium	**133**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN8510A**
		Dilution Factor: 1		Analysis Time..: 18:08		
Lead	**51.5**	**3.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN85106**
		Dilution Factor: 1		Analysis Time..: 18:08		
Selenium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGN85107
		Dilution Factor: 1		Analysis Time..: 18:08		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-W

TOTAL Metals

Lot-Sample #...: F0G220156-011 **Matrix.....:** WATER
Date Sampled...: 07/21/00 16:48 **Date Received..:** 07/22/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206325						
Mercury	**2.6**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGN8610C**
		Dilution Factor: 1		Analysis Time..: 19:27		
Prep Batch #...: 0206351						
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGN86108
		Dilution Factor: 1		Analysis Time..: 18:13		
Arsenic	**255**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN86104**
		Dilution Factor: 1		Analysis Time..: 18:13		
Barium	**5460**	**200**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN86105**
		Dilution Factor: 1		Analysis Time..: 18:13		
Cadmium	**11.3**	**5.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN86109**
		Dilution Factor: 1		Analysis Time..: 18:13		
Chromium	**994**	**10.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN8610A**
		Dilution Factor: 1		Analysis Time..: 18:13		
Lead	**327**	**3.0**	**ug/L**	**SW846 6010B**	**07/24-07/25/00**	**DGN86106**
		Dilution Factor: 1		Analysis Time..: 18:13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGN86107
		Dilution Factor: 1		Analysis Time..: 18:13		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I5-14

TOTAL Metals

Lot-Sample #...: F0G220156-012 **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:17 **Date Received..:** 07/22/00
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206177						
Silver	ND	1.2	mg/kg	SW846 6010B	07/24-07/25/00	DGN88102
		Dilution Factor: 1		Analysis Time..: 13:15		
Arsenic	**5.4**	**1.2**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN88103**
		Dilution Factor: 1		Analysis Time..: 13:15		
Barium	**122**	**25.0**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN88104**
		Dilution Factor: 1		Analysis Time..: 13:15		
Cadmium	ND	0.62	mg/kg	SW846 6010B	07/24-07/25/00	DGN88105
		Dilution Factor: 1		Analysis Time..: 13:15		
Chromium	**17.9**	**1.2**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN88106**
		Dilution Factor: 1		Analysis Time..: 13:15		
Lead	**12.8**	**0.37**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN88107**
		Dilution Factor: 1		Analysis Time..: 13:15		
Selenium	ND	0.62	mg/kg	SW846 6010B	07/24-07/25/00	DGN88108
		Dilution Factor: 1		Analysis Time..: 13:15		
Prep Batch #...: 0206331						
Mercury	**0.030 B**	**0.042**	**mg/kg**	**SW846 7471A**	**07/24/00**	**DGN88109**
		Dilution Factor: 1		Analysis Time..: 19:46		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I3-12

TOTAL Metals

Lot-Sample #...: F0G220156-013 **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:40 **Date Received..:** 07/22/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206177						
Silver	ND	1.3	mg/kg	SW846 6010B	07/24-07/25/00	DGN8E102
		Dilution Factor: 1		Analysis Time..: 13:20		
Arsenic	**7.7**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8E103**
		Dilution Factor: 1		Analysis Time..: 13:20		
Barium	**142**	**25.6**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8E104**
		Dilution Factor: 1		Analysis Time..: 13:20		
Cadmium	**0.098 B**	**0.64**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8E105**
		Dilution Factor: 1		Analysis Time..: 13:20		
Chromium	**17.5**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8E106**
		Dilution Factor: 1		Analysis Time..: 13:20		
Lead	**9.7**	**0.38**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8E107**
		Dilution Factor: 1		Analysis Time..: 13:20		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/24-07/25/00	DGN8E108
		Dilution Factor: 1		Analysis Time..: 13:20		
Prep Batch #...: 0206331						
Mercury	**0.026 B**	**0.043**	**mg/kg**	**SW846 7471A**	**07/24/00**	**DGN8E109**
		Dilution Factor: 1		Analysis Time..: 19:30		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I4-5

TOTAL Metals

Lot-Sample #...: F0G220156-014 **Matrix.....:** SOLID
Date Sampled...: 07/21/00 09:55 **Date Received..:** 07/22/00
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206177						
Silver	ND	1.2	mg/kg	SW846 6010B	07/24-07/25/00	DGN8H102
		Dilution Factor: 1		Analysis Time..: 14:33		
Arsenic	**4.4**	**1.2**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8H103**
		Dilution Factor: 1		Analysis Time..: 14:33		
Barium	**233**	**24.8**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8H104**
		Dilution Factor: 1		Analysis Time..: 14:33		
Cadmium	ND	0.62	mg/kg	SW846 6010B	07/24-07/25/00	DGN8H105
		Dilution Factor: 1		Analysis Time..: 14:33		
Chromium	**13.2**	**1.2**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8H106**
		Dilution Factor: 1		Analysis Time..: 14:33		
Lead	**8.7**	**0.37**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8H107**
		Dilution Factor: 1		Analysis Time..: 14:33		
Selenium	ND	0.62	mg/kg	SW846 6010B	07/24-07/25/00	DGN8H108
		Dilution Factor: 1		Analysis Time..: 14:33		
Prep Batch #...: 0206331						
Mercury	**0.019 B**	**0.041**	**mg/kg**	**SW846 7471A**	**07/24/00**	**DGN8H109**
		Dilution Factor: 1		Analysis Time..: 19:33		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2-11

TOTAL Metals

Lot-Sample #...: F0G220156-015 **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:25 **Date Received..:** 07/22/00
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206177						
Silver	ND	1.3	mg/kg	SW846 6010B	07/24-07/25/00	DGN8K102
		Dilution Factor: 1		Analysis Time..: 13:38		
Arsenic	**3.7**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8K103**
		Dilution Factor: 1		Analysis Time..: 13:38		
Barium	**71.6**	**26.7**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8K104**
		Dilution Factor: 1		Analysis Time..: 13:38		
Cadmium	ND	0.67	mg/kg	SW846 6010B	07/24-07/25/00	DGN8K105
		Dilution Factor: 1		Analysis Time..: 13:38		
Chromium	**14.4**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8K106**
		Dilution Factor: 1		Analysis Time..: 13:38		
Lead	**6.8**	**0.40**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8K107**
		Dilution Factor: 1		Analysis Time..: 13:38		
Selenium	ND	0.67	mg/kg	SW846 6010B	07/24-07/25/00	DGN8K108
		Dilution Factor: 1		Analysis Time..: 13:38		
Prep Batch #...: 0206331						
Mercury	**0.021 B**	**0.044**	**mg/kg**	**SW846 7471A**	**07/24/00**	**DGN8K109**
		Dilution Factor: 1		Analysis Time..: 19:35		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I1-12

TOTAL Metals

Lot-Sample #...: F0G220156-016 **Matrix.....:** SOLID
Date Sampled...: 07/21/00 10:55 **Date Received..:** 07/22/00
% Moisture.....: 23

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206177						
Silver	ND	1.3	mg/kg	SW846 6010B	07/24-07/25/00	DGN8L102
		Dilution Factor: 1		Analysis Time..: 13:43		
Arsenic	**5.5**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8L103**
		Dilution Factor: 1		Analysis Time..: 13:43		
Barium	**152**	**25.8**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8L104**
		Dilution Factor: 1		Analysis Time..: 13:43		
Cadmium	**0.076 B**	**0.65**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8L105**
		Dilution Factor: 1		Analysis Time..: 13:43		
Chromium	**13.4**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8L106**
		Dilution Factor: 1		Analysis Time..: 13:43		
Lead	**9.1**	**0.39**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8L107**
		Dilution Factor: 1		Analysis Time..: 13:43		
Selenium	ND	0.65	mg/kg	SW846 6010B	07/24-07/25/00	DGN8L108
		Dilution Factor: 1		Analysis Time..: 13:43		
Prep Batch #...: 0206331						
Mercury	**0.019 B**	**0.043**	**mg/kg**	**SW846 7471A**	**07/24/00**	**DGN8L109**
		Dilution Factor: 1		Analysis Time..: 19:37		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I8-15

TOTAL Metals

Lot-Sample #...: F0G220156-017 **Matrix.....:** SOLID
Date Sampled...: 07/21/00 11:40 **Date Received..:** 07/22/00
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206177						
Silver	ND	1.3	mg/kg	SW846 6010B	07/24-07/25/00	DGN8M102
		Dilution Factor: 1		Analysis Time..: 13:47		
Arsenic	**8.5**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8M103**
		Dilution Factor: 1		Analysis Time..: 13:47		
Barium	**295**	**26.5**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8M104**
		Dilution Factor: 1		Analysis Time..: 13:47		
Cadmium	**0.18 B**	**0.66**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8M105**
		Dilution Factor: 1		Analysis Time..: 13:47		
Chromium	**18.7**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8M106**
		Dilution Factor: 1		Analysis Time..: 13:47		
Lead	**11.7**	**0.40**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8M107**
		Dilution Factor: 1		Analysis Time..: 13:47		
Selenium	ND	0.66	mg/kg	SW846 6010B	07/24-07/25/00	DGN8M108
		Dilution Factor: 1		Analysis Time..: 13:47		
Prep Batch #...: 0206331						
Mercury	**0.021 B**	**0.044**	**mg/kg**	**SW846 7471A**	**07/24/00**	**DGN8M109**
		Dilution Factor: 1		Analysis Time..: 19:40		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I7-3

TOTAL Metals

Lot-Sample #...: F0G220156-018 **Matrix.....:** SOLID
Date Sampled...: 07/21/00 13:23 **Date Received..:** 07/22/00
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0206177						
Silver	ND	1.3	mg/kg	SW846 6010B	07/24-07/25/00	DGN8N102
		Dilution Factor: 1		Analysis Time..: 14:37		
Arsenic	**7.7**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8N103**
		Dilution Factor: 1		Analysis Time..: 14:37		
Barium	**293**	**26.5**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8N104**
		Dilution Factor: 1		Analysis Time..: 14:37		
Cadmium	ND	0.66	mg/kg	SW846 6010B	07/24-07/25/00	DGN8N105
		Dilution Factor: 1		Analysis Time..: 14:37		
Chromium	**18.0**	**1.3**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8N106**
		Dilution Factor: 1		Analysis Time..: 14:37		
Lead	**12.2**	**0.40**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8N107**
		Dilution Factor: 1		Analysis Time..: 14:37		
Selenium	**0.53 B**	**0.66**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGN8N108**
		Dilution Factor: 1		Analysis Time..: 14:37		
Prep Batch #...: 0206331						
Mercury	**0.017 B**	**0.044**	**mg/kg**	**SW846 7471A**	**07/24/00**	**DGN8N109**
		Dilution Factor: 1		Analysis Time..: 19:42		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGV7A101 **Matrix.....:** WATER
MB Lot-Sample #: F0G260000-467
Prep Date.....: 07/25/00 **Analysis Time..:** 14:30
Analysis Date..: 07/26/00 **Prep Batch #...:** 0208467
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	0.50	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	69	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGNC0101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G220000-160
Prep Date.....: 07/22/00 **Analysis Time..:** 06:49
Analysis Date..: 07/24/00 **Prep Batch #...:** 0204160
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	25	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	71	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH1HX101 **Matrix.....:** WATER
MB Lot-Sample #: F0G280000-429
Prep Date.....: 07/26/00 **Analysis Time..:** 14:16
Analysis Date..: 07/26/00 **Prep Batch #...:** 0210429
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	94	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH1J3101 **Matrix.....:** WATER
MB Lot-Sample #: F0G280000-430

Prep Date.....: 07/25/00 **Analysis Time..:** 15:10

Analysis Date..: 07/25/00 **Prep Batch #...:** 0210430
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	99	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH197101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G280000-375

Prep Date.....: 07/25/00 **Analysis Time..:** 15:10
Analysis Date..: 07/25/00 **Prep Batch #...:** 0210375
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH2DL101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G280000-562

Prep Date.....: 07/25/00 **Analysis Time..:** 14:16
Analysis Date..: 07/26/00 **Prep Batch #...:** 0210562
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	94	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGRKQ101 **Matrix.....:** WATER
MB Lot-Sample #: F0G250000-537
Prep Date.....: 07/24/00 **Analysis Time..:** 21:36
Analysis Date..: 07/28/00 **Prep Batch #...:** 0207537
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	2.0	ug/L	SW846 8082
Aroclor 1221	ND	2.0	ug/L	SW846 8082
Aroclor 1232	ND	2.0	ug/L	SW846 8082
Aroclor 1242	ND	2.0	ug/L	SW846 8082
Aroclor 1248	ND	2.0	ug/L	SW846 8082
Aroclor 1254	ND	2.0	ug/L	SW846 8082
Aroclor 1260	ND	2.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	135	(12 - 167)
Decachlorobiphenyl	122	(10 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGRKP101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G250000-536

Prep Date.....: 07/25/00 **Analysis Time..:** 01:01

Analysis Date..: 07/29/00 **Prep Batch #...:** 0207536
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(10 - 199)
Decachlorobiphenyl	113	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G220156
MB Lot-Sample #: F0G280000-144

Work Order #...: DH0FE101
Prep Date.....: 07/27/00
Prep Batch #...: 0210144

Matrix.....: WATER
Analysis Time..: 13:09

Analysis Date..: 07/27/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**1.4**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	102	(78 - 124)
Toluene-d8	101	(71 - 129)
Dibromofluoromethane	96	(74 - 135)
1,2-Dichloroethane-d4	87	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH0FE101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DGQHQ101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G250000-310
Prep Date.....: 07/24/00 **Analysis Time..:** 11:40
Analysis Date..: 07/24/00 **Prep Batch #...:** 0207310
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	**8.7 J**	**20**	**ug/kg**	**SW846 8260B**
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	82	(73 - 109)
Toluene-d8	93	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DGQHQ101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH1PW101 **Matrix.....:** WATER
MB Lot-Sample #: F0G280000-459
Prep Date.....: 07/28/00 **Analysis Time..:** 09:21
Analysis Date..: 07/28/00 **Prep Batch #...:** 0210459
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**0.47 J**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	121	(78 - 124)
Toluene-d8	100	(71 - 129)
Dibromofluoromethane	127	(74 - 135)
1,2-Dichloroethane-d4	107	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH1PW101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G220156 **Work Order #...:** DGRKR101 **Matrix.....:** WATER
MB Lot-Sample #: F0G250000-538

Prep Date.....: 07/25/00 **Analysis Time..:** 15:09
Analysis Date..: 07/26/00 **Prep Batch #...:** 0207538
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	5.0	ug/L	SW846 8310
Acenaphthylene	ND	5.0	ug/L	SW846 8310
Anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)pyrene	ND	5.0	ug/L	SW846 8310
Benzo(b)fluoranthene	ND	5.0	ug/L	SW846 8310
Benzo(ghi)perylene	ND	5.0	ug/L	SW846 8310
Benzo(k)fluoranthene	ND	5.0	ug/L	SW846 8310
Chrysene	ND	5.0	ug/L	SW846 8310
Dibenz(a,h)anthracene	ND	5.0	ug/L	SW846 8310
Fluoranthene	ND	5.0	ug/L	SW846 8310
Fluorene	ND	5.0	ug/L	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L	SW846 8310
Naphthalene	ND	5.0	ug/L	SW846 8310
Phenanthrene	ND	5.0	ug/L	SW846 8310
Pyrene	ND	5.0	ug/L	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G220156 **Work Order #...:** DGNJ3101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G230000-178

Prep Date.....: 07/22/00 **Analysis Time..:** 18:18
Analysis Date..: 07/30/00 **Prep Batch #...:** 0205178
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	30	ug/kg	SW846 8310
Acenaphthylene	ND	30	ug/kg	SW846 8310
Anthracene	ND	30	ug/kg	SW846 8310
Benzo(a)anthracene	ND	15	ug/kg	SW846 8310
Benzo(a)pyrene	ND	15	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	15	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	30	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	15	ug/kg	SW846 8310
Chrysene	ND	15	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	30	ug/kg	SW846 8310
Fluoranthene	ND	30	ug/kg	SW846 8310
Fluorene	ND	30	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	15	ug/kg	SW846 8310
Naphthalene	ND	30	ug/kg	SW846 8310
Phenanthrene	ND	30	ug/kg	SW846 8310
Pyrene	ND	30	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	58	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G220156
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			**pCi/L**	**9310 MOD**			**F0G240000-228B**	
Gross Alpha	-2.7E-01	U	4.6E-01	10E-01	07/24/00	07/27/00	0206228	
Gross Beta	4E-02	U ?	1.1E+00	1.9E+00	07/24/00	07/27/00	0206228	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

? For informational purposes only. The result does not follow significant figures SOP
U Result is less than the sample detection limit.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G220156 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G240000-177 **Prep Batch #...:** 0206177						
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/24-07/25/00	DGNMP10L
		Dilution Factor: 1				
		Analysis Time..: 12:48				
Barium	ND	20.0	mg/kg	SW846 6010B	07/24-07/25/00	DGNMP128
		Dilution Factor: 1				
		Analysis Time..: 12:48				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/24-07/25/00	DGNMP129
		Dilution Factor: 1				
		Analysis Time..: 12:48				
Chromium	ND	1.0	mg/kg	SW846 6010B	07/24-07/25/00	DGNMP12A
		Dilution Factor: 1				
		Analysis Time..: 12:48				
Lead	**0.19 B**	**0.30**	**mg/kg**	**SW846 6010B**	**07/24-07/25/00**	**DGNMP10M**
		Dilution Factor: 1				
		Analysis Time..: 12:48				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/24-07/25/00	DGNMP10N
		Dilution Factor: 1				
		Analysis Time..: 12:48				
Silver	ND	1.0	mg/kg	SW846 6010B	07/24-07/25/00	DGNMP127
		Dilution Factor: 1				
		Analysis Time..: 12:48				
MB Lot-Sample #: F0G240000-331 **Prep Batch #...:** 0206331						
Mercury	ND	0.033	mg/kg	SW846 7471A	07/24/00	DGP3A101
		Dilution Factor: 1				
		Analysis Time..: 18:47				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G220156 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G240000-325 **Prep Batch #...:** 0206325						
Mercury	**0.099 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/25/00**	**DGP37101**
		Dilution Factor: 1				
		Analysis Time..: 18:31				
MB Lot-Sample #: F0G240000-351 **Prep Batch #...:** 0206351						
Arsenic	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52104
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Barium	ND	200	ug/L	SW846 6010B	07/24-07/25/00	DGP52105
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Cadmium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52102
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Chromium	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52103
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Lead	ND	3.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52106
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Selenium	ND	5.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52107
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Silver	ND	10.0	ug/L	SW846 6010B	07/24-07/25/00	DGP52101
		Dilution Factor: 1				
		Analysis Time..: 17:17				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGV7A102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0G260000-467 DGV7A103-LCSD
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0208467 **Analysis Time..:** 14:56
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**64**	**(10 - 148)**			**SW846 8015 MOD**
	70	**(10 - 148)**	**9.3**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	78	(10 - 150)
	87	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGNC0102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G220000-160
Prep Date.....: 07/22/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0204160 **Analysis Time..:** 07:15
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**74**	**(10 - 164)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	85	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH1HX102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G280000-429
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210429 **Analysis Time..:** 14:51
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**122**	**(70 - 130)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	114	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH1J3102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G280000-430
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210430 **Analysis Time..:** 15:45
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**130**	**(70 - 130)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	118	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH197102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G280000-375
Prep Date.....: 07/25/00 **Analysis Date..:** 07/25/00
Prep Batch #...: 0210375 **Analysis Time..:** 15:45
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**130**	**(50 - 150)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	118	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH2DL102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G280000-562
Prep Date.....: 07/25/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0210562 **Analysis Time..:** 14:51
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**122**	**(50 - 150)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	114	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGRKQ102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0G250000-537 DGRKQ103-LCSD
Prep Date.....: 07/24/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0207537 **Analysis Time..:** 21:50
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**111**	**(58 - 125)**			**SW846 8082**
	108	**(58 - 125)**	**2.6**	**(0-20)**	**SW846 8082**
Aroclor 1260	**101**	**(58 - 124)**			**SW846 8082**
	104	**(58 - 124)**	**3.0**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	101	(39 - 153)
	106	(39 - 153)
Decachlorobiphenyl	124	(10 - 127)
	119	(10 - 127)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGRKP102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G250000-536
Prep Date.....: 07/25/00 **Analysis Date..:** 07/29/00
Prep Batch #...: 0207536 **Analysis Time..:** 01:15
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**105**	**(74 - 127)**	**SW846 8082**
Aroclor 1260	**102**	**(74 - 129)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96	(62 - 162)
Decachlorobiphenyl	110	(53 - 145)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH0FE102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0G280000-144 DH0FE103-LCSD
Prep Date.....: 07/27/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0210144 **Analysis Time..:** 13:46
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**88**	**(71 - 120)**			**SW846 8260B**
	92	**(71 - 120)**	**4.5**	**(0-24)**	**SW846 8260B**
Benzene	**95**	**(76 - 127)**			**SW846 8260B**
	96	**(76 - 127)**	**1.1**	**(0-21)**	**SW846 8260B**
Toluene	**95**	**(76 - 125)**			**SW846 8260B**
	99	**(76 - 125)**	**4.4**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**94**	**(75 - 130)**			**SW846 8260B**
	100	**(75 - 130)**	**6.0**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**95**	**(61 - 145)**			**SW846 8260B**
	97	**(61 - 145)**	**1.4**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	102	(78 - 124)
	98	(78 - 124)
Toluene-d8	101	(71 - 129)
	108	(71 - 129)
Dibromofluoromethane	98	(74 - 135)
	95	(74 - 135)
1,2-Dichloroethane-d4	87	(70 - 130)
	92	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DH1PW102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G280000-459
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 09:58
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**101**	**(71 - 120)**	**SW846 8260B**
Benzene	**109**	**(76 - 127)**	**SW846 8260B**
Toluene	**105**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**102**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**104**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	109	(78 - 124)
Toluene-d8	101	(71 - 129)
Dibromofluoromethane	103	(74 - 135)
1,2-Dichloroethane-d4	100	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DGQHQ102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G250000-310
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 12:13
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**81**	**(72 - 120)**	**SW846 8260B**
Benzene	**90**	**(79 - 125)**	**SW846 8260B**
Toluene	**94**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**92**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**106**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	85	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	98	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G220156 **Work Order #...:** DGRKR102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0G250000-538 DGRKR103-LCSD
Prep Date.....: 07/25/00 **Analysis Date..:** 07/27/00
Prep Batch #...: 0207538 **Analysis Time..:** 15:17
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**59**	**(45 - 134)**			**SW846 8310**
	74	**(45 - 134)**	**23**	**(0-82)**	**SW846 8310**
Acenaphthylene	**50**	**(46 - 124)**			**SW846 8310**
	66	**(46 - 124)**	**27**	**(0-56)**	**SW846 8310**
Anthracene	**59**	**(28 - 158)**			**SW846 8310**
	68	**(28 - 158)**	**13**	**(0-46)**	**SW846 8310**
Benzo(a)anthracene	**71**	**(52 - 132)**			**SW846 8310**
	79	**(52 - 132)**	**11**	**(0-43)**	**SW846 8310**
Benzo(a)pyrene	**73**	**(22 - 117)**			**SW846 8310**
	83	**(22 - 117)**	**13**	**(0-67)**	**SW846 8310**
Benzo(b)fluoranthene	**78**	**(39 - 109)**			**SW846 8310**
	90	**(39 - 109)**	**14**	**(0-47)**	**SW846 8310**
Benzo(ghi)perylene	**72**	**(10 - 115)**			**SW846 8310**
	83	**(10 - 115)**	**14**	**(0-72)**	**SW846 8310**
Benzo(k)fluoranthene	**70**	**(25 - 116)**			**SW846 8310**
	80	**(25 - 116)**	**13**	**(0-50)**	**SW846 8310**
Chrysene	**72**	**(29 - 130)**			**SW846 8310**
	79	**(29 - 130)**	**10**	**(0-76)**	**SW846 8310**
Dibenz(a,h)anthracene	**72**	**(10 - 122)**			**SW846 8310**
	82	**(10 - 122)**	**13**	**(0-62)**	**SW846 8310**
Fluoranthene	**69**	**(36 - 126)**			**SW846 8310**
	80	**(36 - 126)**	**15**	**(0-43)**	**SW846 8310**
Fluorene	**48 a**	**(52 - 128)**			**SW846 8310**
	69	**(52 - 128)**	**35**	**(0-60)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**74**	**(10 - 101)**			**SW846 8310**
	85	**(10 - 101)**	**14**	**(0-66)**	**SW846 8310**
Naphthalene	**42**	**(42 - 102)**			**SW846 8310**
	62	**(42 - 102)**	**38**	**(0-44)**	**SW846 8310**
Phenanthrene	**62**	**(49 - 126)**			**SW846 8310**
	74	**(49 - 126)**	**18**	**(0-50)**	**SW846 8310**
Pyrene	**58**	**(14 - 116)**			**SW846 8310**
	69	**(14 - 116)**	**17**	**(0-46)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	61	(27 - 128)
	68	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G220156 **Work Order #...:** DGNJ3102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G230000-178
Prep Date.....: 07/22/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0205178 **Analysis Time..:** 18:43
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**83**	**(22 - 109)**	**SW846 8310**
Acenaphthylene	**83**	**(9.0- 125)**	**SW846 8310**
Anthracene	**63**	**(45 - 110)**	**SW846 8310**
Benzo(a)anthracene	**78**	**(43 - 132)**	**SW846 8310**
Benzo(a)pyrene	**70**	**(24 - 156)**	**SW846 8310**
Benzo(b)fluoranthene	**87**	**(46 - 132)**	**SW846 8310**
Benzo(ghi)perylene	**77**	**(50 - 104)**	**SW846 8310**
Benzo(k)fluoranthene	**77**	**(47 - 126)**	**SW846 8310**
Chrysene	**77**	**(39 - 142)**	**SW846 8310**
Dibenz(a,h)anthracene	**78**	**(52 - 110)**	**SW846 8310**
Fluoranthene	**79**	**(16 - 131)**	**SW846 8310**
Fluorene	**78**	**(40 - 108)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**82**	**(49 - 124)**	**SW846 8310**
Naphthalene	**87**	**(20 - 115)**	**SW846 8310**
Phenanthrene	**76**	**(50 - 103)**	**SW846 8310**
Pyrene	**67**	**(48 - 100)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	66	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G220156 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F0G240000-351 **Prep Batch #...:** 0206351					
Chromium	101	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210A
Arsenic	103	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210C
Barium	106	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210D
Lead	100	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210E
Selenium	102	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP5210F
Silver	103	(49 - 135)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP52108
Cadmium	102	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 17:22	07/24-07/25/00	DGP52109

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G220156 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	102	(80 - 120)			SW846 7470A	07/25/00	0206325
	99	(80 - 120)	3.4	(0-20)	SW846 7470A	07/25/00	0206325

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G220156 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Arsenic	112	(72 - 128)			SW846 6010B	07/24-07/25/00	0206177
	111	(72 - 128)	1.4	(0-20)	SW846 6010B	07/24-07/25/00	0206177
		Dilution Factor: 1					
Barium	110	(77 - 122)			SW846 6010B	07/24-07/25/00	0206177
	107	(77 - 122)	2.8	(0-20)	SW846 6010B	07/24-07/25/00	0206177
		Dilution Factor: 1					
Cadmium	111	(77 - 122)			SW846 6010B	07/24-07/25/00	0206177
	111	(77 - 122)	0.17	(0-20)	SW846 6010B	07/24-07/25/00	0206177
		Dilution Factor: 1					
Chromium	101	(77 - 123)			SW846 6010B	07/24-07/25/00	0206177
	100	(77 - 123)	0.87	(0-20)	SW846 6010B	07/24-07/25/00	0206177
		Dilution Factor: 1					
Lead	108	(76 - 124)			SW846 6010B	07/24-07/25/00	0206177
	107	(76 - 124)	0.96	(0-20)	SW846 6010B	07/24-07/25/00	0206177
		Dilution Factor: 1					
Selenium	105	(74 - 126)			SW846 6010B	07/24-07/25/00	0206177
	103	(74 - 126)	1.7	(0-20)	SW846 6010B	07/24-07/25/00	0206177
		Dilution Factor: 1					
Silver	107	(75 - 126)			SW846 6010B	07/24-07/25/00	0206177
	106	(75 - 126)	1.0	(0-20)	SW846 6010B	07/24-07/25/00	0206177
		Dilution Factor: 1					
Mercury	67	(58 - 142)			SW846 7471A	07/24/00	0206331
	79	(58 - 142)	17	(0-20)	SW846 7471A	07/24/00	0206331
		Dilution Factor: 5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Laboratory Control Sample Report

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G220156
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
GROSS A/B BY GFPC SW846 9310 MOD		**pCi/L**		**9310 MOD**			**F0G240000-228C**
Gross Alpha	4.50E+01	4.64E+01	5.4E+00	1.1E+00		103	67 - 125
	Batch #:	0206228		**AnalysisDate**	07/27/00		
GROSS A/B BY GFPC SW846 9310 MOD		**pCi/L**		**9310 MOD**			**F0G240000-228C**
Gross Beta	9.16E+01	7.47E+01	7.9E+00	2.0E+00		82	64 - 125
	Batch #:	0206228		**AnalysisDate**	07/27/00		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G220156 **Work Order #...:** DGPNR102-MS **Matrix.....:** SOLID
MS Lot-Sample #: F0G240192-001 DGPNR103-MSD
Date Sampled...: 07/14/00 10:12 **Date Received..:** 07/20/00
Prep Date.....: 07/25/00 **Analysis Date..:**
Prep Batch #...: 0207536 **Analysis Time..:** 00:00
Dilution Factor: 1 **% Moisture.....:** 1.8

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**0**	**(10 - 200)**			**SW846 8082**
		(10 - 200)		**(0-20)**	**SW846 8082**
Aroclor 1260	**0**	**(10 - 183)**			**SW846 8082**
		(10 - 183)		**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene		(10 - 199)
		(10 - 199)
Decachlorobiphenyl		(10 - 200)
		(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G220156 **Work Order #...:** DGN8P10G-MS **Matrix.....:** SOLID
MS Lot-Sample #: F0G220156-019 DGN8P10H-MSD
Date Sampled...: 07/21/00 13:33 **Date Received..:** 07/22/00
Prep Date.....: 07/24/00 **Analysis Date..:** 07/24/00
Prep Batch #...: 0207310 **Analysis Time..:** 19:04
Dilution Factor: 1 **% Moisture.....:** 18

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**88**	**(72 - 120)**			**SW846 8260B**
	87	**(72 - 120)**	**1.2**	**(0-24)**	**SW846 8260B**
Benzene	**94**	**(79 - 125)**			**SW846 8260B**
	94	**(79 - 125)**	**0.31**	**(0-21)**	**SW846 8260B**
Toluene	**95**	**(75 - 124)**			**SW846 8260B**
	99	**(75 - 124)**	**4.2**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**90**	**(81 - 119)**			**SW846 8260B**
	91	**(81 - 119)**	**1.1**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**105**	**(70 - 149)**			**SW846 8260B**
	110	**(70 - 149)**	**3.7**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
	88	(73 - 109)
Toluene-d8	98	(82 - 119)
	101	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
	98	(82 - 132)
1,2-Dichloroethane-d4	106	(60 - 140)
	104	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G220156 **Matrix.....:** WATER
Date Sampled...: 07/19/00 13:55 **Date Received..:** 07/19/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G190309-019 **Prep Batch #...:** 0206351							
Arsenic	102	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10Q
	102	(75 - 125)	0.60	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10R
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Barium	106	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10T
	106	(75 - 125)	0.35	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10U
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Cadmium	101	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10L
	101	(75 - 125)	0.15	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10M
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Chromium	99	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10N
	100	(75 - 125)	0.63	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10P
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Lead	99	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10V
	99	(75 - 125)	0.55	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10W
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Selenium	100	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10X
	100	(75 - 125)	0.28	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK110
		Dilution Factor: 1					
		Analysis Time..: 17:31					
Silver	103	(75 - 125)			SW846 6010B	07/24-07/25/00	DGGLK10J
	102	(75 - 125)	0.70	(0-20)	SW846 6010B	07/24-07/25/00	DGGLK10K
		Dilution Factor: 1					
		Analysis Time..: 17:31					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G220156 **Matrix.....:** WATER
Date Sampled...: 07/18/00 14:41 **Date Received..:** 07/20/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G210255-001 **Prep Batch #...:** 0206325							
Mercury	92	(75 - 125)			SW846 7470A	07/25/00	DGLQL102
	92	(75 - 125)	0.98	(0-20)	SW846 7470A	07/25/00	DGLQL103

Dilution Factor: 1
Analysis Time..: 18:52

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G220156 **Matrix.....:** SOLID
Date Sampled...: 07/13/00 12:30 **Date Received..:** 07/20/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G200220-001 **Prep Batch #...:** 0206177							
Arsenic	93	(75 - 125)			SW846 6010B	07/24-07/25/00	DGJA0112
	86	(75 - 125)	7.7	(0-20)	SW846 6010B	07/24-07/25/00	DGJA0113
		Dilution Factor: 10					
		Analysis Time..: 14:51					
Lead	569 N	(75 - 125)			SW846 6010B	07/24-07/25/00	DGJA0114
	550 N	(75 - 125)	18	(0-20)	SW846 6010B	07/24-07/25/00	DGJA0115
		Dilution Factor: 10					
		Analysis Time..: 14:51					
Selenium	95	(75 - 125)			SW846 6010B	07/24-07/25/00	DGJA0116
	94	(75 - 125)	1.0	(0-20)	SW846 6010B	07/24-07/25/00	DGJA0117
		Dilution Factor: 10					
		Analysis Time..: 14:51					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G220156 **Matrix.....:** SOLID
Date Sampled...: 07/06/00 10:40 **Date Received..:** 07/08/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G080117-002 **Prep Batch #...:** 0206331							
Mercury	97	(75 - 125)			SW846 7471A	07/24/00	DFW6H10V
	96	(75 - 125)	1.4	(0-20)	SW846 7471A	07/24/00	DFW6H10W
		Dilution Factor: 1					
		Analysis Time...: 19:07					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F0G220156 **Work Order #...:** DGN56-SMP DGN56-DUP **Matrix.....:** SOLID

Date Sampled...: 07/20/00 10:05 **Date Received..:** 07/21/00

% Moisture.....: 24

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F0G220145-004	
	23.6	22.7	%	3.8	(0-0.0)	MCAWW 160.3 MOD	07/24-07/25/00	0206473

Dilution Factor: 1

Analysis Time..: 00:00

Chain of Custody Record

cur 265

Quanterra 1/2

QUA-4124

Client: ESE	Project Manager: Doug Marian	Date: 7-21-00	Chain Of Custody Number: 47090
Address: 3199 Rivertech Tech Center	Telephone Number (Area Code)/Fax Number: 314 209 5900 / 209 5929	Lab Number:	Page ____ of ____
City: Md Hts; State: MO; Zip Code: 63043	Site Contact: Dennis Brinkley		
Project Name: Boeing PHASE II	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: % full SI			

	Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOC	TPH	PCB	PAH	RCRA Metals
12	B27I5-14 soil	7-21-00	0917	soil	4oz+oz	gl	2		120G, 250G	X	X	X	X	X
13	B27I3-12		0940	soil	"	"	2			X	X	X	X	X
14	B27I4-5		0955	soil	"	"	2			X	X	X	X	X
15	B27I2-11		1025	soil	"	"	2			X	X	X	X	X
16	B27I1-12		1055	soil	"	"	2			X	X	X	X	X
17	B27I8-15		1140	soil	"	"	2			X	X	X	X	X
18	B27I7-3		1323	soil	"	"	2			X	X	X	X	X
A	B27I7-14		1333	soil	"	"	2			X	X			
1	B29E1W TPH 40%		1420	H_2O	1L	gl	1		LG		X			
2	B24S1W (B2151m jar) TPH 60%		1435	H_2O	500ml	gl	1		LG		X			
8	B27I5-W TPH 60%, mets 60		1525	H_2O			6	2xLG, 500P, 3x40		X	X	X	X	X
3	B27I2-W /		1545	H_2O		40ml	2	2x40		X				
9	B27I8-W TPH 60% PAH/PCB 80% mets 70%		1625	H_2O			5	2x40, 500P, 2xLG		X	X	X	X	X
10	B27I1-W TPH 60%, mets 60%		1605	H_2O			5	2x40, 500P, 2xLG		X	X	X	X	X
11	B27I7-W mets 80%		1648	H_2O			5	2x40, 500P, 2xLG		X	X	X	X	X

Special Instructions: all bottles 100% full except where noted - SW 07.22-00.

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required: ☐ Normal ☑ Rush

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-21-00	1740	1. Received By: [signature] STL	07.22.00	0930
2. Relinquished By: [signature]	7/21/00	1820	2. Received By:		
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

quote 37419

Quanterra 2/2

QUA-4124

Client: ESE	Project Manager: DOUG MARIAN	Date: 7/21/00	Chain Of Custody Number: 47046
Address: 3199 RIVERPORT TECH CENTER	Telephone Number (Area Code)/Fax Number: 314 209-5900	Lab Number:	Page ____ of ____
City: ST. LOUIS; State: MO; Zip Code: 63043	Site Contact: DENNIS BRINKLEY		
Project Name: BOEING	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

	Sample I.D. No. and Description (PAH=70%)	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOC	TPH	PCB	PAH	RCRA METALS		RADIATION		% fuel			
7	B27E1W mets, TPH=50%	7/21/00	1400	H_2O	2L		5	2x40, 500P, 2xLG		X	X	X	X	X							LIMITED VOL.
4	EPE1W	7/21/00	1505	H_2O	500ml	500ml	1	NITRIC	500P							X					
5	EPE2W	7/21/00	1445	H_2O	400ml	500ml	1	NITRIC	500P							X		60			
	(TPH 1/2 full, PAH 75% full)																				
6	TRIP BLANK 1X40		SW	07.22.00																	

Special Instructions

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required: ☐ Normal ☒ Rush

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/21/00	1820	1. Received By: [signature] STL	07.22.00	0930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Committed to *Your* Success

Condition Upon Receipt Variance Report
St. Louis Laboratory

Lot No.: F052225

Client: ESE

Quote No: 37419

Shipper/No: client drop off

Date: 07.22.00 Time: 0930

Initiated by: [illegible]

RFA/COC Numbers: 47046, 47090

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below) _____

☐ **No variances were noted during sample receipt.**

☐ **Cooler Temperature Upon Receipt in °C:** 3°, 4°

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: ① rec'd. 1x40 mL trip blank, not on C-o-C.
② Many bottles not 100% full, see C-o-C for % full.
③ B2151W on C-o-C reads B2151 on jar. (date/time are the same)

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is".

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [illegible] Date: 07.22.00

Project Management Review: [illegible] Date: 7-24-00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

SEVERN TRENT SERVICES

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

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

ANALYTICAL REPORT

Boeing

Lot #: F0G250295

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

August 8, 2000

STL St. Louis is a part of Severn Trent Laboratories, Inc.

Case Narrative
LOT NUMBER: **F0G250295**

This report contains the analytical results for the 19 samples received under chain of custody by STL St. Louis on July 25, 2000. These samples are associated with your Boeing project.

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

Observations/Nonconformances

Nonconformance F01001
Affected Samples:
2: HW1W 4: CN1W

Affected Methods:
9012A

Case Narrative Details:
Samples were received with incorrect preservation. Samples are supposed to be preserved to PH greater than or equal to 12.

Corrective Action:
None.

Nonconformance F01009
Affected Samples:
2: HW1W 3: PB1W
5: B22N1W

Affected Methods:
8082

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Corrective Action:
None.

Nonconformance F01019
Affected Samples:
17: B221E1-12 18: B22N1-4

Affected Methods:
8260B

Case Narrative Details:
Samples B221E-12 and B22N1-4 have low BFB recoveries. The samples were reanalyzed. Results of the reanalysis confirmed a matrix effect in both samples.

Corrective Action:
None.

Nonconformance F01034
Affected Samples:
2: HW1W 3: PB1W
5: B22N1W

Affected Methods:
8082

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Corrective Action:
None.

Nonconformance F01059
Affected Samples:
1: B27I2W 2: HW1W
3: PB1W 5: B22N1W
6: B22W1W 7: B22E1W

Affected Methods:
8015 MOD Volatile Petroleum Hydrocarbon

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

These samples have elevated detection limits due to a lack of sample volume.

Corrective Action:
none

Nonconformance F01060
Affected Samples:
9: B22E1-8 10: B29AW1-8
11: PB1-6 12: B22W1-6
13: HW1-5 15: B220N1-6
16: B221E1-7 17: B221E1-12
18: B22N1-4

Affected Methods:
8015 MOD Diesel Range Hydrocarbons

Case Narrative Details:
Batch QC not performed.

Corrective Action:
This is due to analyst oversight. He is aware of batch QC requirements by the method.

Nonconformance F01068

Affected Samples:
13: HW1-5 14: B220I1-7
18: B22N1-4

Affected Methods:
8310

Case Narrative Details:
These samples were re-extracted within holding time due to low recoveries in the LCS. The re-extracts and associated batch QC is acceptable. Only the results from the second extraction and analysis are included in this report.

Corrective Action:
None.

Nonconformance F01069
Affected Samples:
5: B22N1W

Affected Methods:
8310

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Corrective Action:
None.

METHODS SUMMARY

F0G250295

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 8015 Mod.
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3520
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 8082
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G250295

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGRC3	001	B27I2W	07/24/00	16:55
DGRCC	002	HW1W	07/24/00	16:00
DGRCL	003	PB1W	07/24/00	16:30
DGRCN	004	CN1W	07/24/00	18:50
DGRCP	005	B22N1W	07/24/00	19:15
DGRCR	006	B22W1W	07/24/00	19:45
DGRCT	007	B22E1W	07/24/00	20:10
DGRCV	008	CN1-8	07/24/00	14:55
DGRD0	009	B22E1-8	07/24/00	16:05
DGRD1	010	B29AW1-8	07/24/00	13:05
DGRD3	011	PB1-6	07/24/00	14:25
DGRD5	012	B22W1-6	07/24/00	15:35
DGRD6	013	HW1-5	07/24/00	14:05
DGRD8	014	B220I1-7	07/24/00	10:30
DGRD9	015	B220N1-6	07/24/00	09:50
DGRDA	016	B221E1-7	07/24/00	09:10
DGRDC	017	B221E1-12	07/24/00	09:15
DGRDD	018	B22N1-4	07/24/00	15:15
DGRDF	019	TRIP BLANK	07/24/00	16:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2W

GC Semivolatiles

Lot-Sample #...: F0G250295-001 **Work Order #...:** DGRC3109 **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:55 **Date Received..:** 07/25/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215161 **Analysis Time..:** 13:28
Dilution Factor: 1
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	1.1	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	51	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

GC Semivolatiles

Lot-Sample #...: F0G250295-002 **Work Order #...:** DGRCC10F **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:00 **Date Received..:** 07/25/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215161 **Analysis Time..:** 13:54
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.96	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	23	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

GC Semivolatiles

Lot-Sample #...: F0G250295-002 **Work Order #...:** DGRCC102 **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:00 **Date Received..:** 07/25/00
Prep Date.....: 07/29/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0213181 **Analysis Time..:** 17:05
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(12 - 167)
Decachlorobiphenyl	25	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

GC/MS Volatiles

Lot-Sample #...: F0G250295-002 **Work Order #...:** DGRCC10E **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:00 **Date Received..:** 07/25/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 13:37
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	12	ug/L
1,2-Dichloropropane	ND	12	ug/L
cis-1,3-Dichloropropene	ND	12	ug/L
Trichloroethene	**37**	**12**	**ug/L**
Dibromochloromethane	ND	12	ug/L
1,1,2-Trichloroethane	ND	12	ug/L
Benzene	ND	12	ug/L
trans-1,3-Dichloropropene	ND	12	ug/L
Bromoform	ND	12	ug/L
4-Methyl-2-pentanone	ND	62	ug/L
2-Hexanone	ND	62	ug/L
Tetrachloroethene	**170 E**	**12**	**ug/L**
Toluene	**0.48 J**	**12**	**ug/L**
Chlorobenzene	ND	12	ug/L
Ethylbenzene	ND	12	ug/L
Styrene	ND	12	ug/L
Chloromethane	ND	25	ug/L
Bromomethane	ND	25	ug/L
Vinyl chloride	**38**	**25**	**ug/L**
Chloroethane	ND	25	ug/L
Methylene chloride	ND	12	ug/L
Acetone	ND	120	ug/L
Carbon disulfide	ND	12	ug/L
1,1-Dichloroethene	**0.71 J**	**12**	**ug/L**
1,1-Dichloroethane	ND	12	ug/L
1,2-Dichloroethene (total)	**150 E**	**12**	**ug/L**
Chloroform	ND	12	ug/L
1,2-Dichloroethane	ND	12	ug/L
2-Butanone	ND	62	ug/L
1,1,1-Trichloroethane	ND	12	ug/L
Carbon tetrachloride	ND	12	ug/L
Bromodichloromethane	ND	12	ug/L
1,1,2,2-Tetrachloroethane	ND	12	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	98	(78 - 124)
Toluene-d8	112	(71 - 129)
Dibromofluoromethane	106	(74 - 135)
1,2-Dichloroethane-d4	77	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

GC/MS Volatiles

Lot-Sample #...: F0G250295-002 **Work Order #...:** DGRCC10E **Matrix.....:** WATER

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

GC/MS Volatiles

Lot-Sample #...: F0G250295-002 **Work Order #...:** DGRCC20E **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:00 **Date Received..:** 07/25/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 20:03
Dilution Factor: 12.5

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	12	ug/L
1,2-Dichloropropane	ND	12	ug/L
cis-1,3-Dichloropropene	ND	12	ug/L
Trichloroethene	**49 D**	**12**	**ug/L**
Dibromochloromethane	ND	12	ug/L
1,1,2-Trichloroethane	ND	12	ug/L
Benzene	ND	12	ug/L
trans-1,3-Dichloropropene	ND	12	ug/L
Bromoform	ND	12	ug/L
4-Methyl-2-pentanone	ND	62	ug/L
2-Hexanone	ND	62	ug/L
Tetrachloroethene	**260 D**	**12**	**ug/L**
Toluene	ND	12	ug/L
Chlorobenzene	ND	12	ug/L
Ethylbenzene	ND	12	ug/L
Styrene	ND	12	ug/L
Chloromethane	ND	25	ug/L
Bromomethane	ND	25	ug/L
Vinyl chloride	ND	25	ug/L
Chloroethane	ND	25	ug/L
Methylene chloride	**50 B,D**	**12**	**ug/L**
Acetone	**78 J,D**	**120**	**ug/L**
Carbon disulfide	ND	12	ug/L
1,1-Dichloroethene	ND	12	ug/L
1,1-Dichloroethane	ND	12	ug/L
1,2-Dichloroethene (total)	**180 D**	**12**	**ug/L**
Chloroform	ND	12	ug/L
1,2-Dichloroethane	ND	12	ug/L
2-Butanone	ND	62	ug/L
1,1,1-Trichloroethane	ND	12	ug/L
Carbon tetrachloride	ND	12	ug/L
Bromodichloromethane	ND	12	ug/L
1,1,2,2-Tetrachloroethane	ND	12	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(78 - 124)
Toluene-d8	91	(71 - 129)
Dibromofluoromethane	100	(74 - 135)
1,2-Dichloroethane-d4	96	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

GC/MS Volatiles

Lot-Sample #...: F0G250295-002 **Work Order #...:** DGRCC20E **Matrix.....:** WATER

NOTE(S):

D Result was obtained from the analysis of a dilution.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

GC Volatiles

Lot-Sample #...: F0G250295-002 **Work Order #...:** DGRCC101 **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:00 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213501 **Analysis Time..:** 19:10
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.18**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	128	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: PB1W

GC Semivolatiles

Lot-Sample #...:	F0G250295-003	**Work Order #...:**	DGRCL102	**Matrix.....:**	WATER
Date Sampled...:	07/24/00 16:30	**Date Received..:**	07/25/00		
Prep Date.....:	07/31/00	**Analysis Date..:**	08/03/00		
Prep Batch #...:	0215161	**Analysis Time..:**	14:21		
Dilution Factor:	1				
		Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.94	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	16	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: PB1W

GC Semivolatiles

Lot-Sample #...: F0G250295-003 **Work Order #...:** DGRCL101 **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:30 **Date Received..:** 07/25/00
Prep Date.....: 07/29/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0213181 **Analysis Time..:** 17:18
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	71	(12 - 167)
Decachlorobiphenyl	18	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1W

GC Semivolatiles

Lot-Sample #...: F0G250295-005 **Work Order #...:** DGRCP10E **Matrix.....:** WATER
Date Sampled...: 07/24/00 19:15 **Date Received..:** 07/25/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215161 **Analysis Time..:** 15:10
Dilution Factor: 1
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**2.9**	**1.6**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	63	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1W

GC Semivolatiles

Lot-Sample #...: F0G250295-005 **Work Order #...:** DGRCP101 **Matrix.....:** WATER
Date Sampled...: 07/24/00 19:15 **Date Received..:** 07/25/00
Prep Date.....: 07/29/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0213181 **Analysis Time..:** 17:32
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(12 - 167)
Decachlorobiphenyl	37	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1W

GC/MS Volatiles

Lot-Sample #...: F0G250295-005 **Work Order #...:** DGRCP10D **Matrix.....:** WATER
Date Sampled...: 07/24/00 19:15 **Date Received..:** 07/25/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 18:13
Dilution Factor: 1
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.38 J,B**	**1.0**	**ug/L**
Acetone	**11**	**10**	**ug/L**
Carbon disulfide	**0.51 J**	**1.0**	**ug/L**
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(78 - 124)
Toluene-d8	104	(71 - 129)
Dibromofluoromethane	105	(74 - 135)
1,2-Dichloroethane-d4	94	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1W

GC/MS Volatiles

Lot-Sample #...: F0G250295-005 **Work Order #...:** DGRCP10D **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1W

HPLC

Lot-Sample #...: F0G250295-005 **Work Order #...:** DGRCP102 **Matrix.....:** WATER
Date Sampled...: 07/24/00 19:15 **Date Received..:** 07/25/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215160 **Analysis Time..:** 14:11
Dilution Factor: 10

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	**43**	**5.0**	**ug/L**
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	**25**	**5.0**	**ug/L**
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	50	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1W

GC Volatiles

Lot-Sample #...: F0G250295-005 **Work Order #...:** DGRCP10C **Matrix.....:** WATER
Date Sampled...: 07/24/00 19:15 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0213501 **Analysis Time..:** 10:43
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**3.6**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	78	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1W

GC Semivolatiles

Lot-Sample #...: F0G250295-006 **Work Order #...:** DGRCR10C **Matrix.....:** WATER
Date Sampled...: 07/24/00 19:45 **Date Received..:** 07/25/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215161 **Analysis Time..:** 15:34
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.92	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	14	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1W

GC/MS Volatiles

Lot-Sample #...: F0G250295-006 **Work Order #...:** DGRCR10A **Matrix.....:** WATER
Date Sampled...: 07/24/00 19:45 **Date Received..:** 07/25/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 14:50
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**2.2**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**3.6**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	102	(78 - 124)
Toluene-d8	90	(71 - 129)
Dibromofluoromethane	113	(74 - 135)
1,2-Dichloroethane-d4	96	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1W

GC Volatiles

Lot-Sample #...: F0G250295-006 **Work Order #...:** DGRCR109 **Matrix.....:** WATER
Date Sampled...: 07/24/00 19:45 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213501 **Analysis Time..:** 20:05
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	75	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E1W

GC Semivolatiles

Lot-Sample #...: F0G250295-007 **Work Order #...:** DGRCT103 **Matrix.....:** WATER
Date Sampled...: 07/24/00 20:10 **Date Received..:** 07/25/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0215161 **Analysis Time..:** 10:08
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.57	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	15	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E1W

GC/MS Volatiles

Lot-Sample #...: F0G250295-007 **Work Order #...:** DGRCT102 **Matrix.....:** WATER
Date Sampled...: 07/24/00 20:10 **Date Received..:** 07/25/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 15:27
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	101	(78 - 124)
Toluene-d8	101	(71 - 129)
Dibromofluoromethane	96	(74 - 135)
1,2-Dichloroethane-d4	79	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E1W

GC Volatiles

Lot-Sample #...: F0G250295-007 **Work Order #...:** DGRCT101 **Matrix.....:** WATER
Date Sampled...: 07/24/00 20:10 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213501 **Analysis Time..:** 20:32
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	78	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E1-8

GC Semivolatiles

Lot-Sample #...: F0G250295-009 **Work Order #...:** DGRD0104 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 16:05 **Date Received..:** 07/25/00
Prep Date.....: 07/29/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0213170 **Analysis Time..:** 19:17
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	52	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E1-8

GC/MS Volatiles

Lot-Sample #...: F0G250295-009 **Work Order #...:** DGRD0102 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 16:05 **Date Received..:** 07/25/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0209172 **Analysis Time..:** 16:08
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.5	ug/kg
1,2-Dichloropropane	ND	6.5	ug/kg
cis-1,3-Dichloropropene	ND	6.5	ug/kg
Trichloroethene	ND	6.5	ug/kg
Dibromochloromethane	ND	6.5	ug/kg
1,1,2-Trichloroethane	ND	6.5	ug/kg
Benzene	ND	6.5	ug/kg
trans-1,3-Dichloropropene	ND	6.5	ug/kg
Bromoform	ND	6.5	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.5	ug/kg
Toluene	ND	6.5	ug/kg
Chlorobenzene	ND	6.5	ug/kg
Ethylbenzene	ND	6.5	ug/kg
Styrene	ND	6.5	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.5	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	**14**	**6.5**	**ug/kg**
Acetone	**20 J**	**26**	**ug/kg**
Carbon disulfide	ND	6.5	ug/kg
1,1-Dichloroethene	ND	6.5	ug/kg
1,1-Dichloroethane	ND	6.5	ug/kg
1,2-Dichloroethene (total)	ND	6.5	ug/kg
Chloroform	ND	6.5	ug/kg
1,2-Dichloroethane	ND	6.5	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.5	ug/kg
Carbon tetrachloride	ND	6.5	ug/kg
Bromodichloromethane	ND	6.5	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.5	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	108	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E1-8

GC/MS Volatiles

Lot-Sample #...: F0G250295-009 **Work Order #...:** DGRD0102 **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E1-8

GC Volatiles

Lot-Sample #...:	F0G250295-009	**Work Order #...:**	DGRD0101	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 16:05	**Date Received..:**	07/25/00		
Prep Date.....:	07/30/00	**Analysis Date..:**	07/30/00		
Prep Batch #...:	0213495	**Analysis Time..:**	20:59		
Dilution Factor:	1				
% Moisture.....:	23	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	65	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1-8

GC Semivolatiles

Lot-Sample #...:	F0G250295-010	**Work Order #...:**	DGRD1104	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 13:05	**Date Received..:**	07/25/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213170	**Analysis Time..:**	19:44		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	43	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1-8

GC/MS Volatiles

Lot-Sample #...: F0G250295-010 **Work Order #...:** DGRD1103 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 13:05 **Date Received..:** 07/25/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0209172 **Analysis Time..:** 16:42
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Trichloroethene	ND	6.3	ug/kg
Dibromochloromethane	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	**13**	**6.3**	**ug/kg**
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1-8

GC/MS Volatiles

Lot-Sample #...: F0G250295-010 Work Order #...: DGRD1103 Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1-8

GC Volatiles

Lot-Sample #...: F0G250295-010 **Work Order #...:** DGRD1102 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 13:05 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213495 **Analysis Time..:** 21:27
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	63	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: PB1-6

GC Semivolatiles

Lot-Sample #...:	F0G250295-011	**Work Order #...:**	DGRD3104	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 14:25	**Date Received..:**	07/25/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213170	**Analysis Time..:**	20:10		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	48	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: PB1-6

GC Semivolatiles

Lot-Sample #...: F0G250295-011 **Work Order #...:** DGRD3102 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 14:25 **Date Received..:** 07/25/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 11:52
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	99	(10 - 199)
Decachlorobiphenyl	104	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: PB1-6

GC Volatiles

Lot-Sample #...: F0G250295-011 **Work Order #...:** DGRD3103 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 14:25 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213495 **Analysis Time..:** 21:54
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	57	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1-6

GC Semivolatiles

Lot-Sample #...:	F0G250295-012	**Work Order #...:**	DGRD510D	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 15:35	**Date Received..:**	07/25/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213170	**Analysis Time..:**	20:37		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	28	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1-6

GC/MS Volatiles

Lot-Sample #...: F0G250295-012 **Work Order #...:** DGRD510C **Matrix.....:** SOLID
Date Sampled...: 07/24/00 15:35 **Date Received..:** 07/25/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0209172 **Analysis Time..:** 17:16
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Trichloroethene	ND	6.3	ug/kg
Dibromochloromethane	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	**13**	**6.3**	**ug/kg**
Acetone	**21 J**	**25**	**ug/kg**
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
2-Butanone	**25 J**	**25**	**ug/kg**
1,1,1-Trichloroethane	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	82	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	117	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1-6

GC/MS Volatiles

Lot-Sample #...: F0G250295-012 Work Order #...: DGRD510C Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1-6

GC Volatiles

Lot-Sample #...:	F0G250295-012	**Work Order #...:**	DGRD510A	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 15:35	**Date Received..:**	07/25/00		
Prep Date.....:	07/30/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213495	**Analysis Time..:**	11:10		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.27**	**0.13**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	65	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1-5

GC Semivolatiles

Lot-Sample #...:	F0G250295-013	**Work Order #...:**	DGRD610J	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 14:05	**Date Received..:**	07/25/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213170	**Analysis Time..:**	21:04		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	21	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1-5

GC Semivolatiles

Lot-Sample #...: F0G250295-013 **Work Order #...:** DGRD610C **Matrix.....:** SOLID
Date Sampled...: 07/24/00 14:05 **Date Received..:** 07/25/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 12:35
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	114	(10 - 199)
Decachlorobiphenyl	110	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1-5

GC/MS Volatiles

Lot-Sample #...: F0G250295-013 **Work Order #...:** DGRD610H **Matrix.....:** SOLID
Date Sampled...: 07/24/00 14:05 **Date Received..:** 07/25/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0209172 **Analysis Time..:** 18:57
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Trichloroethene	**9.0**	**6.3**	**ug/kg**
Dibromochloromethane	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	**43**	**6.3**	**ug/kg**
Toluene	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	**18**	**6.3**	**ug/kg**
Chloroethane	ND	13	ug/kg
Methylene chloride	**13**	**6.3**	**ug/kg**
Acetone	**16 J**	**25**	**ug/kg**
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	**55**	**6.3**	**ug/kg**
Chloroform	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	83	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	96	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1-5

GC/MS Volatiles

Lot-Sample #...: F0G250295-013 **Work Order #...:** DGRD610H **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1-5

HPLC

Lot-Sample #...: F0G250295-013 **Work Order #...:** DGRD620A **Matrix.....:** SOLID
Date Sampled...: 07/24/00 14:05 **Date Received..:** 07/25/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 17:43
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	51	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1-5

GC Volatiles

Lot-Sample #...:	F0G250295-013	**Work Order #...:**	DGRD610D	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 14:05	**Date Received..:**	07/25/00		
Prep Date.....:	07/30/00	**Analysis Date..:**	07/30/00		
Prep Batch #...:	0213495	**Analysis Time..:**	23:43		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	53	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220I1-7

GC/MS Volatiles

Lot-Sample #...: F0G250295-014 **Work Order #...:** DGRD8103 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 10:30 **Date Received..:** 07/25/00
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0209172 **Analysis Time..:** 19:31
Dilution Factor: 1
% Moisture.....: 19 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.2	ug/kg
1,2-Dichloropropane	ND	6.2	ug/kg
cis-1,3-Dichloropropene	ND	6.2	ug/kg
Trichloroethene	**48**	**6.2**	**ug/kg**
Dibromochloromethane	ND	6.2	ug/kg
1,1,2-Trichloroethane	ND	6.2	ug/kg
Benzene	ND	6.2	ug/kg
trans-1,3-Dichloropropene	ND	6.2	ug/kg
Bromoform	ND	6.2	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.2	ug/kg
Toluene	ND	6.2	ug/kg
Chlorobenzene	ND	6.2	ug/kg
Ethylbenzene	ND	6.2	ug/kg
Styrene	ND	6.2	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	6.2	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	**11**	**6.2**	**ug/kg**
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.2	ug/kg
1,1-Dichloroethene	ND	6.2	ug/kg
1,1-Dichloroethane	ND	6.2	ug/kg
1,2-Dichloroethene (total)	**75**	**6.2**	**ug/kg**
Chloroform	ND	6.2	ug/kg
1,2-Dichloroethane	ND	6.2	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.2	ug/kg
Carbon tetrachloride	ND	6.2	ug/kg
Bromodichloromethane	ND	6.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	86	(73 - 109)
Toluene-d8	98	(82 - 119)
Dibromofluoromethane	95	(82 - 132)
1,2-Dichloroethane-d4	96	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220I1-7

GC/MS Volatiles

Lot-Sample #...: F0G250295-014 Work Order #...: DGRD8103 Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220I1-7

HPLC

Lot-Sample #...: F0G250295-014 **Work Order #...:** DGRD8202 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 10:30 **Date Received..:** 07/25/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 18:09
Dilution Factor: 1
% Moisture.....: 19 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	37	ug/kg
Acenaphthylene	ND	37	ug/kg
Anthracene	ND	37	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	37	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	37	ug/kg
Fluoranthene	ND	37	ug/kg
Fluorene	ND	37	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	37	ug/kg
Phenanthrene	ND	37	ug/kg
Pyrene	ND	37	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220N1-6

GC Semivolatiles

Lot-Sample #...:	F0G250295-015	**Work Order #...:**	DGRD9103	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 09:50	**Date Received..:**	07/25/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213170	**Analysis Time..:**	22:24		
Dilution Factor:	1				
% Moisture.....:	24	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	33	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	37	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220N1-6

GC Volatiles

Lot-Sample #...: F0G250295-015 **Work Order #...:** DGRD9101 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 09:50 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0213495 **Analysis Time..:** 11:38
Dilution Factor: 1
% Moisture.....: 24 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	58	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-7

GC Semivolatiles

Lot-Sample #...:	F0G250295-016	**Work Order #...:**	DGRDA104	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 09:10	**Date Received..:**	07/25/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213170	**Analysis Time..:**	22:51		
Dilution Factor:	1				
% Moisture.....:	13	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**1200**	**29**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	62	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-7

GC/MS Volatiles

Lot-Sample #...: F0G250295-016 **Work Order #...:** DGRDA203 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 09:10 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 13:16
Dilution Factor: 1
% Moisture.....: 13 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	5.7	ug/kg
1,2-Dichloropropane	ND	5.7	ug/kg
cis-1,3-Dichloropropene	ND	5.7	ug/kg
Trichloroethene	ND	5.7	ug/kg
Dibromochloromethane	ND	5.7	ug/kg
1,1,2-Trichloroethane	ND	5.7	ug/kg
Benzene	ND	5.7	ug/kg
trans-1,3-Dichloropropene	ND	5.7	ug/kg
Bromoform	ND	5.7	ug/kg
4-Methyl-2-pentanone	ND	23	ug/kg
2-Hexanone	ND	23	ug/kg
Tetrachloroethene	**2.1 J,D**	**5.7**	**ug/kg**
Toluene	ND	5.7	ug/kg
Chlorobenzene	ND	5.7	ug/kg
Ethylbenzene	ND	5.7	ug/kg
Styrene	ND	5.7	ug/kg
Chloromethane	ND	11	ug/kg
Bromomethane	ND	11	ug/kg
Vinyl chloride	ND	5.7	ug/kg
Chloroethane	ND	11	ug/kg
Methylene chloride	ND	5.7	ug/kg
Acetone	**71 D**	**23**	**ug/kg**
Carbon disulfide	ND	5.7	ug/kg
1,1-Dichloroethene	ND	5.7	ug/kg
1,1-Dichloroethane	ND	5.7	ug/kg
1,2-Dichloroethene (total)	ND	5.7	ug/kg
Chloroform	ND	5.7	ug/kg
1,2-Dichloroethane	ND	5.7	ug/kg
2-Butanone	ND	23	ug/kg
1,1,1-Trichloroethane	ND	5.7	ug/kg
Carbon tetrachloride	ND	5.7	ug/kg
Bromodichloromethane	ND	5.7	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	90	(73 - 109)
Toluene-d8	100	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	95	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-7

GC/MS Volatiles

Lot-Sample #...: F0G250295-016 Work Order #...: DGRDA203 Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-7

GC Volatiles

Lot-Sample #...:	F0G250295-016	Work Order #...:	DGRDA102	Matrix.....:	SOLID
Date Sampled...:	07/24/00 09:10	Date Received..:	07/25/00		
Prep Date.....:	07/30/00	Analysis Date..:	07/31/00		
Prep Batch #...:	0213495	Analysis Time..:	00:38		
Dilution Factor:	5				
% Moisture.....:	13	Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	2.9	0.57	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	56	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-12

GC Semivolatiles

Lot-Sample #...:	F0G250295-017	**Work Order #...:**	DGRDC104	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 09:15	**Date Received..:**	07/25/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/03/00		
Prep Batch #...:	0213170	**Analysis Time..:**	16:21		
Dilution Factor:	1				
% Moisture.....:	15	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**330**	**29**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	36	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-12

GC/MS Volatiles

Lot-Sample #...: F0G250295-017 **Work Order #...:** DGRDC103 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 09:15 **Date Received..:** 07/25/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0212109 **Analysis Time..:** 19:42
Dilution Factor: 1
% Moisture.....: 15 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	5.9	ug/kg
1,2-Dichloropropane	ND	5.9	ug/kg
cis-1,3-Dichloropropene	ND	5.9	ug/kg
Trichloroethene	ND	5.9	ug/kg
Dibromochloromethane	ND	5.9	ug/kg
1,1,2-Trichloroethane	ND	5.9	ug/kg
Benzene	ND	5.9	ug/kg
trans-1,3-Dichloropropene	ND	5.9	ug/kg
Bromoform	ND	5.9	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	5.9	ug/kg
Toluene	ND	5.9	ug/kg
Chlorobenzene	ND	5.9	ug/kg
Ethylbenzene	ND	5.9	ug/kg
Styrene	ND	5.9	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	5.9	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	**16**	**5.9**	**ug/kg**
Acetone	**52 B**	**24**	**ug/kg**
Carbon disulfide	ND	5.9	ug/kg
1,1-Dichloroethene	ND	5.9	ug/kg
1,1-Dichloroethane	ND	5.9	ug/kg
1,2-Dichloroethene (total)	ND	5.9	ug/kg
Chloroform	ND	5.9	ug/kg
1,2-Dichloroethane	ND	5.9	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	5.9	ug/kg
Carbon tetrachloride	ND	5.9	ug/kg
Bromodichloromethane	ND	5.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	52 *	(73 - 109)
Toluene-d8	106	(82 - 119)
Dibromofluoromethane	104	(82 - 132)
1,2-Dichloroethane-d4	116	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-12

GC/MS Volatiles

Lot-Sample #...: F0G250295-017 Work Order #...: DGRDC103 Matrix.....: SOLID

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-12

GC/MS Volatiles

Lot-Sample #...: F0G250295-017 **Work Order #...:** DGRDC203 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 09:15 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 13:50
Dilution Factor: 1
% Moisture.....: 15 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	5.9	ug/kg
1,2-Dichloropropane	ND	5.9	ug/kg
cis-1,3-Dichloropropene	ND	5.9	ug/kg
Trichloroethene	ND	5.9	ug/kg
Dibromochloromethane	ND	5.9	ug/kg
1,1,2-Trichloroethane	ND	5.9	ug/kg
Benzene	ND	5.9	ug/kg
trans-1,3-Dichloropropene	ND	5.9	ug/kg
Bromoform	ND	5.9	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	**4.6 J,D**	**5.9**	**ug/kg**
Toluene	ND	5.9	ug/kg
Chlorobenzene	ND	5.9	ug/kg
Ethylbenzene	ND	5.9	ug/kg
Styrene	ND	5.9	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	5.9	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	5.9	ug/kg
Acetone	**63 D**	**24**	**ug/kg**
Carbon disulfide	ND	5.9	ug/kg
1,1-Dichloroethene	ND	5.9	ug/kg
1,1-Dichloroethane	ND	5.9	ug/kg
1,2-Dichloroethene (total)	ND	5.9	ug/kg
Chloroform	ND	5.9	ug/kg
1,2-Dichloroethane	ND	5.9	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	5.9	ug/kg
Carbon tetrachloride	ND	5.9	ug/kg
Bromodichloromethane	ND	5.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	68 *	(73 - 109)
Toluene-d8	102	(82 - 119)
Dibromofluoromethane	105	(82 - 132)
1,2-Dichloroethane-d4	114	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-12

GC/MS Volatiles

Lot-Sample #...: F0G250295-017 Work Order #...: DGRDC203 Matrix.....: SOLID

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-12

GC Volatiles

Lot-Sample #...:	F0G250295-017	**Work Order #...:**	DGRDC102	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 09:15	**Date Received..:**	07/25/00		
Prep Date.....:	07/30/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213495	**Analysis Time..:**	01:05		
Dilution Factor:	5				
% Moisture.....:	15	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**5.2**	**0.59**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	56	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

GC Semivolatiles

Lot-Sample #...:	F0G250295-018	**Work Order #...:**	DGRDD10F	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 15:15	**Date Received..:**	07/25/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/03/00		
Prep Batch #...:	0213170	**Analysis Time..:**	16:44		
Dilution Factor:	1				
% Moisture.....:	16	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	30	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	60	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

GC Semivolatiles

Lot-Sample #...: F0G250295-018 **Work Order #...:** DGRDD10C **Matrix.....:** SOLID
Date Sampled...: 07/24/00 15:15 **Date Received..:** 07/25/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 12:49
Dilution Factor: 1
% Moisture.....: 16 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	0.0 *	(10 - 199)
Decachlorobiphenyl	96	(10 - 200)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

GC/MS Volatiles

Lot-Sample #...: F0G250295-018 **Work Order #...:** DGRDD10E **Matrix.....:** SOLID
Date Sampled...: 07/24/00 15:15 **Date Received..:** 07/25/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0212109 **Analysis Time..:** 20:16
Dilution Factor: 1
% Moisture.....: 16 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	5.9	ug/kg
1,2-Dichloropropane	ND	5.9	ug/kg
cis-1,3-Dichloropropene	ND	5.9	ug/kg
Trichloroethene	ND	5.9	ug/kg
Dibromochloromethane	ND	5.9	ug/kg
1,1,2-Trichloroethane	ND	5.9	ug/kg
Benzene	ND	5.9	ug/kg
trans-1,3-Dichloropropene	ND	5.9	ug/kg
Bromoform	ND	5.9	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	5.9	ug/kg
Toluene	ND	5.9	ug/kg
Chlorobenzene	ND	5.9	ug/kg
Ethylbenzene	ND	5.9	ug/kg
Styrene	ND	5.9	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	5.9	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	**17**	**5.9**	**ug/kg**
Acetone	**61 B**	**24**	**ug/kg**
Carbon disulfide	ND	5.9	ug/kg
1,1-Dichloroethene	ND	5.9	ug/kg
1,1-Dichloroethane	ND	5.9	ug/kg
1,2-Dichloroethene (total)	ND	5.9	ug/kg
Chloroform	ND	5.9	ug/kg
1,2-Dichloroethane	ND	5.9	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	5.9	ug/kg
Carbon tetrachloride	ND	5.9	ug/kg
Bromodichloromethane	ND	5.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	73	(73 - 109)
Toluene-d8	105	(82 - 119)
Dibromofluoromethane	25 *	(82 - 132)
1,2-Dichloroethane-d4	115	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

GC/MS Volatiles

Lot-Sample #...: F0G250295-018 **Work Order #...:** DGRDD10E **Matrix.....:** SOLID

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

GC/MS Volatiles

Lot-Sample #...: F0G250295-018 **Work Order #...:** DGRDD20E **Matrix.....:** SOLID
Date Sampled...: 07/24/00 15:15 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 15:31
Dilution Factor: 1
% Moisture.....: 16 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	5.9	ug/kg
1,2-Dichloropropane	ND	5.9	ug/kg
cis-1,3-Dichloropropene	ND	5.9	ug/kg
Trichloroethene	ND	5.9	ug/kg
Dibromochloromethane	ND	5.9	ug/kg
1,1,2-Trichloroethane	ND	5.9	ug/kg
Benzene	ND	5.9	ug/kg
trans-1,3-Dichloropropene	ND	5.9	ug/kg
Bromoform	ND	5.9	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	**6.2 D**	**5.9**	**ug/kg**
Toluene	ND	5.9	ug/kg
Chlorobenzene	ND	5.9	ug/kg
Ethylbenzene	ND	5.9	ug/kg
Styrene	ND	5.9	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	5.9	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	5.9	ug/kg
Acetone	**72 D**	**24**	**ug/kg**
Carbon disulfide	ND	5.9	ug/kg
1,1-Dichloroethene	ND	5.9	ug/kg
1,1-Dichloroethane	ND	5.9	ug/kg
1,2-Dichloroethene (total)	ND	5.9	ug/kg
Chloroform	ND	5.9	ug/kg
1,2-Dichloroethane	ND	5.9	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	5.9	ug/kg
Carbon tetrachloride	ND	5.9	ug/kg
Bromodichloromethane	ND	5.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	93	(73 - 109)
Toluene-d8	113	(82 - 119)
Dibromofluoromethane	18 *	(82 - 132)
1,2-Dichloroethane-d4	127	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

GC/MS Volatiles

Lot-Sample #...: F0G250295-018 **Work Order #...:** DGRDD20E **Matrix.....:** SOLID

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

HPLC

Lot-Sample #...: F0G250295-018
Date Sampled...: 07/24/00 15:15
Prep Date.....: 08/04/00
Prep Batch #...: 0217527
Dilution Factor: 1
% Moisture.....: 16

Work Order #...: DGRDD20A
Date Received..: 07/25/00
Analysis Date..: 08/06/00
Analysis Time..: 18:35

Method.....: SW846 8310

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	**6800**	**36**	**ug/kg**
Acenaphthylene	**74**	**36**	**ug/kg**
Anthracene	ND	36	ug/kg
Benzo(a)anthracene	**42**	**18**	**ug/kg**
Benzo(a)pyrene	ND	18	ug/kg
Benzo(b)fluoranthene	**42**	**18**	**ug/kg**
Benzo(ghi)perylene	ND	36	ug/kg
Benzo(k)fluoranthene	ND	18	ug/kg
Chrysene	**300**	**18**	**ug/kg**
Dibenz(a,h)anthracene	ND	36	ug/kg
Fluoranthene	**110**	**36**	**ug/kg**
Fluorene	**62**	**36**	**ug/kg**
Indeno(1,2,3-cd)pyrene	ND	18	ug/kg
Naphthalene	ND	36	ug/kg
Phenanthrene	ND	36	ug/kg
Pyrene	ND	36	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	63	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

GC Volatiles

Lot-Sample #...:	F0G250295-018	**Work Order #...:**	DGRDD10D	**Matrix.....:**	SOLID
Date Sampled...:	07/24/00 15:15	**Date Received..:**	07/25/00		
Prep Date.....:	07/30/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0213495	**Analysis Time..:**	12:05		
Dilution Factor:	1				
% Moisture.....:	16	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**1.4**	**0.12**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	60	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G250295-019 **Work Order #...:** DGRDF101 **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:00 **Date Received..:** 07/25/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 14:14
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.91 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	97	(78 - 124)
Toluene-d8	106	(71 - 129)
Dibromofluoromethane	104	(74 - 135)
1,2-Dichloroethane-d4	81	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G250295-019 **Work Order #...:** DGRDF101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

General Chemistry

Lot-Sample #...: F0G250295-002 **Work Order #...:** DGRCC **Matrix.....:** WATER
Date Sampled...: 07/24/00 16:00 **Date Received..:** 07/25/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1		Analysis Time..: 16:00		
Reactive Cyanide	**0.11**	**0.050**	**mg/kg**	**SW846 7.3.3**	**07/27-07/28/00**	**0210436**
		Dilution Factor: 1		Analysis Time..: 12:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: CN1W

General Chemistry

Lot-Sample #...: F0G250295-004 **Work Order #...:** DGRCN **Matrix.....:** WATER
Date Sampled...: 07/24/00 18:50 **Date Received..:** 07/25/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1		Analysis Time..: 16:00		
Reactive Cyanide	**0.11**	**0.050**	**mg/kg**	**SW846 7.3.3**	**07/27-07/28/00**	**0210436**
		Dilution Factor: 1		Analysis Time..: 12:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: CN1-8

General Chemistry

Lot-Sample #...: F0G250295-008 **Work Order #...:** DGRCV **Matrix.....:** SOLID
Date Sampled...: 07/24/00 14:55 **Date Received..:** 07/25/00
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.60	mg/kg	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**22.2**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/31/00**	**0213469**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.064	mg/kg	SW846 7.3.3	07/27-07/28/00	0210435
		Dilution Factor: 1		Analysis Time..: 12:00		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E1-8

General Chemistry

Lot-Sample #...: F0G250295-009 **Work Order #...:** DGRD0 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 16:05 **Date Received..:** 07/25/00
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**22.6**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/31/00**	**0213469**
		Dilution Factor: 1		Analysis Time..: 00:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1-8

General Chemistry

Lot-Sample #...: F0G250295-010 Work Order #...: DGRD1 Matrix.....: SOLID
Date Sampled...: 07/24/00 13:05 Date Received..: 07/25/00
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	20.7	0.10	%	MCAWW 160.3 MOD	07/31/00	0213469

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: PB1-6

General Chemistry

Lot-Sample #...: F0G250295-011 **Work Order #...:** DGRD3 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 14:25 **Date Received..:** 07/25/00
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	21.0	0.10	%	MCAWW 160.3 MOD	07/31/00	0213469

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1-6

General Chemistry

Lot-Sample #...: F0G250295-012 **Work Order #...:** DGRD5 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 15:35 **Date Received..:** 07/25/00
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**20.8**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208515**
		Dilution Factor: 1		Analysis Time..: 00:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1-5

General Chemistry

Lot-Sample #...: F0G250295-013 Work Order #...: DGRD6 Matrix.....: SOLID
Date Sampled...: 07/24/00 14:05 Date Received..: 07/25/00
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.63	mg/kg	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**20.7**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208515**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	**0.14**	**0.063**	**mg/kg**	**SW846 7.3.3**	**07/27-07/28/00**	**0210435**
		Dilution Factor: 1		Analysis Time..: 12:00		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220I1-7

General Chemistry

Lot-Sample #...: F0G250295-014 Work Order #...: DGRD8 Matrix.....: SOLID
Date Sampled...: 07/24/00 10:30 Date Received..: 07/25/00
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	19.3	0.10	%	MCAWW 160.3 MOD	07/31/00	0213469
		Dilution Factor: 1		Analysis Time..: 00:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220N1-6

General Chemistry

Lot-Sample #...: F0G250295-015 Work Order #...: DGRD9 Matrix.....: SOLID
Date Sampled...: 07/24/00 09:50 Date Received..: 07/25/00
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	23.9	0.10	%	MCAWW 160.3 MOD	07/31/00	0213469

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-7

General Chemistry

Lot-Sample #...: F0G250295-016 Work Order #...: DGRDA Matrix.....: SOLID
Date Sampled...: 07/24/00 09:10 Date Received..: 07/25/00
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	13.0	0.10	%	MCAWW 160.3 MOD	07/26-07/27/00	0208548
		Dilution Factor: 1		Analysis Time..: 00:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1-12

General Chemistry

Lot-Sample #...: F0G250295-017 **Work Order #...:** DGRDC **Matrix.....:** SOLID
Date Sampled...: 07/24/00 09:15 **Date Received..:** 07/25/00
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**14.9**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208548**

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

General Chemistry

Lot-Sample #...: F0G250295-018 Work Order #...: DGRDD Matrix.....: SOLID
Date Sampled...: 07/24/00 15:15 Date Received..: 07/25/00
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	15.6	0.10	%	MCAWW 160.3 MOD	07/26-07/27/00	0208515
		Dilution Factor: 1		Analysis Time..: 00:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2W

TOTAL Metals

Lot-Sample #...: F0G250295-001 Matrix.....: WATER
Date Sampled...: 07/24/00 16:55 Date Received..: 07/25/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0208223						
Mercury	0.035 B	0.20	ug/L	SW846 7470A	07/26-07/27/00	DGRC3108
		Dilution Factor: 1		Analysis Time..: 09:40		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGRC3105
		Dilution Factor: 1		Analysis Time..: 09:07		
Arsenic	15.3	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGRC3101
		Dilution Factor: 1		Analysis Time..: 09:07		
Barium	538	200	ug/L	SW846 6010B	07/27-07/31/00	DGRC3102
		Dilution Factor: 1		Analysis Time..: 09:07		
Cadmium	2.4 B	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGRC3106
		Dilution Factor: 1		Analysis Time..: 09:07		
Chromium	57.2	10.0	ug/L	SW846 6010B	07/27-08/01/00	DGRC3107
		Dilution Factor: 1		Analysis Time..: 11:13		
Lead	21.9	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGRC3103
		Dilution Factor: 1		Analysis Time..: 09:07		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGRC3104
		Dilution Factor: 1		Analysis Time..: 09:07		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

TOTAL Metals

Lot-Sample #...: F0G250295-002 Matrix.....: WATER
Date Sampled...: 07/24/00 16:00 Date Received..: 07/25/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0208223						
Mercury	2.0	0.20	ug/L	SW846 7470A	07/26-07/27/00	DGRCC10D
		Dilution Factor: 1		Analysis Time..: 09:51		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCC109
		Dilution Factor: 1		Analysis Time..: 10:57		
Arsenic	499	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCC105
		Dilution Factor: 1		Analysis Time..: 10:57		
Barium	19000	2000	ug/L	SW846 6010B	07/27-07/31/00	DGRCC106
		Dilution Factor: 10		Analysis Time..: 09:11		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCC10A
		Dilution Factor: 1		Analysis Time..: 10:57		
Chromium	906	100	ug/L	SW846 6010B	07/27-08/01/00	DGRCC10C
		Dilution Factor: 10		Analysis Time..: 12:33		
Lead	798	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCC107
		Dilution Factor: 1		Analysis Time..: 10:57		
Selenium	32.6	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCC108
		Dilution Factor: 1		Analysis Time..: 10:57		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1W

TOTAL Metals

Lot-Sample #...: F0G250295-005 Matrix.....: WATER
Date Sampled...: 07/24/00 19:15 Date Received..: 07/25/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0208223						
Mercury	0.42	0.20	ug/L	SW846 7470A	07/26-07/27/00	DGRCP10A
		Dilution Factor: 1		Analysis Time..: 09:35		
Prep Batch #...: 0209489						
Silver	1.2 B	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCP107
		Dilution Factor: 1		Analysis Time..: 09:16		
Arsenic	70.9	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCP103
		Dilution Factor: 1		Analysis Time..: 09:16		
Barium	5770	200	ug/L	SW846 6010B	07/27-07/31/00	DGRCP104
		Dilution Factor: 1		Analysis Time..: 09:16		
Cadmium	14.9	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCP108
		Dilution Factor: 1		Analysis Time..: 09:16		
Chromium	426	100	ug/L	SW846 6010B	07/27-08/01/00	DGRCP109
		Dilution Factor: 10		Analysis Time..: 12:37		
Lead	542	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCP105
		Dilution Factor: 1		Analysis Time..: 09:16		
Selenium	36.4	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCP106
		Dilution Factor: 1		Analysis Time..: 09:16		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1W

TOTAL Metals

Lot-Sample #...: F0G250295-006 Matrix.....: WATER
Date Sampled...: 07/24/00 19:45 Date Received..: 07/25/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0208223						
Mercury	2.1	0.20	ug/L	SW846 7470A	07/26-07/27/00	DGRCR108
		Dilution Factor: 1		Analysis Time..: 09:54		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCR105
		Dilution Factor: 1		Analysis Time..: 11:02		
Arsenic	47.5	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCR101
		Dilution Factor: 1		Analysis Time..: 11:02		
Barium	23400	2000	ug/L	SW846 6010B	07/27-07/31/00	DGRCR102
		Dilution Factor: 10		Analysis Time..: 09:21		
Cadmium	23.4	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCR106
		Dilution Factor: 1		Analysis Time..: 11:02		
Chromium	2560	100	ug/L	SW846 6010B	07/27-08/01/00	DGRCR107
		Dilution Factor: 10		Analysis Time..: 12:41		
Lead	1180	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCR103
		Dilution Factor: 1		Analysis Time..: 11:02		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGRCR104
		Dilution Factor: 1		Analysis Time..: 11:02		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22W1-6

TOTAL Metals

Lot-Sample #...: F0G250295-012 Matrix.....: SOLID
Date Sampled...: 07/24/00 15:35 Date Received..: 07/25/00
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0208231						
Mercury	0.032 B	0.042	mg/kg	SW846 7471A	07/27/00	DGRD5108
		Dilution Factor: 1		Analysis Time..: 19:26		
Prep Batch #...: 0209439						
Silver	ND	1.3	mg/kg	SW846 6010B	07/27-07/28/00	DGRD5101
		Dilution Factor: 1		Analysis Time..: 18:50		
Arsenic	1.1 B	1.3	mg/kg	SW846 6010B	07/27-07/28/00	DGRD5102
		Dilution Factor: 1		Analysis Time..: 18:50		
Barium	70.3	25.2	mg/kg	SW846 6010B	07/27-07/28/00	DGRD5103
		Dilution Factor: 1		Analysis Time..: 18:50		
Cadmium	ND	0.63	mg/kg	SW846 6010B	07/27-07/28/00	DGRD5104
		Dilution Factor: 1		Analysis Time..: 18:50		
Chromium	13.1	1.3	mg/kg	SW846 6010B	07/27-07/28/00	DGRD5105
		Dilution Factor: 1		Analysis Time..: 18:50		
Lead	8.8	0.38	mg/kg	SW846 6010B	07/27-07/28/00	DGRD5106
		Dilution Factor: 1		Analysis Time..: 18:50		
Selenium	ND	0.63	mg/kg	SW846 6010B	07/27-07/28/00	DGRD5107
		Dilution Factor: 1		Analysis Time..: 18:50		

NOTE(S):

B Estimated result. Result is less than RL.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1-5

TOTAL Metals

Lot-Sample #...: F0G250295-013 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 14:05 **Date Received..:** 07/25/00
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0208231						
Mercury	**0.032 B**	**0.042**	**mg/kg**	**SW846 7471A**	**07/27/00**	**DGRD6108**
		Dilution Factor: 1		Analysis Time..: 19:28		
Prep Batch #...: 0209439						
Silver	ND	1.3	mg/kg	SW846 6010B	07/27-07/28/00	DGRD6101
		Dilution Factor: 1		Analysis Time..: 18:55		
Arsenic	**4.4**	**1.3**	**mg/kg**	**SW846 6010B**	**07/27-07/28/00**	**DGRD6102**
		Dilution Factor: 1		Analysis Time..: 18:55		
Barium	**142**	**25.2**	**mg/kg**	**SW846 6010B**	**07/27-07/28/00**	**DGRD6103**
		Dilution Factor: 1		Analysis Time..: 18:55		
Cadmium	ND	0.63	mg/kg	SW846 6010B	07/27-07/28/00	DGRD6104
		Dilution Factor: 1		Analysis Time..: 18:55		
Chromium	**14.0**	**1.3**	**mg/kg**	**SW846 6010B**	**07/27-07/28/00**	**DGRD6105**
		Dilution Factor: 1		Analysis Time..: 18:55		
Lead	**8.1**	**0.38**	**mg/kg**	**SW846 6010B**	**07/27-07/28/00**	**DGRD6106**
		Dilution Factor: 1		Analysis Time..: 18:55		
Selenium	ND	0.63	mg/kg	SW846 6010B	07/27-07/28/00	DGRD6107
		Dilution Factor: 1		Analysis Time..: 18:55		

NOTE(S):

B Estimated result. Result is less than RL.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22N1-4

TOTAL Metals

Lot-Sample #...: F0G250295-018 Matrix.....: SOLID
Date Sampled...: 07/24/00 15:15 Date Received..: 07/25/00
% Moisture.....: 16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0208231						
Mercury	0.029 B	0.039	mg/kg	SW846 7471A	07/27/00	DGRDD108
		Dilution Factor: 1		Analysis Time..: 19:24		
Prep Batch #...: 0209439						
Silver	ND	1.2	mg/kg	SW846 6010B	07/27-07/28/00	DGRDD101
		Dilution Factor: 1		Analysis Time..: 19:08		
Arsenic	3.0	1.2	mg/kg	SW846 6010B	07/27-07/28/00	DGRDD102
		Dilution Factor: 1		Analysis Time..: 19:08		
Barium	84.4	23.7	mg/kg	SW846 6010B	07/27-07/28/00	DGRDD103
		Dilution Factor: 1		Analysis Time..: 19:08		
Cadmium	ND	0.59	mg/kg	SW846 6010B	07/27-07/28/00	DGRDD104
		Dilution Factor: 1		Analysis Time..: 19:08		
Chromium	11.3	1.2	mg/kg	SW846 6010B	07/27-07/28/00	DGRDD105
		Dilution Factor: 1		Analysis Time..: 19:08		
Lead	6.1	0.36	mg/kg	SW846 6010B	07/27-07/28/00	DGRDD106
		Dilution Factor: 1		Analysis Time..: 19:08		
Selenium	ND	0.59	mg/kg	SW846 6010B	07/27-07/28/00	DGRDD107
		Dilution Factor: 1		Analysis Time..: 19:08		

NOTE(S):

B Estimated result. Result is less than RL.

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DGW31101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G270000-172
Prep Date.....: 07/26/00 **Analysis Time..:** 10:07
Analysis Date..: 07/26/00 **Prep Batch #...:** 0209172
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	83	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	95	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DGW31101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G250295 **Work Order #...:** DHEN0101 **Matrix.....:** SOLID
MB Lot-Sample #: F0H040000-527

Prep Date.....: 08/04/00 **Analysis Time..:** 16:52
Analysis Date..: 08/06/00 **Prep Batch #...:** 0217527
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	30	ug/kg	SW846 8310
Acenaphthylene	ND	30	ug/kg	SW846 8310
Anthracene	ND	30	ug/kg	SW846 8310
Benzo(a)anthracene	ND	15	ug/kg	SW846 8310
Benzo(a)pyrene	ND	15	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	15	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	30	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	15	ug/kg	SW846 8310
Chrysene	ND	15	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	30	ug/kg	SW846 8310
Fluoranthene	ND	30	ug/kg	SW846 8310
Fluorene	ND	30	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	15	ug/kg	SW846 8310
Naphthalene	ND	30	ug/kg	SW846 8310
Phenanthrene	ND	30	ug/kg	SW846 8310
Pyrene	ND	30	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DH1PW101 **Matrix.....:** WATER
MB Lot-Sample #: F0G280000-459

Prep Date.....: 07/28/00 **Analysis Time..:** 09:21
Analysis Date..: 07/28/00 **Prep Batch #...:** 0210459
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**0.47 J**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	121	(78 - 124)
Toluene-d8	100	(71 - 129)
Dibromofluoromethane	127	(74 - 135)
1,2-Dichloroethane-d4	107	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DH1PW101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G250295
MB Lot-Sample #: F0G300000-109
Work Order #...: DH3AL101
Matrix.....: SOLID
Prep Date.....: 07/28/00
Analysis Time..: 11:08
Analysis Date..: 07/28/00
Prep Batch #...: 0212109
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	**17 J**	**20**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	93	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DH3AL101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G250295
MB Lot-Sample #: F0G310000-170
Analysis Date..: 07/31/00
Dilution Factor: 1

Work Order #...: DH3HW101
Prep Date.....: 07/29/00
Prep Batch #...: 0213170

Matrix.....: SOLID
Analysis Time..: 17:57

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	25	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	38	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G250295
MB Lot-Sample #: F0G310000-181
Work Order #...: DH3JE101
Matrix.....: WATER
Prep Date.....: 07/29/00
Analysis Time..: 16:10
Analysis Date..: 08/01/00
Prep Batch #...: 0213181
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(12 - 167)
Decachlorobiphenyl	88	(10 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G250295
MB Lot-Sample #: F0G310000-262
Analysis Date..: 07/30/00
Dilution Factor: 1

Work Order #...: DH3Q4101
Prep Date.....: 07/30/00
Prep Batch #...: 0213262

Matrix.....: SOLID
Analysis Time..: 11:54

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DH3Q4101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G250295
MB Lot-Sample #: F0G310000-501
Analysis Date..: 07/30/00
Dilution Factor: 1

Work Order #...: DH4CD101
Prep Date.....: 07/30/00
Prep Batch #...: 0213501

Matrix.....: WATER
Analysis Time..: 15:03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	70	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DH4C0101 **Matrix.....:** SOLID
MB Lot-Sample #: F0G310000-495
Prep Date.....: 07/30/00 **Analysis Time..:** 15:03
Analysis Date..: 07/30/00 **Prep Batch #...:** 0213495
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	70	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G250295
MB Lot-Sample #: F0H020000-145
Work Order #...: DH6PG101
Matrix.....: SOLID
Prep Date.....: 08/01/00
Analysis Time..: 11:25
Analysis Date..: 08/03/00
Prep Batch #...: 0215145
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	113	(10 - 199)
Decachlorobiphenyl	124	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G250295 **Work Order #...:** DH6Q8101 **Matrix.....:** WATER
MB Lot-Sample #: F0H020000-160
Prep Date.....: 07/31/00 **Analysis Time..:** 12:29
Analysis Date..: 08/03/00 **Prep Batch #...:** 0215160
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
******* INVALID DATA ON FOLLOWING LINE *******				
Acenaphthene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Acenaphthylene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Anthracene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Benzo(a)anthracene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Benzo(a)pyrene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Benzo(b)fluoranthene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Benzo(ghi)perylene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Benzo(k)fluoranthene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Chrysene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Dibenz(a,h)anthracene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Fluoranthene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Fluorene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Naphthalene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Phenanthrene	ND	5.0	ug/L	SW846 8310
******* INVALID DATA ON FOLLOWING LINE *******				
Pyrene	ND	5.0	ug/L	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	68	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G250295
MB Lot-Sample #: F0H020000-161
Work Order #...: DH6Q9101
Matrix.....: WATER
Prep Date.....: 07/31/00
Analysis Time..: 12:09
Analysis Date..: 08/03/00
Prep Batch #...: 0215161
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	0.57	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	37	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G250295 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G260000-231 **Prep Batch #...:** 0208231						
Mercury	**0.012 B**	**0.033**	**mg/kg**	**SW846 7471A**	**07/27/00**	**DGT7H101**
		Dilution Factor: 1				
		Analysis Time..: 18:53				
MB Lot-Sample #: F0G270000-439 **Prep Batch #...:** 0209439						
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/27-07/28/00	DGX9410E
		Dilution Factor: 1				
		Analysis Time..: 17:29				
Barium	ND	20.0	mg/kg	SW846 6010B	07/27-07/28/00	DGX9410F
		Dilution Factor: 1				
		Analysis Time..: 17:29				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/27-07/28/00	DGX94102
		Dilution Factor: 1				
		Analysis Time..: 17:29				
Chromium	ND	1.0	mg/kg	SW846 6010B	07/27-07/28/00	DGX94103
		Dilution Factor: 1				
		Analysis Time..: 17:29				
Lead	ND	0.30	mg/kg	SW846 6010B	07/27-07/28/00	DGX94104
		Dilution Factor: 1				
		Analysis Time..: 17:29				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/27-07/28/00	DGX9410G
		Dilution Factor: 1				
		Analysis Time..: 17:29				
Silver	ND	1.0	mg/kg	SW846 6010B	07/27-07/28/00	DGX94101
		Dilution Factor: 1				
		Analysis Time..: 17:29				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G250295 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G260000-223 **Prep Batch #...:** 0208223						
Mercury	ND	0.20	ug/L	SW846 7470A	07/26-07/27/00	DGT79101
		Dilution Factor: 1				
		Analysis Time..: 09:03				
MB Lot-Sample #: F0G270000-489 **Prep Batch #...:** 0209489						
Arsenic	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF103
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Barium	ND	200	ug/L	SW846 6010B	07/27-07/31/00	DGXGF104
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Cadmium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF101
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Chromium	ND	10.0	ug/L	SW846 6010B	07/27-08/01/00	DGXGF102
		Dilution Factor: 1				
		Analysis Time..: 11:06				
Lead	ND	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF105
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF106
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF107
		Dilution Factor: 1				
		Analysis Time..: 08:58				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G250295 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
***Cyanide, Total	ON FOLLOWING ONE	Work Order #: DH5R0101		MB Lot-Sample #:	F0H010000-318	
	ND	0.50	mg/kg	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1				
		Analysis Time..: 12:00				
Reactive Cyanide		Work Order #: DH1K1101		MB Lot-Sample #:	F0G280000-435	
	ND	0.050	mg/kg	SW846 7.3.3	07/27-07/28/00	0210435
		Dilution Factor: 1				
		Analysis Time..: 12:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G250295 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DH5NK101		MB Lot-Sample #:	F0H010000-315	
	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1				
		Analysis Time..: 16:00				
Reactive Cyanide		Work Order #: DH1K2101		MB Lot-Sample #:	F0G280000-436	
	ND	0.050	mg/kg	SW846 7.3.3	07/27-07/28/00	0210436
		Dilution Factor: 1				
		Analysis Time..: 12:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G250295
LCS Lot-Sample#: F0G310000-170
Prep Date.....: 07/29/00
Prep Batch #...: 0213170
Dilution Factor: 1

Work Order #...: DH3HW102-LCS
DH3HW103-LCSD
Analysis Date..: 07/31/00
Analysis Time..: 18:24

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**52**	**(10 - 164)**			**SW846 8015 MOD**
	51	**(10 - 164)**	**2.8**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	64	(10 - 150)
	60	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G250295
LCS Lot-Sample#: F0G310000-181
Prep Date.....: 07/29/00
Prep Batch #...: 0213181
Dilution Factor: 1

Work Order #...: DH3JE102-LCS
DH3JE103-LCSD
Analysis Date..: 08/01/00
Analysis Time..: 16:24

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**104**	**(58 - 125)**			**SW846 8082**
	99	**(58 - 125)**	**4.4**	**(0-20)**	**SW846 8082**
Aroclor 1260	**110**	**(58 - 124)**			**SW846 8082**
	106	**(58 - 124)**	**3.1**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	121	(39 - 153)
	111	(39 - 153)
Decachlorobiphenyl	120	(10 - 127)
	110	(10 - 127)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G250295 **Work Order #...:** DH6Q8102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0H020000-160 DH6Q8103-LCSD
Prep Date.....: 07/31/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215160 **Analysis Time..:** 12:54
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**88**	**(45 - 134)**			**SW846 8310**
	86	**(45 - 134)**	**2.6**	**(0-82)**	**SW846 8310**
Acenaphthylene	**88**	**(46 - 124)**			**SW846 8310**
	89	**(46 - 124)**	**1.4**	**(0-56)**	**SW846 8310**
Anthracene	**65**	**(28 - 158)**			**SW846 8310**
	57	**(28 - 158)**	**13**	**(0-46)**	**SW846 8310**
Benzo(a)anthracene	**81**	**(52 - 132)**			**SW846 8310**
	81	**(52 - 132)**	**0.51**	**(0-43)**	**SW846 8310**
Benzo(a)pyrene	**76**	**(22 - 117)**			**SW846 8310**
	77	**(22 - 117)**	**1.3**	**(0-67)**	**SW846 8310**
Benzo(b)fluoranthene	**90**	**(39 - 109)**			**SW846 8310**
	92	**(39 - 109)**	**1.9**	**(0-47)**	**SW846 8310**
Benzo(ghi)perylene	**82**	**(10 - 115)**			**SW846 8310**
	82	**(10 - 115)**	**0.34**	**(0-72)**	**SW846 8310**
Benzo(k)fluoranthene	**81**	**(25 - 116)**			**SW846 8310**
	81	**(25 - 116)**	**0.67**	**(0-50)**	**SW846 8310**
Chrysene	**81**	**(29 - 130)**			**SW846 8310**
	81	**(29 - 130)**	**0.36**	**(0-76)**	**SW846 8310**
Dibenz(a,h)anthracene	**84**	**(10 - 122)**			**SW846 8310**
	85	**(10 - 122)**	**0.96**	**(0-62)**	**SW846 8310**
Fluoranthene	**81**	**(36 - 126)**			**SW846 8310**
	83	**(36 - 126)**	**1.9**	**(0-43)**	**SW846 8310**
Fluorene	**80**	**(52 - 128)**			**SW846 8310**
	81	**(52 - 128)**	**0.32**	**(0-60)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**85**	**(10 - 101)**			**SW846 8310**
	86	**(10 - 101)**	**1.8**	**(0-66)**	**SW846 8310**
Naphthalene	**92**	**(42 - 102)**			**SW846 8310**
	90	**(42 - 102)**	**2.5**	**(0-44)**	**SW846 8310**
Phenanthrene	**79**	**(49 - 126)**			**SW846 8310**
	79	**(49 - 126)**	**0.57**	**(0-50)**	**SW846 8310**
Pyrene	**69**	**(14 - 116)**			**SW846 8310**
	70	**(14 - 116)**	**1.8**	**(0-46)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	69	(27 - 128)
	67	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G250295 **Work Order #...:** DH6Q9102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0H020000-161 DH6Q9103-LCSD
Prep Date.....: 07/31/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215161 **Analysis Time..:** 12:35
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**56**	**(10 - 148)**			**SW846 8015 MOD**
	51	**(10 - 148)**	**9.3**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	70	(10 - 150)
	66	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G250295 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	91	(58 - 142)			SW846 7471A	07/27/00	0208231
	100	(58 - 142)	9.2	(0-20)	SW846 7471A	07/27/00	0208231
		Dilution Factor: 5					
Arsenic	110	(72 - 128)			SW846 6010B	07/27-07/28/00	0209439
	108	(72 - 128)	2.3	(0-20)	SW846 6010B	07/27-07/28/00	0209439
		Dilution Factor: 1					
Barium	107	(77 - 122)			SW846 6010B	07/27-07/28/00	0209439
	104	(77 - 122)	2.6	(0-20)	SW846 6010B	07/27-07/28/00	0209439
		Dilution Factor: 1					
Cadmium	104	(77 - 122)			SW846 6010B	07/27-07/28/00	0209439
	103	(77 - 122)	0.45	(0-20)	SW846 6010B	07/27-07/28/00	0209439
		Dilution Factor: 1					
Chromium	99	(77 - 123)			SW846 6010B	07/27-07/28/00	0209439
	97	(77 - 123)	1.8	(0-20)	SW846 6010B	07/27-07/28/00	0209439
		Dilution Factor: 1					
Lead	105	(76 - 124)			SW846 6010B	07/27-07/28/00	0209439
	103	(76 - 124)	1.8	(0-20)	SW846 6010B	07/27-07/28/00	0209439
		Dilution Factor: 1					
Selenium	105	(74 - 126)			SW846 6010B	07/27-07/28/00	0209439
	102	(74 - 126)	3.0	(0-20)	SW846 6010B	07/27-07/28/00	0209439
		Dilution Factor: 1					
Silver	112	(75 - 126)			SW846 6010B	07/27-07/28/00	0209439
	108	(75 - 126)	3.4	(0-20)	SW846 6010B	07/27-07/28/00	0209439
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G250295 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	85	(80 - 120)			SW846 7470A	07/26-07/27/00	0208223
	84	(80 - 120)	0.11	(0-20)	SW846 7470A	07/26-07/27/00	0208223

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G250295 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DH5R0102-LCS/DH5R0103-LCSD				LCS Lot-Sample#: F0H010000-318	
	96	(80 - 120)			SW846 9012A	08/01/00	0214318
	97	(80 - 120)	0.82	(0-30)	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1					
Reactive Cyanide		WO#:DH1K1102-LCS/DH1K1103-LCSD				LCS Lot-Sample#: F0G280000-435	
	8.8 N	(0.0- 0.0)			SW846 7.3.3	07/27-07/28/00	0210435
	0.80 N,*	(0.0- 0.0)	167	(0-0.0)	SW846 7.3.3	07/27-07/28/00	0210435
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G250295 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DH5NK102-LCS/DH5NK103-LCSD				LCS Lot-Sample#: F0H010000-315	
	94	(80 - 120)			SW846 9012A	07/31-08/01/00	0214315
	92	(80 - 120)	1.4	(0-20)	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1					
Reactive Cyanide		WO#:DH1K2102-LCS/DH1K2103-LCSD				LCS Lot-Sample#: F0G280000-436	
	8.8 N	(0.0- 0.0)			SW846 7.3.3	07/27-07/28/00	0210436
	0.80 N,*	(0.0- 0.0)	167	(0-0.0)	SW846 7.3.3	07/27-07/28/00	0210436
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DGW31102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G270000-172
Prep Date.....: 07/26/00 **Analysis Date..:** 07/26/00
Prep Batch #...: 0209172 **Analysis Time..:** 10:41
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**80**	**(72 - 120)**	**SW846 8260B**
Benzene	**90**	**(79 - 125)**	**SW846 8260B**
Toluene	**93**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**92**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**91**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	83	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	96	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G250295
LCS Lot-Sample#: F0H040000-527
Prep Date.....: 08/04/00
Prep Batch #...: 0217527
Dilution Factor: 1

Work Order #...: DHEN0102
Analysis Date..: 08/06/00
Analysis Time..: 17:18

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	58	(22 - 109)	SW846 8310
Acenaphthylene	66	(9.0- 125)	SW846 8310
Anthracene	53	(45 - 110)	SW846 8310
Benzo(a)anthracene	66	(43 - 132)	SW846 8310
Benzo(a)pyrene	59	(24 - 156)	SW846 8310
Benzo(b)fluoranthene	73	(46 - 132)	SW846 8310
Benzo(ghi)perylene	65	(50 - 104)	SW846 8310
Benzo(k)fluoranthene	65	(47 - 126)	SW846 8310
Chrysene	66	(39 - 142)	SW846 8310
Dibenz(a,h)anthracene	72	(52 - 110)	SW846 8310
Fluoranthene	65	(16 - 131)	SW846 8310
Fluorene	60	(40 - 108)	SW846 8310
Indeno(1,2,3-cd)pyrene	67	(49 - 124)	SW846 8310
Naphthalene	62	(20 - 115)	SW846 8310
Phenanthrene	63	(50 - 103)	SW846 8310
Pyrene	56	(48 - 100)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DH1PW102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G280000-459
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 09:58
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**101**	**(71 - 120)**	**SW846 8260B**
Benzene	**109**	**(76 - 127)**	**SW846 8260B**
Toluene	**105**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**102**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**104**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	109	(78 - 124)
Toluene-d8	101	(71 - 129)
Dibromofluoromethane	103	(74 - 135)
1,2-Dichloroethane-d4	100	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G250295
LCS Lot-Sample#: F0G300000-109
Prep Date.....: 07/28/00
Prep Batch #...: 0212109
Dilution Factor: 1

Work Order #...: DH3AL102
Analysis Date..: 07/28/00
Analysis Time..: 10:34

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**82**	**(72 - 120)**	**SW846 8260B**
Benzene	**93**	**(79 - 125)**	**SW846 8260B**
Toluene	**91**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**90**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**103**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	85	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	111	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G250295
LCS Lot-Sample#: F0G310000-262
Prep Date.....: 07/30/00
Prep Batch #...: 0213262
Dilution Factor: 1

Work Order #...: DH3Q4102
Analysis Date..: 07/30/00
Analysis Time..: 12:28

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**84**	**(72 - 120)**	**SW846 8260B**
Benzene	**92**	**(79 - 125)**	**SW846 8260B**
Toluene	**92**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**89**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**113**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	94	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DH4CD102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G310000-501
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213501 **Analysis Time..:** 15:30
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**110**	**(70 - 130)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	81	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G250295 **Work Order #...:** DH4C0102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G310000-495
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213495 **Analysis Time..:** 15:30
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**110**	**(50 - 150)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	81	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G250295 **Work Order #...:** DH6PG102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0H020000-145
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 11:38
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**78**	**(74 - 127)**	**SW846 8082**
Aroclor 1260	**83**	**(74 - 129)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(62 - 162)
Decachlorobiphenyl	98	(53 - 145)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G250295 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F0G270000-489 **Prep Batch #...:** 0209489					
Arsenic	106	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10A
Barium	109	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10C
Lead	102	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10D
Selenium	104	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10E
Silver	108	(49 - 135)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10F
Cadmium	104	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF108
Chromium	101	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 11:10	07/27-08/01/00	DGXGF109

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G250295 **Matrix.....:** SOLID
Date Sampled...: 07/17/00 14:53 **Date Received..:** 07/18/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G190226-001 **Prep Batch #...:** 0208231							
Mercury	109	(75 - 125)			SW846 7471A	07/27/00	DGFTN102
	109	(75 - 125)	0.0	(0-20)	SW846 7471A	07/27/00	DGFTN103

Dilution Factor: 1
Analysis Time..: 19:11

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G250295 **Matrix.....:** WATER
Date Sampled...: 07/13/00 10:15 **Date Received..:** 07/18/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G200213-002 **Prep Batch #...:** 0208223							
Mercury	90	(75 - 125)			SW846 7470A	07/26-07/27/00	DGJ7N12J
	90	(75 - 125)	0.44	(0-20)	SW846 7470A	07/26-07/27/00	DGJ7N12K

Dilution Factor: 1
Analysis Time..: 09:13

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G250295
MS Lot-Sample #: F0G250295-017
Date Sampled...: 07/24/00 09:15
Prep Date.....: 07/30/00
Prep Batch #...: 0213262
Dilution Factor: 1

Work Order #...: DGRDC105-MS
DGRDC106-MSD
Date Received..: 07/25/00
Analysis Date..: 07/30/00
Analysis Time..: 14:24
% Moisture.....: 15

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**80**	**(72 - 120)**			**SW846 8260B**
	83	**(72 - 120)**	**2.8**	**(0-24)**	**SW846 8260B**
Benzene	**98**	**(79 - 125)**			**SW846 8260B**
	99	**(79 - 125)**	**0.46**	**(0-21)**	**SW846 8260B**
Toluene	**100**	**(75 - 124)**			**SW846 8260B**
	101	**(75 - 124)**	**0.75**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**90**	**(81 - 119)**			**SW846 8260B**
	92	**(81 - 119)**	**2.6**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**113**	**(70 - 149)**			**SW846 8260B**
	116	**(70 - 149)**	**2.7**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	55 *	(73 - 109)
	85	(73 - 109)
Toluene-d8	100	(82 - 119)
	103	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
	102	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)
	110	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G250295 **Matrix.....:** SOLID
Date Sampled...: 07/24/00 15:15 **Date Received..:** 07/25/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G250295-018 **Prep Batch #...:** 0209439							
Arsenic	94	(75 - 125)			SW846 6010B	07/27-07/28/00	DGRDD10J
	95	(75 - 125)	1.1	(0-20)	SW846 6010B	07/27-07/28/00	DGRDD10K
		Dilution Factor: 1					
		Analysis Time..: 19:12					
Barium	99	(75 - 125)			SW846 6010B	07/27-07/28/00	DGRDD10L
	101	(75 - 125)	1.9	(0-20)	SW846 6010B	07/27-07/28/00	DGRDD10M
		Dilution Factor: 1					
		Analysis Time..: 19:12					
Cadmium	88	(75 - 125)			SW846 6010B	07/27-07/28/00	DGRDD10N
	89	(75 - 125)	1.0	(0-20)	SW846 6010B	07/27-07/28/00	DGRDD10P
		Dilution Factor: 1					
		Analysis Time..: 19:12					
Chromium	90	(75 - 125)			SW846 6010B	07/27-07/28/00	DGRDD10Q
	92	(75 - 125)	1.3	(0-20)	SW846 6010B	07/27-07/28/00	DGRDD10R
		Dilution Factor: 1					
		Analysis Time..: 19:12					
Lead	91	(75 - 125)			SW846 6010B	07/27-07/28/00	DGRDD10T
	91	(75 - 125)	0.48	(0-20)	SW846 6010B	07/27-07/28/00	DGRDD10U
		Dilution Factor: 1					
		Analysis Time..: 19:12					
Selenium	91	(75 - 125)			SW846 6010B	07/27-07/28/00	DGRDD10V
	93	(75 - 125)	1.3	(0-20)	SW846 6010B	07/27-07/28/00	DGRDD10W
		Dilution Factor: 1					
		Analysis Time..: 19:12					
Silver	91	(75 - 125)			SW846 6010B	07/27-07/28/00	DGRDD10G
	92	(75 - 125)	0.85	(0-20)	SW846 6010B	07/27-07/28/00	DGRDD10H
		Dilution Factor: 1					
		Analysis Time..: 19:12					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G250295
MS Lot-Sample #: F0G250295-011
Date Sampled...: 07/24/00 14:25
Prep Date.....: 08/01/00
Prep Batch #...: 0215145
Dilution Factor: 1

Work Order #...: DGRD3105-MS
DGRD3106-MSD
Date Received..: 07/25/00
Analysis Date..: 08/03/00
Analysis Time..: 12:06
% Moisture.....: 21

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**83**	**(10 - 200)**			**SW846 8082**
	83	**(10 - 200)**	**0.36**	**(0-20)**	**SW846 8082**
Aroclor 1260	**84**	**(10 - 183)**			**SW846 8082**
	82	**(10 - 183)**	**2.3**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(10 - 199)
	89	(10 - 199)
Decachlorobiphenyl	98	(10 - 200)
	97	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G250295
MS Lot-Sample #: F0G250312-016
Date Sampled...: 07/25/00 16:05
Prep Date.....: 07/26/00
Prep Batch #...: 0209172
Dilution Factor: 1

Work Order #...: DGRJ3107-MS
DGRJ3108-MSD
Date Received..: 07/25/00
Analysis Date..: 07/26/00
Analysis Time..: 12:45
% Moisture.....: 22

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**81**	**(72 - 120)**			**SW846 8260B**
	78	**(72 - 120)**	**3.1**	**(0-24)**	**SW846 8260B**
Benzene	**88**	**(79 - 125)**			**SW846 8260B**
	89	**(79 - 125)**	**1.6**	**(0-21)**	**SW846 8260B**
Toluene	**94**	**(75 - 124)**			**SW846 8260B**
	92	**(75 - 124)**	**2.4**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**89**	**(81 - 119)**			**SW846 8260B**
	91	**(81 - 119)**	**2.2**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**108**	**(70 - 149)**			**SW846 8260B**
	99	**(70 - 149)**	**8.5**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	85	(73 - 109)
	86	(73 - 109)
Toluene-d8	100	(82 - 119)
	97	(82 - 119)
Dibromofluoromethane	98	(82 - 132)
	100	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)
	111	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

Client Lot #...:
MS Lot-Sample #:

Work Order #...:

Matrix.....:

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
		(22 - 109)		(0-35)	SW846 8310
		(9.0- 125)		(0-35)	SW846 8310
		(45 - 110)		(0-35)	SW846 8310
		(28 - 121)		(0-35)	SW846 8310
		(13 - 136)		(0-35)	SW846 8310
		(28 - 124)		(0-35)	SW846 8310
		(50 - 104)		(0-35)	SW846 8310
		(29 - 116)		(0-35)	SW846 8310
		(10 - 173)		(0-35)	SW846 8310
		(52 - 110)		(0-35)	SW846 8310
		(16 - 131)		(0-35)	SW846 8310
		(40 - 108)		(0-35)	SW846 8310
		(29 - 117)		(0-35)	SW846 8310
		(20 - 115)		(0-35)	SW846 8310
		(50 - 103)		(0-35)	SW846 8310
		(48 - 100)		(0-35)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	51	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Lot-Sample #...: F0G250295 **Work Order #...:** DH00420G **Matrix.....:** SOLID
MS Lot-Sample #: F0G270337-016
Date Sampled...: 07/26/00 09:05 **Date Received..:** 07/27/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527
Dilution Factor: 1 **Percnt Moisture:** 22

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**0**	**(22 - 109)**	**SW846 8310**
Acenaphthylene	**0**	**(9.0- 125)**	**SW846 8310**
Anthracene	**0**	**(45 - 110)**	**SW846 8310**
Benzo(a)anthracene	**0**	**(28 - 121)**	**SW846 8310**
Benzo(a)pyrene	**0**	**(13 - 136)**	**SW846 8310**
Benzo(b)fluoranthene	**0**	**(28 - 124)**	**SW846 8310**
Benzo(ghi)perylene	**0**	**(50 - 104)**	**SW846 8310**
Benzo(k)fluoranthene	**0**	**(29 - 116)**	**SW846 8310**
Chrysene	**0**	**(10 - 173)**	**SW846 8310**
Dibenz(a,h)anthracene	**0**	**(52 - 110)**	**SW846 8310**
Fluoranthene	**0**	**(16 - 131)**	**SW846 8310**
Fluorene	**0**	**(40 - 108)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**0**	**(29 - 117)**	**SW846 8310**
Naphthalene	**0**	**(20 - 115)**	**SW846 8310**
Phenanthrene	**0**	**(50 - 103)**	**SW846 8310**
Pyrene	**0**	**(48 - 100)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F0G250295 **Work Order #...:** DGRDA-SMP DGRDA-DUP **Matrix.....:** SOLID

Date Sampled...: 07/24/00 09:10 **Date Received..:** 07/25/00

% Moisture.....: 13

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F0G250295-016	
	13.0	13.2	%	1.5	(0-0.0)	MCAWW 160.3 MOD	07/26-07/27/00	0208548

Dilution Factor: 1

Analysis Time..: 00:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F0G250295 **Work Order #...:** DGRD5-SMP DGRD5-DUP **Matrix.....:** SOLID

Date Sampled...: 07/24/00 15:35 **Date Received..:** 07/25/00

% Moisture.....: 21

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F0G250295-012	
	20.8	20.7	%	0.048	(0-0.0)	MCAWW 160.3 MOD	07/26-07/27/00	0208515

Dilution Factor: 1

Analysis Time..: 00:00

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-001
PROJECT #: WORK ORDER: DGRC3
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 500P,LG REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 16:55
MATRIX: WATER RECEIVING TIME: 9:50
SAMPLE ID: B27I2W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/25/00	0/00/00	1/20/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGRC3 Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/25/00	0/00/00	8/21/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGRC3 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	7/31/00	9/09/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGRC3-1-09 Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: QPGMR

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-002
PROJECT #: WORK ORDER: DGRCC
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 2X40ML,2XLG,250P,500P REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 16:00
MATRIX: WATER RECEIVING TIME: 9:50
SAMPLE ID: HW1W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGRCC-1-01 Protocol: A QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/25/00	7/31/00	9/09/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGRCC-1-02 Protocol: A QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/25/00	0/00/00	8/07/00
DISTILLATION, MICRO/MIDI - Acid				
(I-06-QP-01) DGRCC-1-03 Protocol: A QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/25/00	0/00/00	8/07/00
DISTILLATION, MACRO - Acid				
(I-08-GI-01) DGRCC-1-04 Protocol: A QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/25/00	0/00/00	1/20/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGRCC Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/25/00	0/00/00	8/21/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGRCC Protocol: A QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGRCC-1-0E Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	7/31/00	9/09/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGRCC-1-0F Protocol: A QC Program: STANDARD TEST SET				

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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-003
PROJECT #: WORK ORDER: DGRCL
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 2XLG REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 16:30
MATRIX: WATER RECEIVING TIME: 9:50
SAMPLE ID: PB1W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
PCBs (8082)	06	7/25/00	7/31/00	9/09/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGRCL-1-01 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	7/31/00	9/09/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGRCL-1-02 Protocol: A QC Program: STANDARD TEST SET				

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Run Date: 7/26/00
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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 250P
STORAGE LOC: T5E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: CN1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G250295-004
WORK ORDER: DGRCN
RECEIVING DATE: 7/25/00
SAMPLING DATE: 7/24/00
ANALYTICAL DUE DATE: 8/01/00N
REPORT DUE DATE: 8/04/00
PRIORITY: 07
SAMPLING TIME: 18:50
RECEIVING TIME: 9:50
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Cyanide, Total tomated)	06	7/25/00	0/00/00	8/07/00
DISTILLATION, MICRO/MIDI - Acid				
(I-06-QP-01) DGRCN-1-01 Protocol: A QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/25/00	0/00/00	8/07/00
DISTILLATION, MACRO - Acid				
(I-08-GI-01) DGRCN-1-02 Protocol: A QC Program: STANDARD TEST SET				

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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-005
PROJECT #: WORK ORDER: DGRCP
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 2XLG,500P,2X40ML REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E,V6I PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 19:15
MATRIX: WATER RECEIVING TIME: 9:50
SAMPLE ID: B22N1W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
PCBs (8082)	06	7/25/00	7/31/00	9/09/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGRCP-1-01 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/25/00	7/31/00	9/09/00
LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal				
(I-10-SG-01) DGRCP-1-02 Protocol: A QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/25/00	0/00/00	1/20/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGRCP Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/25/00	0/00/00	8/21/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGRCP Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGRCP-1-0C Protocol: A QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGRCP-1-0D Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	7/31/00	9/09/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGRCP-1-0E Protocol: A QC Program: STANDARD TEST SET				

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User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: LG,500P,2X40ML
STORAGE LOC: T5E,V6I
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B22W1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G250295-006
WORK ORDER: DGRCR
RECEIVING DATE: 7/25/00
SAMPLING DATE: 7/24/00
ANALYTICAL DUE DATE: 8/01/00N
REPORT DUE DATE: 8/04/00
PRIORITY: 07
SAMPLING TIME: 19:45
RECEIVING TIME: 9:50
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGRCR Protocol: A QC Program: STANDARD TEST SET	06	7/25/00	0/00/00	1/20/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGRCR Protocol: A QC Program: STANDARD TEST SET	06	7/25/00	0/00/00	8/21/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGRCR-1-09 Protocol: A QC Program: STANDARD TEST SET	06	7/25/00	0/00/00	8/07/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGRCR-1-0A Protocol: A QC Program: STANDARD TEST SET	06	7/25/00	0/00/00	8/07/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGRCR-1-0C Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	7/31/00	9/09/00

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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-007
PROJECT #: WORK ORDER: DGRCT
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: LG,2X40ML REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E,V6I PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 20:10
MATRIX: WATER RECEIVING TIME: 9:50
SAMPLE ID: B22E1W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGRCT-1-01 Protocol: A QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGRCT-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	7/31/00	9/09/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGRCT-1-03 Protocol: A QC Program: STANDARD TEST SET				

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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 250G
STORAGE LOC: T5E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: CN1-8
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G250295-008
WORK ORDER: DGRCV
RECEIVING DATE: 7/25/00
SAMPLING DATE: 7/24/00
ANALYTICAL DUE DATE: 8/01/00N
REPORT DUE DATE: 8/04/00
PRIORITY: 07
SAMPLING TIME: 14:55
RECEIVING TIME: 9:50
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Reactive Cyanide 3)	06	7/25/00	0/00/00	8/07/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGRCV-1-01 Protocol: B QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/25/00	0/00/00	8/07/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGRCV-1-02 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRCV-1-03 Protocol: B QC Program: STANDARD TEST SET				

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Run Date: 7/26/00
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User Id.: QPGMR

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: T5E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B22E1-8
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G250295-009
WORK ORDER: DGRD0
RECEIVING DATE: 7/25/00
SAMPLING DATE: 7/24/00
ANALYTICAL DUE DATE: 8/01/00N
REPORT DUE DATE: 8/04/00
PRIORITY: 07
SAMPLING TIME: 16:05
RECEIVING TIME: 9:50
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRD0-1-01 Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGRD0-1-02 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRD0-1-03 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRD0-1-04 Protocol: B QC Program: STANDARD TEST SET				

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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-010
PROJECT #: WORK ORDER: DGRD1
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 13:05
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: B29AW1-8
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGRD1-1-03 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRD1-1-01 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRD1-1-02 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRD1-1-04 Protocol: B QC Program: STANDARD TEST SET				

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User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marion
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 250G
STORAGE LOC: T5E
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: PB1-6
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G250295-011
WORK ORDER: DGRD3
RECEIVING DATE: 7/25/00
SAMPLING DATE: 7/24/00
ANALYTICAL DUE DATE: 8/01/00N
REPORT DUE DATE: 8/04/00
PRIORITY: 07
SAMPLING TIME: 14:25
RECEIVING TIME: 9:50
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRD3-1-01 Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/25/00	8/07/00	9/16/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGRD3-1-02 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRD3-1-03 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRD3-1-04 Protocol: B QC Program: STANDARD TEST SET				

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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-012
PROJECT #: WORK ORDER: DGRD5
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 15:35
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: B22W1-6
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/25/00	0/00/00	1/20/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGRD5 Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/25/00	0/00/00	8/21/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGRD5 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRD5-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRD5-1-0A Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGRD5-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRD5-1-0D Protocol: B QC Program: STANDARD TEST SET				

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CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-013
PROJECT #: WORK ORDER: DGRD6
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 14:05
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: HW1-5
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/25/00	0/00/00	1/20/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGRD6 Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/25/00	0/00/00	8/21/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGRD6 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRD6-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/25/00	8/07/00	9/16/00
SONICATION - Low Level				
(A-13-SG-01) DGRD6-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/25/00	8/07/00	9/16/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGRD6-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRD6-1-0D Protocol: B QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/25/00	0/00/00	8/07/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGRD6-1-0E Protocol: B QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/25/00	0/00/00	8/07/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGRD6-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 2 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-013
PROJECT #: WORK ORDER: DGRD6
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 14:05
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: HW1-5
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGRD6-1-0H Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRD6-1-0J Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-014
PROJECT #: WORK ORDER: DGRD8
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:30
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: B220I1-7
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGRD8-1-03 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRD8-1-01 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/25/00	8/07/00	9/16/00
SONICATION - Low Level				
(A-13-SG-01) DGRD8-1-02 Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: QPGMR

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-015
PROJECT #: WORK ORDER: DGRD9
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 9:50
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: B220N1-6
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRD9-1-01 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRD9-1-02 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRD9-1-03 Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-016
PROJECT #: WORK ORDER: DGRDA
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 9:10
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: B221E1-7
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRDA-1-01 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRDA-1-02 Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGRDA-1-03 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRDA-1-04 Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-017
PROJECT #: WORK ORDER: DGRDC
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 9:15
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: B221E1-12
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRDC-1-01 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRDC-1-02 Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGRDC-1-03 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRDC-1-04 Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: WATSONJ

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-018
PROJECT #: WORK ORDER: DGRDD
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/04/00
STORAGE LOC: T5E PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 15:15
MATRIX: SOLID RECEIVING TIME: 9:50
SAMPLE ID: B22N1-4
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/25/00	0/00/00	1/20/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGRDD Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/25/00	0/00/00	8/21/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGRDD Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/25/00	0/00/00	10/31/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGRDD-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/25/00	8/07/00	9/16/00
SONICATION - Low Level				
(A-13-SG-01) DGRDD-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/25/00	8/07/00	9/16/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGRDD-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGRDD-1-0D Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/25/00	0/00/00	8/07/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGRDD-1-0E Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/07/00	9/16/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGRDD-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/26/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 8:32:58
STL St. Louis User Id.: LOEBM

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G250295-019
PROJECT #: WORK ORDER: DGRDF
REPORT TO: Doug Marion RECEIVING DATE: 7/25/00
P.O. NUMBER: SAMPLING DATE: 7/24/00
SITE: Boeing ANALYTICAL DUE DATE: 8/01/00N
AMOUNT REC"D: 40ML REPORT DUE DATE: 8/04/00
STORAGE LOC: V6I PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 16:00
MATRIX: WATER RECEIVING TIME: 9:50
SAMPLE ID: TRIP BLANK
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/26/00	0/00/00	8/07/00

PURGE AND TRAP - 25 mL purge (Waters)
STL: VOA CLP 3/90
(I-25-QK-01) DGRDF-1-01 Protocol: A QC Program: STANDARD TEST SET

F0G250295 T5E

Chain of Custody Record

Quanterra

QUA-4124

Client: ESE	Project Manager: DOUG MARIAN	Date: 7/24/00	Chain Of Custody Number: 47051
Address: 3199 RIVERPORT TECH CENTER	Telephone Number (Area Code)/Fax Number:	Lab Number:	Page ____ of ____
City: ST. LOUIS; State: MO; Zip Code: 63043	Site Contact:		
Project Name: Boeing Phase II	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOC	TPH	PAH	T. RCRA METALS	PCB		TOTAL/REACTIVE CN
B27I2W	7/24/00	1655	H_2O		1	500P, 1LG				X		X			
HW1W	7/24/00	1600	H_2O		250P, 2x1LG, 500P, 2x40ml VOA				X	X		X	X		X
PB1W	↓	1630	H_2O		2x1LG					X			X		
CN1W	↓	1850	H_2O		1x250P										X
B22N1W	↓	1915	H_2O		2x1LG, 500P, 2x40ml VOA				X	X	X	X	X		
B22W1W	↓	1945	H_2O		1LG, 500P, 2x40ml VOA				X	X		X			
B22E1W	↓	2010	H_2O		1LG, 2x40ml VOA				X	X					
										PH2		PH2			PH2

Special Instructions: B22N1W HAS PETROLEUM SHEEN

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required: ☐ Normal ☐ Rush

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/25	740	1. Received By: [signature]	7-25-00	0740
2. Relinquished By: [signature]	7-25-00	0950	2. Received By: [signature]	07-25-00	0950
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

LOT F0G250295

STL ST. LOUIS

Chain of Custody Record

Quanterra

QUA-4124

Client: ESE	Project Manager: Doug Marian	Date:	Chain Of Custody Number: 47052
Address: 3199 Riverport TechCenter	Telephone Number (Area Code)/Fax Number:	Lab Number:	Page ____ of ____
City: Mt Hts / State: MO / Zip Code: 63301	Site Contact:		
Project Name: Boeing Phase II	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

	Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOC	TPH	PAH	RCRA Metals	PCB	Total/Reactive CN			
4	CN1-8	7-24-00	1455	Soil		1x 250ml SS									X			
5	B22E1-8		1605					1x120ml SS		X	X							
6	B29AW1-8		1305							X	X							
11	PB1-6		1425								X			X				
12	B22W1-6		1535					1x120ml SS		X	X		X					
13	HW1-5		1405							X	X	X	X	X	X			
14	B220I1-7		1030							X		X						
15	B220N1-6		0950						HOA Sample		X							
16	B221E1-7		0910							X	X							
17	B221E1-12		0915							X	X							
18	B22N1-4		1515							X	X	X	X	X				
19	Trip Blank	7-24-00	1600	H_2O						X								

Special Instructions

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required: ☐ Normal ☐ Rush

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify):

		Date	Time		Date	Time
1. Relinquished By	[signature]	7/25/00	740	1. Received By [signature]	7-25-00	0740
2. Relinquished By	[signature]	7-25-00	0950	2. Received By [signature]	07-25-00	0950
3. Relinquished By				3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Committed to *Your* Success

Lot No.: F0G250295

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: ESE

Quote No: 37419

Shipper/No: Client drop off

Date: 07-25-00 Time: 0950

Initiated by: [signature]

RFA/COC Numbers: 47051

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☒ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☒ pH 7 See below
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below) _____

☐ **No variances were noted during sample receipt.**

☐ **Cooler Temperature Upon Receipt in °C:** 3

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: The acid preserved bottles for HW1W have pH=7. pH also 7 for B22N1W, B22W1W, B22E1W

Corrective Action:

☑ Client's Name: DOUG MARION Informed verbally on: 7-26-00 By: MARK LOEB

X VOICE MAIL @ OFFICE & VOICE MAIL ON CELL PHONE PROVIDED BY OFFICE

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☑ Sample(s) processed "as is". CLIENT CALL - PRESERVE & PROCEED

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [signature] Date: 07-25-00

Project Management Review: [signature] Date: 7-26-00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

Committed to *Your* Success

Lot No.:_____

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: ESE

Quote No: 37419

Shipper/No: Client drop off

Date: 07-25-00 Time: 0950

Initiated by: [signature]

RFA/COC Numbers: 47052

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature:_____
   - ☐ pH_____
   - ☐ other:_____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain:
   _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below)

☐ **No variances were noted during sample receipt.**

☐ **Cooler Temperature Upon Receipt in °C:** 3

Temperature Variance Does Not Affect the Following Analyses: _____

Notes:

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is".

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [signature] Date: 07-25-00

Project Management Review: [signature] Date: 7-26-00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

SEVERN TRENT SERVICES

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

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

ANALYTICAL REPORT

Boeing

Lot #: F0G260239

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

August 8, 2000

Case Narrative
LOT NUMBER: **F0G260239**

This report contains the analytical results for the 27 samples received under chain of custody by STL St. Louis on July 26, 2000. These samples are associated with your Boeing project.

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

Observations/Nonconformances

Nonconformance F01001
Affected Samples:

1: RC3W	2: RC3W (DUPLICATE)
3: RC1W	4: RC2W

Affected Methods:
9012A

Case Narrative Details:
Samples were received with incorrect preservation. Samples are supposed to be preserved to PH greater than or equal to 12.

Corrective Action:
None.

Nonconformance F01026
Affected Samples:
3: RC1W

Affected Methods:
8015 MOD Volatile Petroleum Hydrocarbons

Case Narrative Details:
The surrogate compound exceeded stated control limits for the sample listed. The sample was analyzed twice to confirm for matrix interference.

Corrective Action:
None.

Nonconformance F01027

Affected Samples:

1: RC3W	2: RC3W (DUPLICATE)
3: RC1W	4: RC2W
5: B22E3	6: B22E2W
7: B27I9W	8: B27I9W (DUPLICATE)
12: B221E1W	13: B29E1W
14: B27I6W	16: RC2-7
17: B27I9-9	18: B27I6-8 (DUPLICATE)
19: B27I6-8	20: RC1-7
21: RC3-5	22: RC3-5 (DUPLICATE)
23: B22E3-6	24: B22E2-6

Affected Methods:

8015 MOD Volatile Petroleum Hydrocarbons

Case Narrative Details:

Batch QC is a LCS/LCSD.

Corrective Action:

None.

Nonconformance F01029

Affected Samples:

4: RC2W	5: B22E3
6: B22E2W	

Affected Methods:

8260B

Case Narrative Details:

The pH for samples B22E3 and B22E2W are > 2.

Sample RC2W had the low ISTD Area and the BFB Recovery high. The sample was reanalyzed. Results of the reanalysis confirmed a matrix effect.

Sample RC3-5 (F0G260239-21) was analyzed four times. The first run was overcalibration.
A dilution was performed and it did not match the original results.
A second 5 gram run was analyzed and it matches the dilution. A soil (any soil) will give different numbers based on the non-homogeneity of the sample.

Corrective Action:

None.

Nonconformance F01056

Affected Samples:

1: RC3W 2: RC3W (DUPLICATE)
3: RC1W 4: RC2W
5: B22E3

Affected Methods:

8082

Case Narrative Details:

A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Corrective Action:

None.

Nonconformance F01058

Affected Samples:

3: RC1W 17: B27I9-9

Affected Methods:

8082

Case Narrative Details:

TCMX (secondary surrogate) was not recovered due to matrix interference.

Corrective Action:

DCB (primary surrogate) was acceptable and is the only surrogate required by the method.

Nonconformance F01061

Affected Samples:

1: RC3W 2: RC3W (DUPLICATE)
3: RC1W 4: RC2W
5: B22E3 6: B22E2W
7: B27I9W 8: B27I9W (DUPLICATE)
12: B221E1W 27: B220N1W

Affected Methods:

8015 MOD

Case Narrative Details:

A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Sample 005 has an elevated detection limit due to a lack of sample volume.

Corrective Action:

None.

Nonconformance F01062
Affected Samples:
16: RC2-7 17: B27I9-9
18: B27I6-8 (DUPLICATE) 19: B27I6-8
20: RC1-7 21: RC3-5
22: RC3-5 (DUPLICATE) 23: B22E3-6
24: B22E2-6

Affected Methods:
8015 MOD

Case Narrative Details:
Batch QC not performed.

Corrective Action:
The analyst is now aware of the batch QC requirements.

Nonconformance F01068
Affected Samples:
16: RC2-7 17: B27I9-9
18: B27I6-8 (DUPLICATE) 19: B27I6-8
20: RC1-7 21: RC3-5
22: RC3-5 (DUPLICATE) 25: B29I1-17

Affected Methods:
8310

Case Narrative Details:
These samples were re-extracted within holding time due to low recoveries in the LCS. The re-extracts were acceptable.

Corrective Action:
None.

Nonconformance F01072
Affected Samples:
6: B22E2W 7: B27I9W
9: B29I1W 11: B27I2
22: RC3-5 (DUPLICATE)

Affected Methods:
8310

Case Narrative Details:
These samples had low surrogate recoveries. Sample 022 (soil) had low surrogate recoveries, but are within real time recovery limits of 36-108%, therefore being acceptable.

Corrective Action:
none.

METHODS SUMMARY

F0G260239

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 8015 Mod.
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3520
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 8082
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G260239

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGV54	001	RC3W	07/25/00	18:40
DGV61	002	RC3W (DUPLICATE)	07/25/00	19:00
DGV63	003	RC1W	07/25/00	17:40
DGV66	004	RC2W	07/25/00	18:10
DGV6D	005	B22E3	07/25/00	17:00
DGV6J	006	B22E2W	07/25/00	16:20
DGV77	007	B27I9W	07/25/00	20:00
DGV7C	008	B27I9W (DUPLICATE)	07/25/00	20:00
DGV7D	009	B29I1W	07/25/00	14:20
DGV7F	010	HW1W	07/25/00	08:20
DGV7H	011	B27I2	07/25/00	20:30
DGV7W	012	B221E1W	07/25/00	15:25
DGV8K	013	B29E1W	07/25/00	15:30
DGV8Q	014	B27I6W	07/25/00	19:30
DGV9C	015	TRIP BLANK	07/25/00	
DGV9E	016	RC2-7	07/25/00	13:40
DGV9W	017	B27I9-9	07/25/00	09:55
DGVA2	018	B27I6-8 (DUPLICATE)	07/25/00	09:15
DGVA3	019	B27I6-8	07/25/00	09:15
DGVA5	020	RC1-7	07/25/00	10:45
DGVA6	021	RC3-5	07/25/00	14:30
DGVA9	022	RC3-5 (DUPLICATE)	07/25/00	14:30
DGVAD	023	B22E3-6	07/25/00	15:30
DGVCD	024	B22E2-6	07/25/00	15:15
DGVCE	025	B29I1-17	07/25/00	13:10
DGVFM	026	B220I1W	07/25/00	14:20
DGVFQ	027	B220N1W	07/25/00	14:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

GC Semivolatiles

Lot-Sample #...: F0G260239-001 **Work Order #...:** DGV5410F **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:40 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214452 **Analysis Time..:** 19:05
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	64	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

GC Semivolatiles

Lot-Sample #...: F0G260239-001 **Work Order #...:** DGV54102 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:40 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214462 **Analysis Time..:** 12:35
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	63	(12 - 167)
Decachlorobiphenyl	31	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

GC/MS Volatiles

Lot-Sample #...: F0G260239-001 **Work Order #...:** DGV54101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:40 **Date Received..:** 07/26/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 18:50
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**2.7**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.42 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**16**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	**0.28 J**	**1.0**	**ug/L**
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**210 E**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	95	(78 - 124)
Toluene-d8	109	(71 - 129)
Dibromofluoromethane	114	(74 - 135)
1,2-Dichloroethane-d4	85	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

GC/MS Volatiles

Lot-Sample #...: F0G260239-001 **Work Order #...:** DGV54101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

E Estimated result. Result concentration exceeds the calibration range.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

GC/MS Volatiles

Lot-Sample #...: F0G260239-001 **Work Order #...:** DGV54201 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:40 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 16:20
Dilution Factor: 10

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	10	ug/L
1,2-Dichloropropane	ND	10	ug/L
cis-1,3-Dichloropropene	ND	10	ug/L
Trichloroethene	**3.7 J,D**	**10**	**ug/L**
Dibromochloromethane	ND	10	ug/L
1,1,2-Trichloroethane	ND	10	ug/L
Benzene	ND	10	ug/L
trans-1,3-Dichloropropene	ND	10	ug/L
Bromoform	ND	10	ug/L
4-Methyl-2-pentanone	ND	50	ug/L
2-Hexanone	ND	50	ug/L
Tetrachloroethene	ND	10	ug/L
Toluene	ND	10	ug/L
Chlorobenzene	ND	10	ug/L
Ethylbenzene	ND	10	ug/L
Styrene	ND	10	ug/L
Chloromethane	ND	20	ug/L
Bromomethane	ND	20	ug/L
Vinyl chloride	ND	20	ug/L
Chloroethane	ND	20	ug/L
Methylene chloride	**4.5 J,B,D**	**10**	**ug/L**
Acetone	ND	100	ug/L
Carbon disulfide	ND	10	ug/L
1,1-Dichloroethene	ND	10	ug/L
1,1-Dichloroethane	ND	10	ug/L
1,2-Dichloroethene (total)	**200 D**	**10**	**ug/L**
Chloroform	ND	10	ug/L
1,2-Dichloroethane	ND	10	ug/L
2-Butanone	ND	50	ug/L
1,1,1-Trichloroethane	ND	10	ug/L
Carbon tetrachloride	ND	10	ug/L
Bromodichloromethane	ND	10	ug/L
1,1,2,2-Tetrachloroethane	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(78 - 124)
Toluene-d8	112	(71 - 129)
Dibromofluoromethane	102	(74 - 135)
1,2-Dichloroethane-d4	84	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

GC/MS Volatiles

Lot-Sample #...: F0G260239-001 **Work Order #...:** DGV54201 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

HPLC

Lot-Sample #...: F0G260239-001 **Work Order #...:** DGV54103 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:40 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214465 **Analysis Time..:** 20:52
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	48	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

GC Volatiles

Lot-Sample #...: F0G260239-001
Date Sampled...: 07/25/00 18:40
Prep Date.....: 07/31/00
Prep Batch #...: 0214335
Dilution Factor: 1

Work Order #...: DGV5410G
Date Received..: 07/26/00
Analysis Date..: 07/31/00
Analysis Time..: 17:04

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	0.13	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	79	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

GC Semivolatiles

Lot-Sample #...: F0G260239-002 **Work Order #...:** DGV6110F **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:00 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214452 **Analysis Time..:** 19:28
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**49**	**0.50**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	70	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

GC Semivolatiles

Lot-Sample #...: F0G260239-002 **Work Order #...:** DGV61102 **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:00 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214462 **Analysis Time..:** 12:48
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97	(12 - 167)
Decachlorobiphenyl	38	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-002 **Work Order #...:** DGV61101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:00 **Date Received..:** 07/26/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 19:26
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**0.37 J**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**17**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.44 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	**0.34 J**	**1.0**	**ug/L**
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**230 E**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	99	(78 - 124)
Toluene-d8	90	(71 - 129)
Dibromofluoromethane	114	(74 - 135)
1,2-Dichloroethane-d4	90	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-002 Work Order #...: DGV61101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Estimated result. Result concentration exceeds the calibration range.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-002 **Work Order #...:** DGV61201 **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:00 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214138 **Analysis Time..:** 12:23
Dilution Factor: 10

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	10	ug/L
1,2-Dichloropropane	ND	10	ug/L
cis-1,3-Dichloropropene	ND	10	ug/L
Trichloroethene	ND	10	ug/L
Dibromochloromethane	ND	10	ug/L
1,1,2-Trichloroethane	ND	10	ug/L
Benzene	ND	10	ug/L
trans-1,3-Dichloropropene	ND	10	ug/L
Bromoform	ND	10	ug/L
4-Methyl-2-pentanone	ND	50	ug/L
2-Hexanone	ND	50	ug/L
Tetrachloroethene	ND	10	ug/L
Toluene	ND	10	ug/L
Chlorobenzene	ND	10	ug/L
Ethylbenzene	ND	10	ug/L
Styrene	ND	10	ug/L
Chloromethane	ND	20	ug/L
Bromomethane	ND	20	ug/L
Vinyl chloride	ND	20	ug/L
Chloroethane	ND	20	ug/L
Methylene chloride	**7.2 J,D**	**10**	**ug/L**
Acetone	ND	100	ug/L
Carbon disulfide	ND	10	ug/L
1,1-Dichloroethene	ND	10	ug/L
1,1-Dichloroethane	ND	10	ug/L
1,2-Dichloroethene (total)	**250 D**	**10**	**ug/L**
Chloroform	ND	10	ug/L
1,2-Dichloroethane	ND	10	ug/L
2-Butanone	ND	50	ug/L
1,1,1-Trichloroethane	ND	10	ug/L
Carbon tetrachloride	ND	10	ug/L
Bromodichloromethane	ND	10	ug/L
1,1,2,2-Tetrachloroethane	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	108	(78 - 124)
Toluene-d8	98	(71 - 129)
Dibromofluoromethane	107	(74 - 135)
1,2-Dichloroethane-d4	96	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-002 **Work Order #...:** DGV61201 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

HPLC

Lot-Sample #...: F0G260239-002 **Work Order #...:** DGV61103 **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:00 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214465 **Analysis Time..:** 21:18
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	49	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

GC Volatiles

Lot-Sample #...:	F0G260239-002	**Work Order #...:**	DGV6110G	**Matrix.....:**	WATER
Date Sampled...:	07/25/00 19:00	**Date Received..:**	07/26/00		
Prep Date.....:	07/31/00	**Analysis Date..:**	07/31/00		
Prep Batch #...:	0214335	**Analysis Time..:**	17:31		
Dilution Factor:	1				
		Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.14**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	74	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

GC Semivolatiles

Lot-Sample #...: F0G260239-003 **Work Order #...:** DGV6310F **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:40 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214452 **Analysis Time..:** 19:52
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	75	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

GC Semivolatiles

Lot-Sample #...: F0G260239-003 **Work Order #...:** DGV63102 **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:40 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214462 **Analysis Time..:** 13:02
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	**11**	**1.0**	**ug/L**
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	0.0	(12 - 167)
Decachlorobiphenyl	36	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

GC/MS Volatiles

Lot-Sample #...: F0G260239-003 **Work Order #...:** DGV63101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:40 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 17:33
Dilution Factor: 10

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	10	ug/L
1,2-Dichloropropane	ND	10	ug/L
cis-1,3-Dichloropropene	ND	10	ug/L
Trichloroethene	**80**	**10**	**ug/L**
Dibromochloromethane	ND	10	ug/L
1,1,2-Trichloroethane	ND	10	ug/L
Benzene	ND	10	ug/L
trans-1,3-Dichloropropene	ND	10	ug/L
Bromoform	ND	10	ug/L
4-Methyl-2-pentanone	ND	50	ug/L
2-Hexanone	ND	50	ug/L
Tetrachloroethene	ND	10	ug/L
Toluene	ND	10	ug/L
Chlorobenzene	ND	10	ug/L
Ethylbenzene	ND	10	ug/L
Styrene	ND	10	ug/L
Chloromethane	ND	20	ug/L
Bromomethane	ND	20	ug/L
Vinyl chloride	**20**	**20**	**ug/L**
Chloroethane	ND	20	ug/L
Methylene chloride	**4.8 J,B**	**10**	**ug/L**
Acetone	ND	100	ug/L
Carbon disulfide	ND	10	ug/L
1,1-Dichloroethene	ND	10	ug/L
1,1-Dichloroethane	**3.8 J**	**10**	**ug/L**
1,2-Dichloroethene (total)	**120**	**10**	**ug/L**
Chloroform	ND	10	ug/L
1,2-Dichloroethane	ND	10	ug/L
2-Butanone	ND	50	ug/L
1,1,1-Trichloroethane	ND	10	ug/L
Carbon tetrachloride	ND	10	ug/L
Bromodichloromethane	ND	10	ug/L
1,1,2,2-Tetrachloroethane	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	102	(78 - 124)
Toluene-d8	94	(71 - 129)
Dibromofluoromethane	103	(74 - 135)
1,2-Dichloroethane-d4	91	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

GC/MS Volatiles

Lot-Sample #...: F0G260239-003 **Work Order #...:** DGV63101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

HPLC

Lot-Sample #...: F0G260239-003 **Work Order #...:** DGV63103 **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:40 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214465 **Analysis Time..:** 21:43
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	39	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

GC Volatiles

Lot-Sample #...: F0G260239-003 Work Order #...: DGV6310G Matrix.....: WATER
Date Sampled...: 07/25/00 17:40 Date Received..: 07/26/00
Prep Date.....: 07/31/00 Analysis Date..: 07/31/00
Prep Batch #...: 0214335 Analysis Time..: 17:58
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	0.19	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	151 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

GC Volatiles

Lot-Sample #...: F0G260239-003 Work Order #...: DGV6320G Matrix.....: WATER
Date Sampled...: 07/25/00 17:40 Date Received..: 07/26/00
Prep Date.....: 07/31/00 Analysis Date..: 08/01/00
Prep Batch #...: 0214335 Analysis Time..: 10:19
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	0.13	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	159 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

GC Semivolatiles

Lot-Sample #...: F0G260239-004 **Work Order #...:** DGV6610F **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:10 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214452 **Analysis Time..:** 15:40
Dilution Factor: 100
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**340**	**50**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	0.0 DIL	(10 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

GC Semivolatiles

Lot-Sample #...: F0G260239-004
Date Sampled...: 07/25/00 18:10
Prep Date.....: 08/01/00
Prep Batch #...: 0214462
Dilution Factor: 50

Work Order #...: DGV66102
Date Received..: 07/26/00
Analysis Date..: 08/04/00
Analysis Time..: 15:27

Matrix.....: WATER

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	50	ug/L
Aroclor 1221	ND	50	ug/L
Aroclor 1232	ND	50	ug/L
Aroclor 1242	ND	50	ug/L
Aroclor 1248	ND	50	ug/L
Aroclor 1254	**580**	**50**	**ug/L**
Aroclor 1260	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	0.0 DIL	(12 - 167)
Decachlorobiphenyl	0.0 DIL	(10 - 125)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

GC/MS Volatiles

Lot-Sample #...: F0G260239-004 **Work Order #...:** DGV66101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:10 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 13:53
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	**2.2**	**1.0**	**ug/L**
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	**0.85 J**	**1.0**	**ug/L**
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**3.6**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	**0.77 J**	**1.0**	**ug/L**
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**51 E**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	**1.1 B**	**1.0**	**ug/L**
Acetone	**7.1 J**	**10**	**ug/L**
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	**17**	**1.0**	**ug/L**
1,2-Dichloroethene (total)	**46 E**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	192 *	(78 - 124)
Toluene-d8	112	(71 - 129)
Dibromofluoromethane	116	(74 - 135)
1,2-Dichloroethane-d4	111	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

GC/MS Volatiles

Lot-Sample #...: F0G260239-004 Work Order #...: DGV66101 Matrix.....: WATER

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

E Estimated result. Result concentration exceeds the calibration range.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

GC/MS Volatiles

Lot-Sample #...: F0G260239-004 **Work Order #...:** DGV66201 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:10 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 19:23
Dilution Factor: 2

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	**1.7 J,D**	**2.0**	**ug/L**
1,2-Dichloropropane	ND	2.0	ug/L
cis-1,3-Dichloropropene	ND	2.0	ug/L
Trichloroethene	ND	2.0	ug/L
Dibromochloromethane	ND	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
Benzene	**0.56 J,D**	**2.0**	**ug/L**
trans-1,3-Dichloropropene	ND	2.0	ug/L
Bromoform	ND	2.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
2-Hexanone	ND	10	ug/L
Tetrachloroethene	ND	2.0	ug/L
Toluene	**2.8 D**	**2.0**	**ug/L**
Chlorobenzene	ND	2.0	ug/L
Ethylbenzene	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
Chloromethane	ND	4.0	ug/L
Bromomethane	ND	4.0	ug/L
Vinyl chloride	**21 D**	**4.0**	**ug/L**
Chloroethane	ND	4.0	ug/L
Methylene chloride	**1.1 J,B,D**	**2.0**	**ug/L**
Acetone	**11 J,D**	**20**	**ug/L**
Carbon disulfide	ND	2.0	ug/L
1,1-Dichloroethene	ND	2.0	ug/L
1,1-Dichloroethane	**12 D**	**2.0**	**ug/L**
1,2-Dichloroethene (total)	**34 D**	**2.0**	**ug/L**
Chloroform	ND	2.0	ug/L
1,2-Dichloroethane	ND	2.0	ug/L
2-Butanone	ND	10	ug/L
1,1,1-Trichloroethane	ND	2.0	ug/L
Carbon tetrachloride	ND	2.0	ug/L
Bromodichloromethane	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	184 *	(78 - 124)
Toluene-d8	119	(71 - 129)
Dibromofluoromethane	117	(74 - 135)
1,2-Dichloroethane-d4	103	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

GC/MS Volatiles

Lot-Sample #...: F0G260239-004 Work Order #...: DGV66201 Matrix.....: WATER

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

HPLC

Lot-Sample #...: F0G260239-004 **Work Order #...:** DGV66103 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:10 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/07/00
Prep Batch #...: 0214465 **Analysis Time..:** 12:24
Dilution Factor: 10

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	50	ug/L
Acenaphthylene	ND	50	ug/L
Anthracene	ND	50	ug/L
Benzo(a)anthracene	**250**	**50**	**ug/L**
Benzo(a)pyrene	ND	50	ug/L
Benzo(b)fluoranthene	ND	50	ug/L
Benzo(ghi)perylene	ND	50	ug/L
Benzo(k)fluoranthene	ND	50	ug/L
Chrysene	**86**	**50**	**ug/L**
Dibenz(a,h)anthracene	ND	50	ug/L
Fluoranthene	ND	50	ug/L
Fluorene	ND	50	ug/L
Indeno(1,2,3-cd)pyrene	ND	50	ug/L
Naphthalene	ND	50	ug/L
Phenanthrene	ND	50	ug/L
Pyrene	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	0.0 DIL	(27 - 128)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

GC Volatiles

Lot-Sample #...: F0G260239-004
Date Sampled...: 07/25/00 18:10
Prep Date.....: 07/31/00
Prep Batch #...: 0214335
Dilution Factor: 1

Work Order #...: DGV6610G
Date Received..: 07/26/00
Analysis Date..: 07/31/00
Analysis Time..: 18:25

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	2.1	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	92	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3

GC Semivolatiles

Lot-Sample #...: F0G260239-005 **Work Order #...:** DGV6D10D **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:00 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214452 **Analysis Time..:** 10:32
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	1.2	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	37	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3

GC Semivolatiles

Lot-Sample #...: F0G260239-005
Date Sampled...: 07/25/00 17:00
Prep Date.....: 08/01/00
Prep Batch #...: 0214462
Dilution Factor: 1

Work Order #...: DGV6D102
Date Received..: 07/26/00
Analysis Date..: 08/04/00
Analysis Time..: 13:29

Matrix.....: WATER

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(12 - 167)
Decachlorobiphenyl	65	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3

GC/MS Volatiles

Lot-Sample #...: F0G260239-005 **Work Order #...:** DGV6D101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:00 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 12:40
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.38 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	99	(78 - 124)
Toluene-d8	107	(71 - 129)
Dibromofluoromethane	107	(74 - 135)
1,2-Dichloroethane-d4	80	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3

GC/MS Volatiles

Lot-Sample #...: F0G260239-005 Work Order #...: DGV6D101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3

HPLC

Lot-Sample #...: F0G260239-005 **Work Order #...:** DGV6D103 **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:00 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214465 **Analysis Time..:** 23:26
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	29	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3

GC Volatiles

Lot-Sample #...: F0G260239-005
Date Sampled...: 07/25/00 17:00
Prep Date.....: 07/31/00
Prep Batch #...: 0214335
Dilution Factor: 1

Work Order #...: DGV6D10E
Date Received..: 07/26/00
Analysis Date..: 07/31/00
Analysis Time..: 18:53

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	0.13	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	74	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2W

GC Semivolatiles

Lot-Sample #...: F0G260239-006 **Work Order #...:** DGV6J10D **Matrix.....:** WATER
Date Sampled...: 07/25/00 16:20 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214452 **Analysis Time..:** 21:02
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	28	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2W

GC/MS Volatiles

Lot-Sample #...: F0G260239-006 **Work Order #...:** DGV6J101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 16:20 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 13:17
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.50 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(78 - 124)
Toluene-d8	94	(71 - 129)
Dibromofluoromethane	113	(74 - 135)
1,2-Dichloroethane-d4	88	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2W

GC/MS Volatiles

Lot-Sample #...: F0G260239-006 **Work Order #...:** DGV6J101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2W

HPLC

Lot-Sample #...: F0G260239-006 **Work Order #...:** DGV6J103 **Matrix.....:** WATER
Date Sampled...: 07/25/00 16:20 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214465 **Analysis Time..:** 23:52
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	18 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2W

GC Volatiles

Lot-Sample #...: F0G260239-006 **Work Order #...:** DGV6J10E **Matrix.....:** WATER
Date Sampled...: 07/25/00 16:20 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214335 **Analysis Time..:** 19:20
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	77	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W

GC Semivolatiles

Lot-Sample #...:	F0G260239-007	**Work Order #...:**	DGV7710C	**Matrix.....:**	WATER
Date Sampled...:	07/25/00 20:00	**Date Received..:**	07/26/00		
Prep Date.....:	08/01/00	**Analysis Date..:**	08/04/00		
Prep Batch #...:	0214452	**Analysis Time..:**	11:19		
Dilution Factor:	10				
		Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**120**	**5.0**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	0.0 DIL	(10 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W

GC/MS Volatiles

Lot-Sample #...: F0G260239-007 **Work Order #...:** DGV77101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 20:00 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 14:30
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	**16**	**5.0**	**ug/L**
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	**33**	**10**	**ug/L**
Carbon disulfide	**2.3**	**1.0**	**ug/L**
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	**13**	**5.0**	**ug/L**
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	109	(78 - 124)
Toluene-d8	94	(71 - 129)
Dibromofluoromethane	101	(74 - 135)
1,2-Dichloroethane-d4	103	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W

HPLC

Lot-Sample #...: F0G260239-007 **Work Order #...:** DGV77102 **Matrix.....:** WATER
Date Sampled...: 07/25/00 20:00 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214465 **Analysis Time..:** 00:17
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	21 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W

GC Volatiles

Lot-Sample #...: F0G260239-007 **Work Order #...:** DGV7710D **Matrix.....:** WATER
Date Sampled...: 07/25/00 20:00 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214335 **Analysis Time..:** 19:47
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.11**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	75	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W (DUPLICATE)

GC Semivolatiles

Lot-Sample #...: F0G260239-008 **Work Order #...:** DGV7C10C **Matrix.....:** WATER
Date Sampled...: 07/25/00 20:00 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214452 **Analysis Time..:** 11:44
Dilution Factor: 10

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**62**	**5.0**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	0.0 DIL	(10 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-008 **Work Order #...:** DGV7C101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 20:00 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 18:46
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	**2.7 J**	**5.0**	**ug/L**
2-Hexanone	**16**	**5.0**	**ug/L**
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	**36**	**10**	**ug/L**
Carbon disulfide	**2.0**	**1.0**	**ug/L**
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	**16**	**5.0**	**ug/L**
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(78 - 124)
Toluene-d8	99	(71 - 129)
Dibromofluoromethane	107	(74 - 135)
1,2-Dichloroethane-d4	103	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-008 Work Order #...: DGV7C101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W (DUPLICATE)

HPLC

Lot-Sample #...: F0G260239-008 **Work Order #...:** DGV7C102 **Matrix.....:** WATER
Date Sampled...: 07/25/00 20:00 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214465 **Analysis Time..:** 00:43
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	34	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W (DUPLICATE)

GC Volatiles

Lot-Sample #...: F0G260239-008 **Work Order #...:** DGV7C10D **Matrix.....:** WATER
Date Sampled...: 07/25/00 20:00 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0214335 **Analysis Time..:** 10:46
Dilution Factor: 1
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	86	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29I1W

HPLC

Lot-Sample #...: F0G260239-009 **Work Order #...:** DGV7D101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 14:20 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214465 **Analysis Time..:** 01:09
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	25 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: HW1W

HPLC

Lot-Sample #...: F0G260239-010 **Work Order #...:** DGV7F101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 08:20 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214465 **Analysis Time..:** 01:34
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	46	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2

HPLC

Lot-Sample #...: F0G260239-011 **Work Order #...:** DGV7H101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 20:30 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0214465 **Analysis Time..:** 02:00
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	16 *	(27 - 128)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1W

GC Semivolatiles

Lot-Sample #...: F0G260239-012 **Work Order #...:** DGV7W101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 15:25 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214452 **Analysis Time..:** 22:13
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	54	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E1W

GC Volatiles

Lot-Sample #...: F0G260239-012 **Work Order #...:** DGV7W102 **Matrix.....:** WATER
Date Sampled...: 07/25/00 15:25 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214335 **Analysis Time..:** 21:36
Dilution Factor: 1
Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.65**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	97	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29E1W

GC Volatiles

Lot-Sample #...: F0G260239-013 **Work Order #...:** DGV8K101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 15:30 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214335 **Analysis Time..:** 22:03
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.73**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	110	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6W

GC/MS Volatiles

Lot-Sample #...: F0G260239-014 **Work Order #...:** DGV8Q101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:30 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 15:06
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	**0.24 J**	**1.0**	**ug/L**
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**16**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	**5.4 J**	**10**	**ug/L**
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**0.51 J**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	110	(78 - 124)
Toluene-d8	90	(71 - 129)
Dibromofluoromethane	105	(74 - 135)
1,2-Dichloroethane-d4	103	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6W

GC/MS Volatiles

Lot-Sample #...: F0G260239-014 **Work Order #...:** DGV8Q101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6W

GC Volatiles

Lot-Sample #...: F0G260239-014 **Work Order #...:** DGV8Q102 **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:30 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0214335 **Analysis Time..:** 11:13
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	74	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G260239-015 **Work Order #...:** DGV9C101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 18:10
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.87 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(78 - 124)
Toluene-d8	108	(71 - 129)
Dibromofluoromethane	118	(74 - 135)
1,2-Dichloroethane-d4	90	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G260239-015 **Work Order #...:** DGV9C101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2-7

GC Semivolatiles

Lot-Sample #...:	F0G260239-016	**Work Order #...:**	DGV9E10E	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 13:40	**Date Received..:**	07/26/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	03:43		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**980**	**32**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	43	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2-7

GC Semivolatiles

Lot-Sample #...: F0G260239-016 **Work Order #...:** DGV9E10C **Matrix.....:** SOLID
Date Sampled...: 07/25/00 13:40 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 13:16
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	**100**	**42**	**ug/kg**
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(10 - 199)
Decachlorobiphenyl	94	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2-7

GC/MS Volatiles

Lot-Sample #...: F0G260239-016 **Work Order #...:** DGV9E10H **Matrix.....:** SOLID
Date Sampled...: 07/25/00 13:40 **Date Received..:** 07/26/00
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0212109 **Analysis Time..:** 20:50
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	**4.7 J**	**6.4**	**ug/kg**
Chloroethane	ND	13	ug/kg
Methylene chloride	**15**	**6.4**	**ug/kg**
Acetone	**20 J,B**	**26**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	**1.6 J**	**6.4**	**ug/kg**
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	90	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	104	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2-7

GC/MS Volatiles

Lot-Sample #...: F0G260239-016 Work Order #...: DGV9E10H Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2-7

HPLC

Lot-Sample #...: F0G260239-016 **Work Order #...:** DGV9E20A **Matrix.....:** SOLID
Date Sampled...: 07/25/00 13:40 **Date Received..:** 07/26/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 19:00
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	**29**	**19**	**ug/kg**
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	67	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2-7

GC Volatiles

Lot-Sample #...:	F0G260239-016	**Work Order #...:**	DGV9E10D	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 13:40	**Date Received..:**	07/26/00		
Prep Date.....:	07/31/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0214344	**Analysis Time..:**	11:40		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	65	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9-9

GC Semivolatiles

Lot-Sample #...:	F0G260239-017	**Work Order #...:**	DGV9W10E	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 09:55	**Date Received..:**	07/26/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	04:09		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**1400**	**32**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	31	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9-9

GC Semivolatiles

Lot-Sample #...: F0G260239-017 **Work Order #...:** DGV9W10C **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:55 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 13:30
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	0.0	(10 - 199)
Decachlorobiphenyl	71	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9-9

GC/MS Volatiles

Lot-Sample #...: F0G260239-017 **Work Order #...:** DGV9W10H **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:55 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 16:05
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	**6.7 J**	**26**	**ug/kg**
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	**110**	**26**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	100	(73 - 109)
Toluene-d8	101	(82 - 119)
Dibromofluoromethane	106	(82 - 132)
1,2-Dichloroethane-d4	111	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9-9

GC/MS Volatiles

Lot-Sample #...: F0G260239-017 Work Order #...: DGV9W10H Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9-9

HPLC

Lot-Sample #...: F0G260239-017 **Work Order #...:** DGV9W20A **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:55 **Date Received..:** 07/26/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 19:26
Dilution Factor: 10
% Moisture.....: 22 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	380	ug/kg
Acenaphthylene	ND	380	ug/kg
Anthracene	ND	380	ug/kg
Benzo(a)anthracene	ND	190	ug/kg
Benzo(a)pyrene	ND	190	ug/kg
Benzo(b)fluoranthene	ND	190	ug/kg
Benzo(ghi)perylene	ND	380	ug/kg
Benzo(k)fluoranthene	ND	190	ug/kg
Chrysene	**740**	**190**	**ug/kg**
Dibenz(a,h)anthracene	ND	380	ug/kg
Fluoranthene	ND	380	ug/kg
Fluorene	ND	380	ug/kg
Indeno(1,2,3-cd)pyrene	ND	190	ug/kg
Naphthalene	ND	380	ug/kg
Phenanthrene	ND	380	ug/kg
Pyrene	ND	380	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	47	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9-9

GC Volatiles

Lot-Sample #...: F0G260239-017 **Work Order #...:** DGV9W10D **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:55 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0214344 **Analysis Time..:** 12:07
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	52	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8 (DUPLICATE)

GC Semivolatiles

Lot-Sample #...:	F0G260239-018	**Work Order #...:**	DGVA210E	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 09:15	**Date Received..:**	07/26/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	04:36		
Dilution Factor:	1				
% Moisture.....:	27	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	34	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	25	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8 (DUPLICATE)

GC Semivolatiles

Lot-Sample #...: F0G260239-018 **Work Order #...:** DGVA210C **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 14:25
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	45	ug/kg
Aroclor 1221	ND	45	ug/kg
Aroclor 1232	ND	45	ug/kg
Aroclor 1242	ND	45	ug/kg
Aroclor 1248	ND	45	ug/kg
Aroclor 1254	ND	45	ug/kg
Aroclor 1260	ND	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(10 - 199)
Decachlorobiphenyl	102	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8 (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-018 **Work Order #...:** DGVA210F **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 16:39
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.9	ug/kg
1,2-Dichloropropane	ND	6.9	ug/kg
cis-1,3-Dichloropropene	ND	6.9	ug/kg
Trichloroethene	ND	6.9	ug/kg
Dibromochloromethane	ND	6.9	ug/kg
1,1,2-Trichloroethane	ND	6.9	ug/kg
Benzene	ND	6.9	ug/kg
trans-1,3-Dichloropropene	ND	6.9	ug/kg
Bromoform	ND	6.9	ug/kg
4-Methyl-2-pentanone	ND	28	ug/kg
2-Hexanone	ND	28	ug/kg
Tetrachloroethene	ND	6.9	ug/kg
Toluene	ND	6.9	ug/kg
Chlorobenzene	ND	6.9	ug/kg
Ethylbenzene	ND	6.9	ug/kg
Styrene	ND	6.9	ug/kg
Chloromethane	ND	14	ug/kg
Bromomethane	ND	14	ug/kg
Vinyl chloride	ND	6.9	ug/kg
Chloroethane	ND	14	ug/kg
Methylene chloride	ND	6.9	ug/kg
Acetone	**25 J**	**28**	**ug/kg**
Carbon disulfide	ND	6.9	ug/kg
1,1-Dichloroethene	ND	6.9	ug/kg
1,1-Dichloroethane	ND	6.9	ug/kg
1,2-Dichloroethene (total)	ND	6.9	ug/kg
Chloroform	ND	6.9	ug/kg
1,2-Dichloroethane	ND	6.9	ug/kg
2-Butanone	ND	28	ug/kg
1,1,1-Trichloroethane	ND	6.9	ug/kg
Carbon tetrachloride	ND	6.9	ug/kg
Bromodichloromethane	ND	6.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.9	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	101	(82 - 119)
Dibromofluoromethane	103	(82 - 132)
1,2-Dichloroethane-d4	104	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8 (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-018 Work Order #...: DGVA210F Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8 (DUPLICATE)

HPLC

Lot-Sample #...: F0G260239-018 **Work Order #...:** DGVA220A **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 19:52
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	41	ug/kg
Acenaphthylene	ND	41	ug/kg
Anthracene	ND	41	ug/kg
Benzo(a)anthracene	ND	21	ug/kg
Benzo(a)pyrene	ND	21	ug/kg
Benzo(b)fluoranthene	ND	21	ug/kg
Benzo(ghi)perylene	ND	41	ug/kg
Benzo(k)fluoranthene	ND	21	ug/kg
Chrysene	ND	21	ug/kg
Dibenz(a,h)anthracene	ND	41	ug/kg
Fluoranthene	ND	41	ug/kg
Fluorene	ND	41	ug/kg
Indeno(1,2,3-cd)pyrene	ND	21	ug/kg
Naphthalene	ND	41	ug/kg
Phenanthrene	ND	41	ug/kg
Pyrene	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	44	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8 (DUPLICATE)

GC Volatiles

Lot-Sample #...: F0G260239-018 **Work Order #...:** DGVA210D **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0214344 **Analysis Time..:** 12:34
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.14	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	63	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8

GC Semivolatiles

Lot-Sample #...:	F0G260239-019	**Work Order #...:**	DGVA310E	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 09:15	**Date Received..:**	07/26/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	05:02		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	30	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8

GC Semivolatiles

Lot-Sample #...: F0G260239-019 **Work Order #...:** DGVA310C **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 14:38
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(10 - 199)
Decachlorobiphenyl	104	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8

GC/MS Volatiles

Lot-Sample #...: F0G260239-019 **Work Order #...:** DGVA310F **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 17:13
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Trichloroethene	ND	6.3	ug/kg
Dibromochloromethane	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.3	ug/kg
Acetone	**20 J**	**25**	**ug/kg**
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	82	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8

GC/MS Volatiles

Lot-Sample #...: F0G260239-019 Work Order #...: DGVA310F Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8

HPLC

Lot-Sample #...: F0G260239-019 **Work Order #...:** DGVA320A **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 21:09
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	56	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8

GC Volatiles

Lot-Sample #...:	F0G260239-019	**Work Order #...:**	DGVA310D	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 09:15	**Date Received..:**	07/26/00		
Prep Date.....:	07/31/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0214344	**Analysis Time..:**	00:20		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	64	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1-7

GC Semivolatiles

Lot-Sample #...:	F0G260239-020	**Work Order #...:**	DGVA510E	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 10:45	**Date Received..:**	07/26/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	05:29		
Dilution Factor:	1				
% Moisture.....:	23	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	50	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1-7

GC Semivolatiles

Lot-Sample #...: F0G260239-020 **Work Order #...:** DGVA510C **Matrix.....:** SOLID
Date Sampled...: 07/25/00 10:45 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 14:52
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	43	ug/kg
Aroclor 1221	ND	43	ug/kg
Aroclor 1232	ND	43	ug/kg
Aroclor 1242	ND	43	ug/kg
Aroclor 1248	ND	43	ug/kg
Aroclor 1254	ND	43	ug/kg
Aroclor 1260	ND	43	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	66	(10 - 199)
Decachlorobiphenyl	84	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1-7

GC/MS Volatiles

Lot-Sample #...: F0G260239-020 **Work Order #...:** DGVA510H **Matrix.....:** SOLID
Date Sampled...: 07/25/00 10:45 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 17:47
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.5	ug/kg
1,2-Dichloropropane	ND	6.5	ug/kg
cis-1,3-Dichloropropene	ND	6.5	ug/kg
Trichloroethene	**3.9 J**	**6.5**	**ug/kg**
Dibromochloromethane	ND	6.5	ug/kg
1,1,2-Trichloroethane	ND	6.5	ug/kg
Benzene	ND	6.5	ug/kg
trans-1,3-Dichloropropene	ND	6.5	ug/kg
Bromoform	ND	6.5	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.5	ug/kg
Toluene	ND	6.5	ug/kg
Chlorobenzene	ND	6.5	ug/kg
Ethylbenzene	ND	6.5	ug/kg
Styrene	ND	6.5	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	**51**	**6.5**	**ug/kg**
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.5	ug/kg
Acetone	**23 J**	**26**	**ug/kg**
Carbon disulfide	ND	6.5	ug/kg
1,1-Dichloroethene	ND	6.5	ug/kg
1,1-Dichloroethane	ND	6.5	ug/kg
1,2-Dichloroethene (total)	**58**	**6.5**	**ug/kg**
Chloroform	ND	6.5	ug/kg
1,2-Dichloroethane	ND	6.5	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.5	ug/kg
Carbon tetrachloride	ND	6.5	ug/kg
Bromodichloromethane	ND	6.5	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.5	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	82	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	98	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1-7

GC/MS Volatiles

Lot-Sample #...: F0G260239-020 Work Order #...: DGVA510H Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1-7

HPLC

Lot-Sample #...: F0G260239-020 **Work Order #...:** DGVA520A **Matrix.....:** SOLID
Date Sampled...: 07/25/00 10:45 **Date Received..:** 07/26/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 21:35
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	39	ug/kg
Acenaphthylene	ND	39	ug/kg
Anthracene	ND	39	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	39	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	39	ug/kg
Fluoranthene	ND	39	ug/kg
Fluorene	ND	39	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	39	ug/kg
Phenanthrene	ND	39	ug/kg
Pyrene	ND	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	51	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1-7

GC Volatiles

Lot-Sample #...: F0G260239-020 **Work Order #...:** DGVA510D **Matrix.....:** SOLID
Date Sampled...: 07/25/00 10:45 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0214344 **Analysis Time..:** 00:47
Dilution Factor: 1
% Moisture.....: 23 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	60	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC Semivolatiles

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA610E **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 07/29/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0213175 **Analysis Time..:** 06:49
Dilution Factor: 1
% Moisture.....: 37 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	40	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	32	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC Semivolatiles

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA610C **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 15:06
Dilution Factor: 1
% Moisture.....: 37 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	52	ug/kg
Aroclor 1221	ND	52	ug/kg
Aroclor 1232	ND	52	ug/kg
Aroclor 1242	ND	52	ug/kg
Aroclor 1248	ND	52	ug/kg
Aroclor 1254	ND	52	ug/kg
Aroclor 1260	ND	52	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	152	(10 - 199)
Decachlorobiphenyl	108	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC/MS Volatiles

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA610H **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 18:21
Dilution Factor: 1
% Moisture.....: 37 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	7.9	ug/kg
1,2-Dichloropropane	ND	7.9	ug/kg
cis-1,3-Dichloropropene	ND	7.9	ug/kg
Trichloroethene	**58**	**7.9**	**ug/kg**
Dibromochloromethane	ND	7.9	ug/kg
1,1,2-Trichloroethane	ND	7.9	ug/kg
Benzene	ND	7.9	ug/kg
trans-1,3-Dichloropropene	ND	7.9	ug/kg
Bromoform	ND	7.9	ug/kg
4-Methyl-2-pentanone	ND	32	ug/kg
2-Hexanone	ND	32	ug/kg
Tetrachloroethene	ND	7.9	ug/kg
Toluene	ND	7.9	ug/kg
Chlorobenzene	ND	7.9	ug/kg
Ethylbenzene	ND	7.9	ug/kg
Styrene	ND	7.9	ug/kg
Chloromethane	ND	16	ug/kg
Bromomethane	ND	16	ug/kg
Vinyl chloride	**16 J**	**7.9**	**ug/kg**
Chloroethane	ND	16	ug/kg
Methylene chloride	ND	7.9	ug/kg
Acetone	**130**	**32**	**ug/kg**
Carbon disulfide	ND	7.9	ug/kg
1,1-Dichloroethene	ND	7.9	ug/kg
1,1-Dichloroethane	ND	7.9	ug/kg
1,2-Dichloroethene (total)	**530 E**	**7.9**	**ug/kg**
Chloroform	ND	7.9	ug/kg
1,2-Dichloroethane	ND	7.9	ug/kg
2-Butanone	ND	32	ug/kg
1,1,1-Trichloroethane	ND	7.9	ug/kg
Carbon tetrachloride	ND	7.9	ug/kg
Bromodichloromethane	ND	7.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	7.9	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	86	(73 - 109)
Toluene-d8	102	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	113	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC/MS Volatiles

Lot-Sample #...: F0G260239-021 Work Order #...: DGVA610H Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

E Estimated result. Result concentration exceeds the calibration range.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC/MS Volatiles

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA620H **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/02/00
Prep Batch #...: 0216156 **Analysis Time..:** 14:02
Dilution Factor: 2
% Moisture.....: 37 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	16	ug/kg
1,2-Dichloropropane	ND	16	ug/kg
cis-1,3-Dichloropropene	ND	16	ug/kg
Trichloroethene	**27 D**	**16**	**ug/kg**
Dibromochloromethane	ND	16	ug/kg
1,1,2-Trichloroethane	ND	16	ug/kg
Benzene	**5.9 J,D**	**16**	**ug/kg**
trans-1,3-Dichloropropene	ND	16	ug/kg
Bromoform	ND	16	ug/kg
4-Methyl-2-pentanone	ND	63	ug/kg
2-Hexanone	ND	63	ug/kg
Tetrachloroethene	ND	16	ug/kg
Toluene	ND	16	ug/kg
Chlorobenzene	**5.8 J,D**	**16**	**ug/kg**
Ethylbenzene	ND	16	ug/kg
Styrene	ND	16	ug/kg
Chloromethane	ND	32	ug/kg
Bromomethane	ND	32	ug/kg
Vinyl chloride	ND	16	ug/kg
Chloroethane	ND	32	ug/kg
Methylene chloride	**33**	**16**	**ug/kg**
Acetone	**78 B,D**	**63**	**ug/kg**
Carbon disulfide	ND	16	ug/kg
1,1-Dichloroethene	**6.9 J,D**	**16**	**ug/kg**
1,1-Dichloroethane	ND	16	ug/kg
1,2-Dichloroethene (total)	**87**	**16**	**ug/kg**
Chloroform	**6.1 J,D**	**16**	**ug/kg**
1,2-Dichloroethane	**8.0 J,D**	**16**	**ug/kg**
2-Butanone	ND	63	ug/kg
1,1,1-Trichloroethane	ND	16	ug/kg
Carbon tetrachloride	**5.6 J,D**	**16**	**ug/kg**
Bromodichloromethane	ND	16	ug/kg
1,1,2,2-Tetrachloroethane	ND	16	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	99	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	112	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC/MS Volatiles

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA620H **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC/MS Volatiles

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA630H **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/02/00
Prep Batch #...: 0216156 **Analysis Time..:** 16:27
Dilution Factor: 1
% Moisture.....: 37 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	7.9	ug/kg
1,2-Dichloropropane	ND	7.9	ug/kg
cis-1,3-Dichloropropene	ND	7.9	ug/kg
Trichloroethene	**98**	**7.9**	**ug/kg**
Dibromochloromethane	ND	7.9	ug/kg
1,1,2-Trichloroethane	ND	7.9	ug/kg
Benzene	ND	7.9	ug/kg
trans-1,3-Dichloropropene	ND	7.9	ug/kg
Bromoform	ND	7.9	ug/kg
4-Methyl-2-pentanone	ND	32	ug/kg
2-Hexanone	ND	32	ug/kg
Tetrachloroethene	ND	7.9	ug/kg
Toluene	ND	7.9	ug/kg
Chlorobenzene	ND	7.9	ug/kg
Ethylbenzene	ND	7.9	ug/kg
Styrene	ND	7.9	ug/kg
Chloromethane	ND	16	ug/kg
Bromomethane	ND	16	ug/kg
Vinyl chloride	ND	7.9	ug/kg
Chloroethane	ND	16	ug/kg
Methylene chloride	**31**	**7.9**	**ug/kg**
Acetone	**86 B**	**32**	**ug/kg**
Carbon disulfide	ND	7.9	ug/kg
1,1-Dichloroethene	ND	7.9	ug/kg
1,1-Dichloroethane	ND	7.9	ug/kg
1,2-Dichloroethene (total)	**240**	**7.9**	**ug/kg**
Chloroform	ND	7.9	ug/kg
1,2-Dichloroethane	ND	7.9	ug/kg
2-Butanone	ND	32	ug/kg
1,1,1-Trichloroethane	ND	7.9	ug/kg
Carbon tetrachloride	ND	7.9	ug/kg
Bromodichloromethane	ND	7.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	7.9	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	100	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC/MS Volatiles

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA630H **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

HPLC

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA620A **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 22:00
Dilution Factor: 1
% Moisture.....: 37 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	47	ug/kg
Acenaphthylene	ND	47	ug/kg
Anthracene	ND	47	ug/kg
Benzo(a)anthracene	ND	24	ug/kg
Benzo(a)pyrene	ND	24	ug/kg
Benzo(b)fluoranthene	ND	24	ug/kg
Benzo(ghi)perylene	ND	47	ug/kg
Benzo(k)fluoranthene	ND	24	ug/kg
Chrysene	**140**	**24**	**ug/kg**
Dibenz(a,h)anthracene	ND	47	ug/kg
Fluoranthene	ND	47	ug/kg
Fluorene	ND	47	ug/kg
Indeno(1,2,3-cd)pyrene	ND	24	ug/kg
Naphthalene	ND	47	ug/kg
Phenanthrene	ND	47	ug/kg
Pyrene	ND	47	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	45	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

GC Volatiles

Lot-Sample #...:	F0G260239-021	**Work Order #...:**	DGVA610D	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 14:30	**Date Received..:**	07/26/00		
Prep Date.....:	07/31/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0214344	**Analysis Time..:**	01:14		
Dilution Factor:	1				
% Moisture.....:	37	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.22**	**0.16**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	60	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

GC Semivolatiles

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA910E **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 07/29/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0213175 **Analysis Time..:** 07:15
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	34	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	43	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

GC Semivolatiles

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA910C **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 15:19
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	45	ug/kg
Aroclor 1221	ND	45	ug/kg
Aroclor 1232	ND	45	ug/kg
Aroclor 1242	ND	45	ug/kg
Aroclor 1248	ND	45	ug/kg
Aroclor 1254	ND	45	ug/kg
Aroclor 1260	ND	45	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	109	(10 - 199)
Decachlorobiphenyl	103	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA910H **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 18:55
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.9	ug/kg
1,2-Dichloropropane	ND	6.9	ug/kg
cis-1,3-Dichloropropene	ND	6.9	ug/kg
Trichloroethene	**280 E**	**6.9**	**ug/kg**
Dibromochloromethane	ND	6.9	ug/kg
1,1,2-Trichloroethane	ND	6.9	ug/kg
Benzene	ND	6.9	ug/kg
trans-1,3-Dichloropropene	ND	6.9	ug/kg
Bromoform	ND	6.9	ug/kg
4-Methyl-2-pentanone	ND	28	ug/kg
2-Hexanone	ND	28	ug/kg
Tetrachloroethene	ND	6.9	ug/kg
Toluene	ND	6.9	ug/kg
Chlorobenzene	ND	6.9	ug/kg
Ethylbenzene	ND	6.9	ug/kg
Styrene	ND	6.9	ug/kg
Chloromethane	ND	14	ug/kg
Bromomethane	ND	14	ug/kg
Vinyl chloride	ND	6.9	ug/kg
Chloroethane	ND	14	ug/kg
Methylene chloride	ND	6.9	ug/kg
Acetone	**200**	**28**	**ug/kg**
Carbon disulfide	ND	6.9	ug/kg
1,1-Dichloroethene	ND	6.9	ug/kg
1,1-Dichloroethane	ND	6.9	ug/kg
1,2-Dichloroethene (total)	**520 E**	**6.9**	**ug/kg**
Chloroform	ND	6.9	ug/kg
1,2-Dichloroethane	ND	6.9	ug/kg
2-Butanone	ND	28	ug/kg
1,1,1-Trichloroethane	ND	6.9	ug/kg
Carbon tetrachloride	ND	6.9	ug/kg
Bromodichloromethane	ND	6.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.9	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	89	(73 - 109)
Toluene-d8	102	(82 - 119)
Dibromofluoromethane	104	(82 - 132)
1,2-Dichloroethane-d4	118	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA910H **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA920H **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0215223 **Analysis Time..:** 15:17
Dilution Factor: 2
% Moisture.....: 27 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	14	ug/kg
1,2-Dichloropropane	ND	14	ug/kg
cis-1,3-Dichloropropene	ND	14	ug/kg
Trichloroethene	**120 D**	**14**	**ug/kg**
Dibromochloromethane	ND	14	ug/kg
1,1,2-Trichloroethane	ND	14	ug/kg
Benzene	ND	14	ug/kg
trans-1,3-Dichloropropene	ND	14	ug/kg
Bromoform	ND	14	ug/kg
4-Methyl-2-pentanone	ND	55	ug/kg
2-Hexanone	ND	55	ug/kg
Tetrachloroethene	ND	14	ug/kg
Toluene	ND	14	ug/kg
Chlorobenzene	ND	14	ug/kg
Ethylbenzene	ND	14	ug/kg
Styrene	ND	14	ug/kg
Chloromethane	ND	28	ug/kg
Bromomethane	ND	28	ug/kg
Vinyl chloride	ND	14	ug/kg
Chloroethane	ND	28	ug/kg
Methylene chloride	**110 D**	**14**	**ug/kg**
Acetone	**340 B,D**	**55**	**ug/kg**
Carbon disulfide	ND	14	ug/kg
1,1-Dichloroethene	ND	14	ug/kg
1,1-Dichloroethane	ND	14	ug/kg
1,2-Dichloroethene (total)	**180 D**	**14**	**ug/kg**
Chloroform	ND	14	ug/kg
1,2-Dichloroethane	ND	14	ug/kg
2-Butanone	ND	55	ug/kg
1,1,1-Trichloroethane	ND	14	ug/kg
Carbon tetrachloride	ND	14	ug/kg
Bromodichloromethane	ND	14	ug/kg
1,1,2,2-Tetrachloroethane	ND	14	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	97	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

GC/MS Volatiles

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA920H **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

HPLC

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA920A **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 22:26
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	41	ug/kg
Acenaphthylene	ND	41	ug/kg
Anthracene	ND	41	ug/kg
Benzo(a)anthracene	ND	21	ug/kg
Benzo(a)pyrene	ND	21	ug/kg
Benzo(b)fluoranthene	ND	21	ug/kg
Benzo(ghi)perylene	ND	41	ug/kg
Benzo(k)fluoranthene	ND	21	ug/kg
Chrysene	**30**	**21**	**ug/kg**
Dibenz(a,h)anthracene	ND	41	ug/kg
Fluoranthene	ND	41	ug/kg
Fluorene	ND	41	ug/kg
Indeno(1,2,3-cd)pyrene	ND	21	ug/kg
Naphthalene	ND	41	ug/kg
Phenanthrene	ND	41	ug/kg
Pyrene	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	36 *	(44 - 140)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

GC Volatiles

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA910D **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0214344 **Analysis Time..:** 01:41
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.14	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	149	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3-6

GC Semivolatiles

Lot-Sample #...:	F0G260239-023	**Work Order #...:**	DGVAD103	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 15:30	**Date Received..:**	07/26/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	07:42		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	37	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3-6

GC/MS Volatiles

Lot-Sample #...: F0G260239-023 **Work Order #...:** DGVAD104 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 15:30 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 19:29
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	**39**	**26**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	99	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	107	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3-6

GC/MS Volatiles

Lot-Sample #...: F0G260239-023 **Work Order #...:** DGVAD104 **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3-6

GC Volatiles

Lot-Sample #...:	F0G260239-023	**Work Order #...:**	DGVAD102	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 15:30	**Date Received..:**	07/26/00		
Prep Date.....:	07/31/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0214344	**Analysis Time..:**	13:02		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	57	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2-6

GC Semivolatiles

Lot-Sample #...:	F0G260239-024	**Work Order #...:**	DGVCD103	**Matrix.....:**	SOLID
Date Sampled...:	07/25/00 15:15	**Date Received..:**	07/26/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	08:08		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	25	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2-6

GC/MS Volatiles

Lot-Sample #...: F0G260239-024 **Work Order #...:** DGVCD104 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 15:15 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 20:03
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	**16 J**	**26**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	96	(82 - 119)
Dibromofluoromethane	105	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2-6

GC/MS Volatiles

Lot-Sample #...: F0G260239-024 **Work Order #...:** DGVCD104 **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2-6

GC Volatiles

Lot-Sample #...: F0G260239-024 **Work Order #...:** DGVCD102 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 15:15 **Date Received..:** 07/26/00
Prep Date.....: 07/31/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0214344 **Analysis Time..:** 13:29
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	57	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29I1-17

GC/MS Volatiles

Lot-Sample #...: F0G260239-025 **Work Order #...:** DGVCE103 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 13:10 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 20:37
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	**21 J**	**26**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	100	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	108	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29I1-17

GC/MS Volatiles

Lot-Sample #...: F0G260239-025 Work Order #...: DGVCE103 Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29I1-17

HPLC

Lot-Sample #...: F0G260239-025 **Work Order #...:** DGVCE202 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 13:10 **Date Received..:** 07/26/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 22:52
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	38	ug/kg
Acenaphthylene	ND	38	ug/kg
Anthracene	ND	38	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	38	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	38	ug/kg
Fluoranthene	ND	38	ug/kg
Fluorene	ND	38	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	38	ug/kg
Phenanthrene	ND	38	ug/kg
Pyrene	ND	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	48	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220I1W

GC/MS Volatiles

Lot-Sample #...: F0G260239-026 **Work Order #...:** DGVFM101 **Matrix.....:** WATER
Date Sampled...: 07/25/00 14:20 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 15:43
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**220 E**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	**0.88 J**	**1.0**	**ug/L**
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**63 E**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	91	(71 - 129)
Dibromofluoromethane	103	(74 - 135)
1,2-Dichloroethane-d4	97	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220I1W

GC/MS Volatiles

Lot-Sample #...: F0G260239-026 **Work Order #...:** DGVFM101 **Matrix.....:** WATER

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220I1W

GC/MS Volatiles

Lot-Sample #...: F0G260239-026 **Work Order #...:** DGVFM201 **Matrix.....:** WATER
Date Sampled...: 07/25/00 14:20 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 20:00
Dilution Factor: 20

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	20	ug/L
1,2-Dichloropropane	ND	20	ug/L
cis-1,3-Dichloropropene	ND	20	ug/L
Trichloroethene	**220 D**	**20**	**ug/L**
Dibromochloromethane	ND	20	ug/L
1,1,2-Trichloroethane	ND	20	ug/L
Benzene	ND	20	ug/L
trans-1,3-Dichloropropene	ND	20	ug/L
Bromoform	ND	20	ug/L
4-Methyl-2-pentanone	ND	100	ug/L
2-Hexanone	ND	100	ug/L
Tetrachloroethene	ND	20	ug/L
Toluene	ND	20	ug/L
Chlorobenzene	ND	20	ug/L
Ethylbenzene	ND	20	ug/L
Styrene	ND	20	ug/L
Chloromethane	ND	40	ug/L
Bromomethane	ND	40	ug/L
Vinyl chloride	ND	40	ug/L
Chloroethane	ND	40	ug/L
Methylene chloride	**7.9 J,B,D**	**20**	**ug/L**
Acetone	ND	200	ug/L
Carbon disulfide	ND	20	ug/L
1,1-Dichloroethene	ND	20	ug/L
1,1-Dichloroethane	ND	20	ug/L
1,2-Dichloroethene (total)	**54 D**	**20**	**ug/L**
Chloroform	ND	20	ug/L
1,2-Dichloroethane	ND	20	ug/L
2-Butanone	ND	100	ug/L
1,1,1-Trichloroethane	ND	20	ug/L
Carbon tetrachloride	ND	20	ug/L
Bromodichloromethane	ND	20	ug/L
1,1,2,2-Tetrachloroethane	ND	20	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	99	(78 - 124)
Toluene-d8	107	(71 - 129)
Dibromofluoromethane	100	(74 - 135)
1,2-Dichloroethane-d4	81	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220I1W

GC/MS Volatiles

Lot-Sample #...: F0G260239-026 Work Order #...: DGVFM201 Matrix.....: WATER

NOTE(S):

D Result was obtained from the analysis of a dilution.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B220N1W

GC Semivolatiles

Lot-Sample #...:	F0G260239-027	**Work Order #...:**	DGVFQ101	**Matrix.....:**	WATER
Date Sampled...:	07/25/00 14:50	**Date Received..:**	07/26/00		
Prep Date.....:	08/01/00	**Analysis Date..:**	08/04/00		
Prep Batch #...:	0214452	**Analysis Time..:**	12:08		
Dilution Factor:	10				
		Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	**35**	**5.0**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	0.0 DIL	(10 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

General Chemistry

Lot-Sample #...: F0G260239-001 **Work Order #...:** DGV54 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:40 **Date Received..:** 07/26/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1		Analysis Time..: 16:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	07/27-07/28/00	0210436
		Dilution Factor: 1		Analysis Time..: 12:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

General Chemistry

Lot-Sample #...: F0G260239-002 **Work Order #...:** DGV61 **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:00 **Date Received..:** 07/26/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1		Analysis Time..: 16:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	07/27-07/28/00	0210436
		Dilution Factor: 1		Analysis Time..: 12:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

General Chemistry

Lot-Sample #...: F0G260239-003 **Work Order #...:** DGV63 **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:40 **Date Received..:** 07/26/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1		Analysis Time..: 16:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	07/27-07/28/00	0210436
		Dilution Factor: 1		Analysis Time..: 12:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

General Chemistry

Lot-Sample #...: F0G260239-004 **Work Order #...:** DGV66 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:10 **Date Received..:** 07/26/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1		Analysis Time..: 16:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	07/27-07/28/00	0210436
		Dilution Factor: 1		Analysis Time..: 12:00		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2-7

General Chemistry

Lot-Sample #...: F0G260239-016 **Work Order #...:** DGV9E **Matrix.....:** SOLID
Date Sampled...: 07/25/00 13:40 **Date Received..:** 07/26/00
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.62	mg/kg	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**21.6**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	**0.14**	**0.064**	**mg/kg**	**SW846 7.3.3**	**07/27-07/28/00**	**0210435**
		Dilution Factor: 1		Analysis Time..: 12:00		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9-9

General Chemistry

Lot-Sample #...: F0G260239-017 Work Order #...: DGV9W Matrix.....: SOLID
Date Sampled...: 07/25/00 09:55 Date Received..: 07/26/00
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	21.7	0.10	%	MCAWW 160.3 MOD	07/26-07/27/00	0208539

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8 (DUPLICATE)

General Chemistry

Lot-Sample #...: F0G260239-018 **Work Order #...:** DGVA2 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**27.4**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8

General Chemistry

Lot-Sample #...: F0G260239-019 **Work Order #...:** DGVA3 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**20.7**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1-7

General Chemistry

Lot-Sample #...: F0G260239-020 **Work Order #...:** DGVA5 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 10:45 **Date Received..:** 07/26/00
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.64	mg/kg	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**22.9**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	**0.14**	**0.065**	**mg/kg**	**SW846 7.3.3**	**07/27-07/28/00**	**0210435**
		Dilution Factor: 1		Analysis Time..: 12:00		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

General Chemistry

Lot-Sample #...: F0G260239-021 **Work Order #...:** DGVA6 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
% Moisture.....: 37

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.79	mg/kg	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**36.8**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.079	mg/kg	SW846 7.3.3	07/27-07/28/00	0210435
		Dilution Factor: 1		Analysis Time..: 12:00		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

General Chemistry

Lot-Sample #...: F0G260239-022 **Work Order #...:** DGVA9 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.66	mg/kg	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1		Analysis Time..: 12:00		
Percent Moisture	**27.4**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	ND	0.069	mg/kg	SW846 7.3.3	07/27-07/28/00	0210435
		Dilution Factor: 1		Analysis Time..: 12:00		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3-6

General Chemistry

Lot-Sample #...: F0G260239-023 **Work Order #...:** DGVAD **Matrix.....:** SOLID
Date Sampled...: 07/25/00 15:30 **Date Received..:** 07/26/00
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**22.2**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2-6

General Chemistry

Lot-Sample #...: F0G260239-024 **Work Order #...:** DGVCD **Matrix.....:** SOLID
Date Sampled...: 07/25/00 15:15 **Date Received..:** 07/26/00
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**21.6**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29I1-17

General Chemistry

Lot-Sample #...: F0G260239-025 **Work Order #...:** DGVCE **Matrix.....:** SOLID
Date Sampled...: 07/25/00 13:10 **Date Received..:** 07/26/00
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**22.0**	**0.10**	**%**	**MCAWW 160.3 MOD**	**07/26-07/27/00**	**0208539**

Dilution Factor: 1 Analysis Time..: 00:00

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W

TOTAL Metals

Lot-Sample #...: F0G260239-001 **Matrix.....:** WATER
Date Sampled...: 07/25/00 18:40 **Date Received..:** 07/26/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209280						
Mercury	**0.094 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/27-07/28/00**	**DGV5410E**
		Dilution Factor: 1		Analysis Time..: 13:01		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV5410A
		Dilution Factor: 1		Analysis Time..: 09:25		
Arsenic	**11.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV54106**
		Dilution Factor: 1		Analysis Time..: 09:25		
Barium	**961**	**200**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV54107**
		Dilution Factor: 1		Analysis Time..: 09:25		
Lead	**15.6**	**3.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV54108**
		Dilution Factor: 1		Analysis Time..: 09:25		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV54109
		Dilution Factor: 1		Analysis Time..: 09:25		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV5410C
		Dilution Factor: 1		Analysis Time..: 09:25		
Chromium	**48.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/27-08/01/00**	**DGV5410D**
		Dilution Factor: 1		Analysis Time..: 11:29		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3W (DUPLICATE)

TOTAL Metals

Lot-Sample #...: F0G260239-002 **Matrix.....:** WATER
Date Sampled...: 07/25/00 19:00 **Date Received..:** 07/26/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209280						
Mercury	**0.056 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/27-07/28/00**	**DGV6110E**
		Dilution Factor: 1		Analysis Time..: 13:14		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6110A
		Dilution Factor: 1		Analysis Time..: 09:53		
Arsenic	**7.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV61106**
		Dilution Factor: 1		Analysis Time..: 09:53		
Barium	**896**	**200**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV61107**
		Dilution Factor: 1		Analysis Time..: 09:53		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6110C
		Dilution Factor: 1		Analysis Time..: 09:53		
Chromium	**25.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/27-08/01/00**	**DGV6110D**
		Dilution Factor: 1		Analysis Time..: 11:52		
Lead	**9.0**	**3.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV61108**
		Dilution Factor: 1		Analysis Time..: 09:53		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV61109
		Dilution Factor: 1		Analysis Time..: 09:53		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1W

TOTAL Metals

Lot-Sample #...: F0G260239-003 **Matrix.....:** WATER
Date Sampled...: 07/25/00 17:40 **Date Received..:** 07/26/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209280						
Mercury	**0.16 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/27-07/28/00**	**DGV6310E**
		Dilution Factor: 1		Analysis Time..: 13:17		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6310A
		Dilution Factor: 1		Analysis Time..: 09:58		
Arsenic	**15.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV63106**
		Dilution Factor: 1		Analysis Time..: 09:58		
Barium	**589**	**200**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV63107**
		Dilution Factor: 1		Analysis Time..: 09:58		
Cadmium	**8.6**	**5.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV6310C**
		Dilution Factor: 1		Analysis Time..: 09:58		
Chromium	**64.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/27-08/01/00**	**DGV6310D**
		Dilution Factor: 1		Analysis Time..: 11:55		
Lead	**19.0**	**3.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV63108**
		Dilution Factor: 1		Analysis Time..: 09:58		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV63109
		Dilution Factor: 1		Analysis Time..: 09:58		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2W

TOTAL Metals

Lot-Sample #...: F0G260239-004
Date Sampled...: 07/25/00 18:10 Date Received..: 07/26/00
Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209280						
Mercury	0.20	0.20	ug/L	SW846 7470A	07/27-07/28/00	DGV6610E
		Dilution Factor: 1		Analysis Time..: 13:19		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6610A
		Dilution Factor: 1		Analysis Time..: 00:00		
Arsenic	549	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV66106
		Dilution Factor: 1		Analysis Time..: 10:02		
Barium	2100	200	ug/L	SW846 6010B	07/27-07/31/00	DGV66107
		Dilution Factor: 1		Analysis Time..: 10:02		
Cadmium	24.2	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6610C
		Dilution Factor: 1		Analysis Time..: 10:02		
Chromium	159	10.0	ug/L	SW846 6010B	07/27-08/01/00	DGV6610D
		Dilution Factor: 1		Analysis Time..: 11:59		
Lead	39.8	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGV66108
		Dilution Factor: 1		Analysis Time..: 10:02		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV66109
		Dilution Factor: 1		Analysis Time..: 10:02		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E3

TOTAL Metals

Lot-Sample #...: F0G260239-005
Date Sampled...: 07/25/00 17:00 **Date Received..:** 07/26/00
Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209280						
Mercury	**2.2**	**0.20**	**ug/L**	**SW846 7470A**	**07/27-07/28/00**	**DGV6D10C**
		Dilution Factor: 1		Analysis Time..: 13:04		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6D108
		Dilution Factor: 1		Analysis Time..: 11:07		
Arsenic	**453**	**10.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV6D104**
		Dilution Factor: 1		Analysis Time..: 11:07		
Barium	**13100**	**2000**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV6D105**
		Dilution Factor: 10		Analysis Time..: 10:07		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6D109
		Dilution Factor: 1		Analysis Time..: 11:07		
Chromium	**2390**	**100**	**ug/L**	**SW846 6010B**	**07/27-08/01/00**	**DGV6D10A**
		Dilution Factor: 10		Analysis Time..: 12:45		
Lead	**802**	**3.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV6D106**
		Dilution Factor: 1		Analysis Time..: 11:07		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6D107
		Dilution Factor: 1		Analysis Time..: 11:07		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B22E2W

TOTAL Metals

Lot-Sample #...: F0G260239-006
Date Sampled...: 07/25/00 16:20 **Date Received..:** 07/26/00
Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209280						
Mercury	**1.8**	**0.20**	**ug/L**	**SW846 7470A**	**07/27-07/28/00**	**DGV6J10C**
		Dilution Factor: 1		Analysis Time..: 13:11		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6J108
		Dilution Factor: 1		Analysis Time..: 11:11		
Arsenic	**577**	**10.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV6J104**
		Dilution Factor: 1		Analysis Time..: 11:11		
Barium	**57000**	**2000**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV6J105**
		Dilution Factor: 10		Analysis Time..: 10:11		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6J109
		Dilution Factor: 1		Analysis Time..: 11:11		
Chromium	**2170**	**100**	**ug/L**	**SW846 6010B**	**07/27-08/01/00**	**DGV6J10A**
		Dilution Factor: 10		Analysis Time..: 12:49		
Lead	**684**	**3.0**	**ug/L**	**SW846 6010B**	**07/27-07/31/00**	**DGV6J106**
		Dilution Factor: 1		Analysis Time..: 11:11		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV6J107
		Dilution Factor: 1		Analysis Time..: 11:11		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W

TOTAL Metals

Lot-Sample #...: F0G260239-007 Matrix.....: WATER
Date Sampled...: 07/25/00 20:00 Date Received..: 07/26/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209280						
Mercury	0.12 B	0.20	ug/L	SW846 7470A	07/27-07/28/00	DGV7710A
		Dilution Factor: 1		Analysis Time..: 13:24		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV77107
		Dilution Factor: 1		Analysis Time..: 10:16		
Arsenic	158	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV77103
		Dilution Factor: 1		Analysis Time..: 10:16		
Barium	1980	200	ug/L	SW846 6010B	07/27-07/31/00	DGV77104
		Dilution Factor: 1		Analysis Time..: 10:16		
Cadmium	0.96 B	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV77108
		Dilution Factor: 1		Analysis Time..: 10:16		
Chromium	83.4	10.0	ug/L	SW846 6010B	07/27-08/01/00	DGV77109
		Dilution Factor: 1		Analysis Time..: 12:11		
Lead	43.4	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGV77105
		Dilution Factor: 1		Analysis Time..: 10:16		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV77106
		Dilution Factor: 1		Analysis Time..: 10:16		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9W (DUPLICATE)

TOTAL Metals

Lot-Sample #...: F0G260239-008 Matrix.....: WATER
Date Sampled...: 07/25/00 20:00 Date Received..: 07/26/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209280						
Mercury	0.13 B	0.20	ug/L	SW846 7470A	07/27-07/28/00	DGV7C10A
		Dilution Factor: 1		Analysis Time..: 13:22		
Prep Batch #...: 0209489						
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV7C107
		Dilution Factor: 1		Analysis Time..: 10:20		
Arsenic	177	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGV7C103
		Dilution Factor: 1		Analysis Time..: 10:20		
Barium	2210	200	ug/L	SW846 6010B	07/27-07/31/00	DGV7C104
		Dilution Factor: 1		Analysis Time..: 10:20		
Cadmium	1.3 B	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV7C108
		Dilution Factor: 1		Analysis Time..: 10:20		
Chromium	110	10.0	ug/L	SW846 6010B	07/27-08/01/00	DGV7C109
		Dilution Factor: 1		Analysis Time..: 12:14		
Lead	51.9	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGV7C105
		Dilution Factor: 1		Analysis Time..: 10:20		
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGV7C106
		Dilution Factor: 1		Analysis Time..: 10:20		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC2-7

TOTAL Metals

Lot-Sample #...: F0G260239-016 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 13:40 **Date Received..:** 07/26/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	ND	0.042	mg/kg	SW846 7471A	07/31/00	DGV9E109
		Dilution Factor: 1		Analysis Time..: 17:23		
Prep Batch #...: 0213224						
Silver	ND	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DGV9E102
		Dilution Factor: 1		Analysis Time..: 18:27		
Arsenic	**4.7**	**1.3**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGV9E103**
		Dilution Factor: 1		Analysis Time..: 18:27		
Barium	**98.1**	**25.5**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGV9E104**
		Dilution Factor: 1		Analysis Time..: 18:27		
Cadmium	ND	0.64	mg/kg	SW846 6010B	07/31-08/01/00	DGV9E105
		Dilution Factor: 1		Analysis Time..: 18:27		
Chromium	**19.5**	**1.3**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGV9E106**
		Dilution Factor: 1		Analysis Time..: 18:27		
Lead	**7.7**	**0.38**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGV9E107**
		Dilution Factor: 1		Analysis Time..: 18:27		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/31-08/01/00	DGV9E108
		Dilution Factor: 1		Analysis Time..: 18:27		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I9-9

TOTAL Metals

Lot-Sample #...: F0G260239-017 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:55 **Date Received..:** 07/26/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	**0.020 B**	**0.043**	**mg/kg**	**SW846 7471A**	**07/31/00**	**DGV9W109**
		Dilution Factor: 1		Analysis Time..: 17:25		
Prep Batch #...: 0213224						
Silver	ND	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DGV9W102
		Dilution Factor: 1		Analysis Time..: 18:31		
Arsenic	**6.5**	**1.3**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGV9W103**
		Dilution Factor: 1		Analysis Time..: 18:31		
Barium	**189**	**25.5**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGV9W104**
		Dilution Factor: 1		Analysis Time..: 18:31		
Cadmium	ND	0.64	mg/kg	SW846 6010B	07/31-08/01/00	DGV9W105
		Dilution Factor: 1		Analysis Time..: 18:31		
Chromium	**17.6**	**1.3**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGV9W106**
		Dilution Factor: 1		Analysis Time..: 18:31		
Lead	**14.0**	**0.38**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGV9W107**
		Dilution Factor: 1		Analysis Time..: 18:31		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/31-08/01/00	DGV9W108
		Dilution Factor: 1		Analysis Time..: 18:31		

NOTE(S):

B Estimated result. Result is less than RL.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8 (DUPLICATE)

TOTAL Metals

Lot-Sample #...: F0G260239-018 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
% Moisture.....: 27

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	**0.032 B**	**0.046**	**mg/kg**	**SW846 7471A**	**07/31/00**	**DGVA2109**
		Dilution Factor: 1		Analysis Time..: 17:01		
Prep Batch #...: 0213224						
Arsenic	**13.8**	**1.4**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA2103**
		Dilution Factor: 1		Analysis Time..: 18:36		
Barium	**216**	**27.6**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA2104**
		Dilution Factor: 1		Analysis Time..: 18:36		
Cadmium	ND	0.69	mg/kg	SW846 6010B	07/31-08/01/00	DGVA2105
		Dilution Factor: 1		Analysis Time..: 18:36		
Silver	ND	1.4	mg/kg	SW846 6010B	07/31-08/01/00	DGVA2102
		Dilution Factor: 1		Analysis Time..: 18:36		
Chromium	**114**	**1.4**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA2106**
		Dilution Factor: 1		Analysis Time..: 18:36		
Lead	**16.2**	**0.41**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA2107**
		Dilution Factor: 1		Analysis Time..: 18:36		
Selenium	ND	0.69	mg/kg	SW846 6010B	07/31-08/01/00	DGVA2108
		Dilution Factor: 1		Analysis Time..: 18:36		

NOTE(S):

B Estimated result. Result is less than RL.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6-8

TOTAL Metals

Lot-Sample #...: F0G260239-019 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	**0.022 B**	**0.042**	**mg/kg**	**SW846 7471A**	**07/31/00**	**DGVA3109**
		Dilution Factor: 1		Analysis Time..: 17:08		
Prep Batch #...: 0213224						
Silver	ND	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DGVA3102
		Dilution Factor: 1		Analysis Time..: 19:03		
Arsenic	**7.9**	**1.3**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA3103**
		Dilution Factor: 1		Analysis Time..: 19:03		
Barium	**116**	**25.2**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA3104**
		Dilution Factor: 1		Analysis Time..: 19:03		
Cadmium	ND	0.63	mg/kg	SW846 6010B	07/31-08/01/00	DGVA3105
		Dilution Factor: 1		Analysis Time..: 19:03		
Chromium	**73.3**	**1.3**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA3106**
		Dilution Factor: 1		Analysis Time..: 19:03		
Lead	**10.6**	**0.38**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA3107**
		Dilution Factor: 1		Analysis Time..: 19:03		
Selenium	ND	0.63	mg/kg	SW846 6010B	07/31-08/01/00	DGVA3108
		Dilution Factor: 1		Analysis Time..: 19:03		

NOTE(S):

B Estimated result. Result is less than RL.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC1-7

TOTAL Metals

Lot-Sample #...: F0G260239-020 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 10:45 **Date Received..:** 07/26/00
% Moisture.....: 23

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	**0.015 B**	**0.043**	**mg/kg**	**SW846 7471A**	**07/31/00**	**DGVA5109**
		Dilution Factor: 1		Analysis Time..: 17:11		
Prep Batch #...: 0213224						
Silver	ND	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DGVA5102
		Dilution Factor: 1		Analysis Time..: 19:08		
Arsenic	**8.8**	**1.3**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA5103**
		Dilution Factor: 1		Analysis Time..: 19:08		
Barium	**188**	**25.9**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA5104**
		Dilution Factor: 1		Analysis Time..: 19:08		
Cadmium	**0.14 B**	**0.65**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA5105**
		Dilution Factor: 1		Analysis Time..: 19:08		
Chromium	**20.0**	**1.3**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA5106**
		Dilution Factor: 1		Analysis Time..: 19:08		
Lead	**11.5**	**0.39**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA5107**
		Dilution Factor: 1		Analysis Time..: 19:08		
Selenium	ND	0.65	mg/kg	SW846 6010B	07/31-08/01/00	DGVA5108
		Dilution Factor: 1		Analysis Time..: 19:08		

NOTE(S):

B Estimated result. Result is less than RL.

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5

TOTAL Metals

Lot-Sample #...: F0G260239-021 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
% Moisture.....: 37

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	ND	0.053	mg/kg	SW846 7471A	07/31/00	DGVA6109
		Dilution Factor: 1		Analysis Time..: 17:13		
Prep Batch #...: 0213224						
Silver	ND	1.6	mg/kg	SW846 6010B	07/31-08/01/00	DGVA6102
		Dilution Factor: 1		Analysis Time..: 19:12		
Arsenic	**5.7**	**1.6**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA6103**
		Dilution Factor: 1		Analysis Time..: 19:12		
Barium	**98.4**	**31.6**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA6104**
		Dilution Factor: 1		Analysis Time..: 19:12		
Cadmium	ND	0.79	mg/kg	SW846 6010B	07/31-08/01/00	DGVA6105
		Dilution Factor: 1		Analysis Time..: 19:12		
Chromium	**13.3**	**1.6**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA6106**
		Dilution Factor: 1		Analysis Time..: 19:12		
Lead	**7.9**	**0.47**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA6107**
		Dilution Factor: 1		Analysis Time..: 19:12		
Selenium	ND	0.79	mg/kg	SW846 6010B	07/31-08/01/00	DGVA6108
		Dilution Factor: 1		Analysis Time..: 19:12		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: RC3-5 (DUPLICATE)

TOTAL Metals

Lot-Sample #...: F0G260239-022
Date Sampled...: 07/25/00 14:30 **Date Received..:** 07/26/00
% Moisture.....: 27
Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	ND	0.046	mg/kg	SW846 7471A	07/31/00	DGVA9109
		Dilution Factor: 1		Analysis Time..: 17:16		
Prep Batch #...: 0213224						
Silver	ND	1.4	mg/kg	SW846 6010B	07/31-08/01/00	DGVA9102
		Dilution Factor: 1		Analysis Time..: 19:17		
Arsenic	**3.0**	**1.4**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA9103**
		Dilution Factor: 1		Analysis Time..: 19:17		
Barium	**96.4**	**27.5**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA9104**
		Dilution Factor: 1		Analysis Time..: 19:17		
Cadmium	ND	0.69	mg/kg	SW846 6010B	07/31-08/01/00	DGVA9105
		Dilution Factor: 1		Analysis Time..: 19:17		
Chromium	**14.8**	**1.4**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA9106**
		Dilution Factor: 1		Analysis Time..: 19:17		
Lead	**8.3**	**0.41**	**mg/kg**	**SW846 6010B**	**07/31-08/01/00**	**DGVA9107**
		Dilution Factor: 1		Analysis Time..: 19:17		
Selenium	ND	0.69	mg/kg	SW846 6010B	07/31-08/01/00	DGVA9108
		Dilution Factor: 1		Analysis Time..: 19:17		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G260239
MB Lot-Sample #: F0H040000-527
Work Order #...: DHEN0101
Matrix.....: SOLID
Prep Date.....: 08/04/00
Analysis Date..: 08/06/00
Prep Batch #...: 0217527
Analysis Time..: 16:52
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	30	ug/kg	SW846 8310
Acenaphthylene	ND	30	ug/kg	SW846 8310
Anthracene	ND	30	ug/kg	SW846 8310
Benzo(a)anthracene	ND	15	ug/kg	SW846 8310
Benzo(a)pyrene	ND	15	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	15	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	30	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	15	ug/kg	SW846 8310
Chrysene	ND	15	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	30	ug/kg	SW846 8310
Fluoranthene	ND	30	ug/kg	SW846 8310
Fluorene	ND	30	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	15	ug/kg	SW846 8310
Naphthalene	ND	30	ug/kg	SW846 8310
Phenanthrene	ND	30	ug/kg	SW846 8310
Pyrene	ND	30	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH1PW101 **Matrix.....:** WATER
MB Lot-Sample #: F0G280000-459

Prep Date.....: 07/28/00 **Analysis Time..:** 09:21
Analysis Date..: 07/28/00 **Prep Batch #...:** 0210459
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**0.47 J**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	121	(78 - 124)
Toluene-d8	100	(71 - 129)
Dibromofluoromethane	127	(74 - 135)
1,2-Dichloroethane-d4	107	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH1PW101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239
MB Lot-Sample #: F0G300000-109
Work Order #...: DH3AL101
Matrix.....: SOLID
Prep Date.....: 07/28/00
Analysis Time..: 11:08
Analysis Date..: 07/28/00
Prep Batch #...: 0212109
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	**17 J**	**20**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	93	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 Work Order #...: DH3AL101 Matrix.....: SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G260239
MB Lot-Sample #: F0G310000-175
Work Order #...: DH3J5101
Matrix.....: SOLID
Prep Date.....: 07/29/00
Analysis Time..: 02:23
Analysis Date..: 08/01/00
Prep Batch #...: 0213175
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	25	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	39	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH3LG101 **Matrix.....:** WATER
MB Lot-Sample #: F0G310000-212

Prep Date.....: 07/30/00 **Analysis Time..:** 11:18
Analysis Date..: 07/30/00 **Prep Batch #...:** 0213212
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**0.53 J**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(78 - 124)
Toluene-d8	95	(71 - 129)
Dibromofluoromethane	100	(74 - 135)
1,2-Dichloroethane-d4	90	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 Work Order #...: DH3LG101 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239
MB Lot-Sample #: F0G310000-262
Work Order #...: DH3Q4101
Matrix.....: SOLID
Prep Date.....: 07/30/00
Analysis Time..: 11:54
Analysis Date..: 07/30/00
Prep Batch #...: 0213262
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH3Q4101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH4Q3101 **Matrix.....:** WATER
MB Lot-Sample #: F0H010000-138
Prep Date.....: 07/31/00 **Analysis Time..:** 10:36
Analysis Date..: 07/31/00 **Prep Batch #...:** 0214138
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**0.97 J,B**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	98	(78 - 124)
Toluene-d8	105	(71 - 129)
Dibromofluoromethane	101	(74 - 135)
1,2-Dichloroethane-d4	92	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH4Q3101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G260239
MB Lot-Sample #: F0H010000-335
Work Order #...: DH5PM101
Matrix.....: WATER
Prep Date.....: 07/31/00
Analysis Date..: 07/31/00
Prep Batch #...: 0214335
Analysis Time..: 15:39
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	74	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G260239
MB Lot-Sample #: F0H010000-344
Analysis Date..: 07/31/00
Dilution Factor: 1

Work Order #...: DH5QP101
Prep Date.....: 07/31/00
Prep Batch #...: 0214344

Matrix.....: SOLID
Analysis Time..: 15:39

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	74	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G260239
MB Lot-Sample #: F0H010000-452
Work Order #...: DH6DK101
Matrix.....: WATER
Prep Date.....: 08/01/00
Analysis Time..: 17:08
Analysis Date..: 08/03/00
Prep Batch #...: 0214452
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	0.50	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	56	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G260239 **Work Order #...:** DH6ED101 **Matrix.....:** WATER
MB Lot-Sample #: F0H010000-465
Prep Date.....: 08/01/00 **Analysis Time..:** 19:35
Analysis Date..: 08/03/00 **Prep Batch #...:** 0214465
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	5.0	ug/L	SW846 8310
Acenaphthylene	ND	5.0	ug/L	SW846 8310
Anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)pyrene	ND	5.0	ug/L	SW846 8310
Benzo(b)fluoranthene	ND	5.0	ug/L	SW846 8310
Benzo(ghi)perylene	ND	5.0	ug/L	SW846 8310
Benzo(k)fluoranthene	ND	5.0	ug/L	SW846 8310
Chrysene	ND	5.0	ug/L	SW846 8310
Dibenz(a,h)anthracene	ND	5.0	ug/L	SW846 8310
Fluoranthene	ND	5.0	ug/L	SW846 8310
Fluorene	ND	5.0	ug/L	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L	SW846 8310
Naphthalene	ND	5.0	ug/L	SW846 8310
Phenanthrene	ND	5.0	ug/L	SW846 8310
Pyrene	ND	5.0	ug/L	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	67	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G260239 **Work Order #...:** DH6E4101 **Matrix.....:** WATER
MB Lot-Sample #: F0H010000-462
Prep Date.....: 08/01/00 **Analysis Time..:** 11:54
Analysis Date..: 08/04/00 **Prep Batch #...:** 0214462
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	107	(12 - 167)
Decachlorobiphenyl	105	(10 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G260239
MB Lot-Sample #: F0H020000-145
Work Order #...: DH6PG101
Matrix.....: SOLID
Prep Date.....: 08/01/00
Analysis Time..: 11:25
Analysis Date..: 08/03/00
Prep Batch #...: 0215145
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	113	(10 - 199)
Decachlorobiphenyl	124	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239
MB Lot-Sample #: F0H020000-223
Work Order #...: DH6W5101
Matrix.....: SOLID
Prep Date.....: 08/01/00
Analysis Time..: 09:07
Analysis Date..: 08/01/00
Prep Batch #...: 0215223
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	**16 J**	**20**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	91	(82 - 119)
Dibromofluoromethane	97	(82 - 132)
1,2-Dichloroethane-d4	107	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH6W5101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH8WQ101 **Matrix.....:** SOLID
MB Lot-Sample #: F0H030000-156
Prep Date.....: 08/02/00 **Analysis Time..:** 12:43
Analysis Date..: 08/02/00 **Prep Batch #...:** 0216156
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	**18 J**	**20**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	77	(73 - 109)
Toluene-d8	98	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	112	(60 - 140)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH8WQ101 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G260239 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G270000-271 **Prep Batch #...:** 0209271						
Mercury	ND	0.033	mg/kg	SW846 7471A	07/31/00	DGWEH101
		Dilution Factor: 1				
		Analysis Time..: 16:53				
MB Lot-Sample #: F0G310000-224 **Prep Batch #...:** 0213224						
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/31-08/01/00	DH3M910J
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Barium	ND	20.0	mg/kg	SW846 6010B	07/31-08/01/00	DH3M911H
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/31-08/01/00	DH3M911J
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Chromium	ND	1.0	mg/kg	SW846 6010B	07/31-08/01/00	DH3M911K
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Lead	ND	0.30	mg/kg	SW846 6010B	07/31-08/01/00	DH3M910K
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/31-08/01/00	DH3M910L
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Silver	ND	1.0	mg/kg	SW846 6010B	07/31-08/01/00	DH3M911G
		Dilution Factor: 1				
		Analysis Time..: 18:13				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G260239

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G270000-280 **Prep Batch #...:** 0209280						
Mercury	ND	0.20	ug/L	SW846 7470A	07/27-07/28/00	DGWEV101
		Dilution Factor: 1				
		Analysis Time..: 12:29				
MB Lot-Sample #: F0G270000-489 **Prep Batch #...:** 0209489						
Arsenic	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF103
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Barium	ND	200	ug/L	SW846 6010B	07/27-07/31/00	DGXGF104
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Cadmium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF101
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Chromium	ND	10.0	ug/L	SW846 6010B	07/27-08/01/00	DGXGF102
		Dilution Factor: 1				
		Analysis Time..: 11:06				
Lead	ND	3.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF105
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Selenium	ND	5.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF106
		Dilution Factor: 1				
		Analysis Time..: 08:58				
Silver	ND	10.0	ug/L	SW846 6010B	07/27-07/31/00	DGXGF107
		Dilution Factor: 1				
		Analysis Time..: 08:58				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G260239 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
***Cyanide, Total	ON FOLLOWING	Work Order #: DH5R0101		MB Lot-Sample #:	F0H010000-318	
	ND	0.50	mg/kg	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1				
		Analysis Time..: 12:00				
Reactive Cyanide		Work Order #: DH1K1101		MB Lot-Sample #:	F0G280000-435	
	ND	0.050	mg/kg	SW846 7.3.3	07/27-07/28/00	0210435
		Dilution Factor: 1				
		Analysis Time..: 12:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G260239

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DH5NK101		MB Lot-Sample #:	F0H010000-315	
	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1				
		Analysis Time..: 16:00				
Reactive Cyanide		Work Order #: DH1K2101		MB Lot-Sample #:	F0G280000-436	
	ND	0.050	mg/kg	SW846 7.3.3	07/27-07/28/00	0210436
		Dilution Factor: 1				
		Analysis Time..: 12:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G260239
LCS Lot-Sample#: F0G310000-175
Prep Date.....: 07/29/00
Prep Batch #...: 0213175
Dilution Factor: 1

Work Order #...: DH3J5102-LCS
DH3J5103-LCSD
Analysis Date..: 08/01/00
Analysis Time..: 02:50

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**44**	**(10 - 164)**			**SW846 8015 MOD**
	56	**(10 - 164)**	**24**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	54	(10 - 150)
	62	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH5PM102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0H010000-335 DH5PM103-LCSD
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214335 **Analysis Time..:** 16:06
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**104**	**(70 - 130)**			**SW846 8015 MOD**
	99	**(70 - 130)**	**4.7**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	118	(70 - 130)
	117	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH5QP102-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: F0H010000-344 DH5QP103-LCSD
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214344 **Analysis Time..:** 16:06
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**104**	**(50 - 150)**			**SW846 8015 MOD**
	99	**(50 - 150)**	**4.7**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	118	(50 - 150)
	117	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G260239 **Work Order #...:** DH6DK102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0H010000-452 DH6DK103-LCSD
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0214452 **Analysis Time..:** 17:31
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**55**	**(10 - 148)**			**SW846 8015 MOD**
	55	**(10 - 148)**	**0.58**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	69	(10 - 150)
	71	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G260239
LCS Lot-Sample#: F0H010000-465
Prep Date.....: 08/01/00
Prep Batch #...: 0214465
Dilution Factor: 1

Work Order #...: DH6ED102-LCS
DH6ED103-LCSD
Analysis Date..: 08/03/00
Analysis Time..: 20:01

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**84**	**(45 - 134)**			**SW846 8310**
	79	**(45 - 134)**	**5.6**	**(0-82)**	**SW846 8310**
Acenaphthylene	**90**	**(46 - 124)**			**SW846 8310**
	82	**(46 - 124)**	**9.4**	**(0-56)**	**SW846 8310**
Anthracene	**53**	**(28 - 158)**			**SW846 8310**
	63	**(28 - 158)**	**16**	**(0-46)**	**SW846 8310**
Benzo(a)anthracene	**79**	**(52 - 132)**			**SW846 8310**
	80	**(52 - 132)**	**2.0**	**(0-43)**	**SW846 8310**
Benzo(a)pyrene	**72**	**(22 - 117)**			**SW846 8310**
	75	**(22 - 117)**	**3.4**	**(0-67)**	**SW846 8310**
Benzo(b)fluoranthene	**87**	**(39 - 109)**			**SW846 8310**
	89	**(39 - 109)**	**2.6**	**(0-47)**	**SW846 8310**
Benzo(ghi)perylene	**77**	**(10 - 115)**			**SW846 8310**
	79	**(10 - 115)**	**2.2**	**(0-72)**	**SW846 8310**
Benzo(k)fluoranthene	**78**	**(25 - 116)**			**SW846 8310**
	80	**(25 - 116)**	**2.3**	**(0-50)**	**SW846 8310**
Chrysene	**78**	**(29 - 130)**			**SW846 8310**
	82	**(29 - 130)**	**4.5**	**(0-76)**	**SW846 8310**
Dibenz(a,h)anthracene	**80**	**(10 - 122)**			**SW846 8310**
	81	**(10 - 122)**	**0.75**	**(0-62)**	**SW846 8310**
Fluoranthene	**80**	**(36 - 126)**			**SW846 8310**
	77	**(36 - 126)**	**3.1**	**(0-43)**	**SW846 8310**
Fluorene	**77**	**(52 - 128)**			**SW846 8310**
	74	**(52 - 128)**	**4.1**	**(0-60)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**83**	**(10 - 101)**			**SW846 8310**
	84	**(10 - 101)**	**0.86**	**(0-66)**	**SW846 8310**
Naphthalene	**90**	**(42 - 102)**			**SW846 8310**
	84	**(42 - 102)**	**6.6**	**(0-44)**	**SW846 8310**
Phenanthrene	**75**	**(49 - 126)**			**SW846 8310**
	72	**(49 - 126)**	**4.4**	**(0-50)**	**SW846 8310**
Pyrene	**68**	**(14 - 116)**			**SW846 8310**
	65	**(14 - 116)**	**4.0**	**(0-46)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	67	(27 - 128)
	67	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G260239
LCS Lot-Sample#: F0H010000-462
Prep Date.....: 08/01/00
Prep Batch #...: 0214462
Dilution Factor: 1

Work Order #...: DH6E4102-LCS
DH6E4103-LCSD
Analysis Date..: 08/04/00
Analysis Time..: 12:07

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**112**	**(58 - 125)**			**SW846 8082**
	106	**(58 - 125)**	**5.4**	**(0-20)**	**SW846 8082**
Aroclor 1260	**109**	**(58 - 124)**			**SW846 8082**
	101	**(58 - 124)**	**7.1**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	124	(39 - 153)
	124	(39 - 153)
Decachlorobiphenyl	122	(10 - 127)
	122	(10 - 127)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G260239 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	112	(58 - 142)			SW846 7471A	07/31/00	0209271
	101	(58 - 142)	9.7	(0-20)	SW846 7471A	07/31/00	0209271

Dilution Factor: 5

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G260239 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	84	(80 - 120)			SW846 7470A	07/27-07/28/00	0209280
	85	(80 - 120)	0.71	(0-20)	SW846 7470A	07/27-07/28/00	0209280

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G260239 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DH5R0102-LCS/DH5R0103-LCSD				LCS Lot-Sample#: F0H010000-318	
	96	(80 - 120)			SW846 9012A	08/01/00	0214318
	97	(80 - 120)	0.82	(0-30)	SW846 9012A	08/01/00	0214318
		Dilution Factor: 1					
Reactive Cyanide		WO#:DH1K1102-LCS/DH1K1103-LCSD				LCS Lot-Sample#: F0G280000-435	
	8.8 N	(0.0- 0.0)			SW846 7.3.3	07/27-07/28/00	0210435
	0.80 N,*	(0.0- 0.0)	167	(0-0.0)	SW846 7.3.3	07/27-07/28/00	0210435
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G260239 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DH5NK102-LCS/DH5NK103-LCSD				LCS Lot-Sample#: F0H010000-315	
	94	(80 - 120)			SW846 9012A	07/31-08/01/00	0214315
	92	(80 - 120)	1.4	(0-20)	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1					
Reactive Cyanide		WO#:DH1K2102-LCS/DH1K2103-LCSD				LCS Lot-Sample#: F0G280000-436	
	8.8 N	(0.0- 0.0)			SW846 7.3.3	07/27-07/28/00	0210436
	0.80 N,*	(0.0- 0.0)	167	(0-0.0)	SW846 7.3.3	07/27-07/28/00	0210436
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G260239 **Work Order #...:** DHEN0102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0H040000-527
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527 **Analysis Time..:** 17:18
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**58**	**(22 - 109)**	**SW846 8310**
Acenaphthylene	**66**	**(9.0- 125)**	**SW846 8310**
Anthracene	**53**	**(45 - 110)**	**SW846 8310**
Benzo(a)anthracene	**66**	**(43 - 132)**	**SW846 8310**
Benzo(a)pyrene	**59**	**(24 - 156)**	**SW846 8310**
Benzo(b)fluoranthene	**73**	**(46 - 132)**	**SW846 8310**
Benzo(ghi)perylene	**65**	**(50 - 104)**	**SW846 8310**
Benzo(k)fluoranthene	**65**	**(47 - 126)**	**SW846 8310**
Chrysene	**66**	**(39 - 142)**	**SW846 8310**
Dibenz(a,h)anthracene	**72**	**(52 - 110)**	**SW846 8310**
Fluoranthene	**65**	**(16 - 131)**	**SW846 8310**
Fluorene	**60**	**(40 - 108)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**67**	**(49 - 124)**	**SW846 8310**
Naphthalene	**62**	**(20 - 115)**	**SW846 8310**
Phenanthrene	**63**	**(50 - 103)**	**SW846 8310**
Pyrene	**56**	**(48 - 100)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH1PW102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G280000-459
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0210459 **Analysis Time..:** 09:58
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**101**	**(71 - 120)**	**SW846 8260B**
Benzene	**109**	**(76 - 127)**	**SW846 8260B**
Toluene	**105**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**102**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**104**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	109	(78 - 124)
Toluene-d8	101	(71 - 129)
Dibromofluoromethane	103	(74 - 135)
1,2-Dichloroethane-d4	100	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH3AL102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G300000-109
Prep Date.....: 07/28/00 **Analysis Date..:** 07/28/00
Prep Batch #...: 0212109 **Analysis Time..:** 10:34
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**82**	**(72 - 120)**	**SW846 8260B**
Benzene	**93**	**(79 - 125)**	**SW846 8260B**
Toluene	**91**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**90**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**103**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	85	(73 - 109)
Toluene-d8	95	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	111	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH3LG102 **Matrix.....:** WATER
LCS Lot-Sample#: F0G310000-212
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 11:54
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**92**	**(71 - 120)**	**SW846 8260B**
Benzene	**98**	**(76 - 127)**	**SW846 8260B**
Toluene	**103**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**99**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**98**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	96	(78 - 124)
Toluene-d8	107	(71 - 129)
Dibromofluoromethane	101	(74 - 135)
1,2-Dichloroethane-d4	92	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH3Q4102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0G310000-262
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 12:28
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**84**	**(72 - 120)**	**SW846 8260B**
Benzene	**92**	**(79 - 125)**	**SW846 8260B**
Toluene	**92**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**89**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**113**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	94	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH4Q3102 **Matrix.....:** WATER
LCS Lot-Sample#: F0H010000-138
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214138 **Analysis Time..:** 11:13
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**100**	**(71 - 120)**	**SW846 8260B**
Benzene	**107**	**(76 - 127)**	**SW846 8260B**
Toluene	**101**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**101**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**108**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	102	(78 - 124)
Toluene-d8	103	(71 - 129)
Dibromofluoromethane	104	(74 - 135)
1,2-Dichloroethane-d4	92	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G260239 **Work Order #...:** DH6PG102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0H020000-145
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 11:38
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**78**	**(74 - 127)**	**SW846 8082**
Aroclor 1260	**83**	**(74 - 129)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(62 - 162)
Decachlorobiphenyl	98	(53 - 145)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH6W5102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0H020000-223
Prep Date.....: 08/01/00 **Analysis Date..:** 08/01/00
Prep Batch #...: 0215223 **Analysis Time..:** 09:41
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**81**	**(72 - 120)**	**SW846 8260B**
Benzene	**93**	**(79 - 125)**	**SW846 8260B**
Toluene	**91**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**87**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**105**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	91	(82 - 119)
Dibromofluoromethane	95	(82 - 132)
1,2-Dichloroethane-d4	104	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DH8WQ102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0H030000-156
Prep Date.....: 08/02/00 **Analysis Date..:** 08/02/00
Prep Batch #...: 0216156 **Analysis Time..:** 11:42
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**86**	**(72 - 120)**	**SW846 8260B**
Benzene	**97**	**(79 - 125)**	**SW846 8260B**
Toluene	**96**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**93**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**107**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	93	(82 - 119)
Dibromofluoromethane	98	(82 - 132)
1,2-Dichloroethane-d4	103	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G260239 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F0G310000-224 **Prep Batch #...:** 0213224					
Lead	105	(76 - 124)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911A
Selenium	103	(74 - 126)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911C
Silver	109	(75 - 126)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911L
Barium	108	(77 - 122)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911M
Cadmium	107	(77 - 122)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911N
Chromium	98	(77 - 123)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911P
Arsenic	109	(72 - 128)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M9119

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G260239

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F0G270000-489 **Prep Batch #...:** 0209489					
Arsenic	106	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10A
Barium	109	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10C
Lead	102	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10D
Selenium	104	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10E
Silver	108	(49 - 135)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF10F
Cadmium	104	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 09:02	07/27-07/31/00	DGXGF108
Chromium	101	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time..: 11:10	07/27-08/01/00	DGXGF109

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G260239 **Matrix.....:** WATER
Date Sampled...: 07/14/00 11:45 **Date Received..:** 07/21/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G210313-027 **Prep Batch #...:** 0209280							
Mercury	91	(75 - 125)			SW846 7470A	07/27-07/28/00	DGMHD10T
	91	(75 - 125)	0.21	(0-20)	SW846 7470A	07/27-07/28/00	DGMHD10U

Dilution Factor: 1
Analysis Time..: 12:44

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DGRDC105-MS **Matrix.....:** SOLID
MS Lot-Sample #: F0G250295-017 DGRDC106-MSD
Date Sampled...: 07/24/00 09:15 **Date Received..:** 07/25/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 14:24
Dilution Factor: 1 **% Moisture.....:** 15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**80**	**(72 - 120)**			**SW846 8260B**
	83	**(72 - 120)**	**2.8**	**(0-24)**	**SW846 8260B**
Benzene	**98**	**(79 - 125)**			**SW846 8260B**
	99	**(79 - 125)**	**0.46**	**(0-21)**	**SW846 8260B**
Toluene	**100**	**(75 - 124)**			**SW846 8260B**
	101	**(75 - 124)**	**0.75**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**90**	**(81 - 119)**			**SW846 8260B**
	92	**(81 - 119)**	**2.6**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**113**	**(70 - 149)**			**SW846 8260B**
	116	**(70 - 149)**	**2.7**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	55 *	(73 - 109)
	85	(73 - 109)
Toluene-d8	100	(82 - 119)
	103	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
	102	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)
	110	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G260239 **Work Order #...:** DGRD3105-MS **Matrix.....:** SOLID
MS Lot-Sample #: F0G250295-011 DGRD3106-MSD
Date Sampled...: 07/24/00 14:25 **Date Received..:** 07/25/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 12:06
Dilution Factor: 1 **% Moisture.....:** 21

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**83**	**(10 - 200)**			**SW846 8082**
	83	**(10 - 200)**	**0.36**	**(0-20)**	**SW846 8082**
Aroclor 1260	**84**	**(10 - 183)**			**SW846 8082**
	82	**(10 - 183)**	**2.3**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(10 - 199)
	89	(10 - 199)
Decachlorobiphenyl	98	(10 - 200)
	97	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G260239 **Matrix.....:** SOLID
Date Sampled...: 07/25/00 09:15 **Date Received..:** 07/26/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G260239-018 **Prep Batch #...:** 0209271							
Mercury	101	(75 - 125)			SW846 7471A	07/31/00	DGVA210G
	100	(75 - 125)	0.87	(0-20)	SW846 7471A	07/31/00	DGVA210H
		Dilution Factor: 1					
		Analysis Time..: 17:03					
MS Lot-Sample #: F0G260239-018 **Prep Batch #...:** 0213224							
Arsenic	94	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210L
	96	(75 - 125)	1.2	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210M
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Barium	86	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210N
	108	(75 - 125)	13	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210P
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Cadmium	90	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210Q
	93	(75 - 125)	3.2	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210R
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Chromium	58 N	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210T
	49 N	(75 - 125)	1.9	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210U
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Lead	85	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210V
	100	(75 - 125)	13	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210W
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Selenium	93	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210X
	91	(75 - 125)	1.6	(0-20)	SW846 6010B	07/31-08/01/00	DGVA2110
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Silver	93	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210J
	89	(75 - 125)	4.7	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210K
		Dilution Factor: 1					
		Analysis Time..: 18:40					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239 **Work Order #...:** DGV6D10F-MS **Matrix.....:** WATER
MS Lot-Sample #: F0G260239-005 DGV6D10G-MSD
Date Sampled...: 07/25/00 17:00 **Date Received..:** 07/26/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213212 **Analysis Time..:** 20:36
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**93**	**(71 - 120)**			**SW846 8260B**
	99	**(71 - 120)**	**6.0**	**(0-24)**	**SW846 8260B**
Benzene	**100**	**(76 - 127)**			**SW846 8260B**
	109	**(76 - 127)**	**9.3**	**(0-21)**	**SW846 8260B**
Toluene	**96**	**(76 - 125)**			**SW846 8260B**
	92	**(76 - 125)**	**5.0**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**100**	**(75 - 130)**			**SW846 8260B**
	86	**(75 - 130)**	**15**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**99**	**(61 - 145)**			**SW846 8260B**
	100	**(61 - 145)**	**0.77**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(78 - 124)
	108	(78 - 124)
Toluene-d8	105	(71 - 129)
	90	(71 - 129)
Dibromofluoromethane	106	(74 - 135)
	103	(74 - 135)
1,2-Dichloroethane-d4	99	(70 - 130)
	103	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

Client Lot #...: **Work Order #...:** **Matrix.....:**
MS Lot-Sample #:

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
		(22 - 109)		(0-35)	SW846 8310
		(9.0- 125)		(0-35)	SW846 8310
		(45 - 110)		(0-35)	SW846 8310
		(28 - 121)		(0-35)	SW846 8310
		(13 - 136)		(0-35)	SW846 8310
		(28 - 124)		(0-35)	SW846 8310
		(50 - 104)		(0-35)	SW846 8310
		(29 - 116)		(0-35)	SW846 8310
		(10 - 173)		(0-35)	SW846 8310
		(52 - 110)		(0-35)	SW846 8310
		(16 - 131)		(0-35)	SW846 8310
		(40 - 108)		(0-35)	SW846 8310
		(29 - 117)		(0-35)	SW846 8310
		(20 - 115)		(0-35)	SW846 8310
		(50 - 103)		(0-35)	SW846 8310
		(48 - 100)		(0-35)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	51	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G260239
MS Lot-Sample #: F0G270362-001
Date Sampled...: 07/24/00
Prep Date.....: 08/01/00
Prep Batch #...: 0215223
Dilution Factor: 5

Work Order #...: DH053102-MS
DH053103-MSD
Date Received..: 07/27/00
Analysis Date..: 08/01/00
Analysis Time..: 16:59
% Moisture.....: 0.0

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**75**	**(72 - 120)**			**SW846 8260B**
	81	**(72 - 120)**	**8.7**	**(0-24)**	**SW846 8260B**
Benzene	**102**	**(79 - 125)**			**SW846 8260B**
	100	**(79 - 125)**	**1.9**	**(0-21)**	**SW846 8260B**
Toluene	**84**	**(75 - 124)**			**SW846 8260B**
	38 a,p	**(75 - 124)**	**28**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**93**	**(81 - 119)**			**SW846 8260B**
	96	**(81 - 119)**	**3.8**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**129**	**(70 - 149)**			**SW846 8260B**
	118	**(70 - 149)**	**8.7**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	96	(73 - 109)
	94	(73 - 109)
Toluene-d8	106	(82 - 119)
	108	(82 - 119)
Dibromofluoromethane	119	(82 - 132)
	106	(82 - 132)
1,2-Dichloroethane-d4	136	(60 - 140)
	121	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Lot-Sample #...: F0G260239 **Work Order #...:** DH00420G **Matrix.....:** SOLID
MS Lot-Sample #: F0G270337-016
Date Sampled...: 07/26/00 09:05 **Date Received..:** 07/27/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/06/00
Prep Batch #...: 0217527
Dilution Factor: 1 **Percnt Moisture:** 22

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**0**	**(22 - 109)**	**SW846 8310**
Acenaphthylene	**0**	**(9.0- 125)**	**SW846 8310**
Anthracene	**0**	**(45 - 110)**	**SW846 8310**
Benzo(a)anthracene	**0**	**(28 - 121)**	**SW846 8310**
Benzo(a)pyrene	**0**	**(13 - 136)**	**SW846 8310**
Benzo(b)fluoranthene	**0**	**(28 - 124)**	**SW846 8310**
Benzo(ghi)perylene	**0**	**(50 - 104)**	**SW846 8310**
Benzo(k)fluoranthene	**0**	**(29 - 116)**	**SW846 8310**
Chrysene	**0**	**(10 - 173)**	**SW846 8310**
Dibenz(a,h)anthracene	**0**	**(52 - 110)**	**SW846 8310**
Fluoranthene	**0**	**(16 - 131)**	**SW846 8310**
Fluorene	**0**	**(40 - 108)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**0**	**(29 - 117)**	**SW846 8310**
Naphthalene	**0**	**(20 - 115)**	**SW846 8310**
Phenanthrene	**0**	**(50 - 103)**	**SW846 8310**
Pyrene	**0**	**(48 - 100)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F0G260239 **Work Order #...:** DGV9E-SMP DGV9E-DUP **Matrix.....:** SOLID

Date Sampled...: 07/25/00 13:40 **Date Received..:** 07/26/00

% Moisture.....: 22

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F0G260239-016	
	21.6	21.2	%	2.1	(0-0.0)	MCAWW 160.3 MOD	07/26-07/27/00	0208539

Dilution Factor: 1

Analysis Time..: 00:00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,500P,3XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: RC3W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-001
WORK ORDER: DGV54
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 18:40
RECEIVING TIME: 13:55
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV54-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
PCBs (8082) LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal STL: Aroclors (I-60-QH-01) DGV54-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV54-1-03 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Cyanide, Total tomated) DISTILLATION, MICRO/MIDI - Acid (I-06-QP-01) DGV54-1-04 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Reactive Cyanide 3) DISTILLATION, MACRO - Acid (I-08-GI-01) DGV54-1-05 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGV54 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGV54 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGV54-1-0F Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,500P,3XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: RC3W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-001
WORK ORDER: DGV54
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 18:40
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge	06	7/26/00	0/00/00	8/08/00

(I-15-WU-01) DGV54-1-0G Protocol: A QC Program: STANDARD TEST SET

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,500P,3XLG
STORAGE LOC: V6J,6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: RC3W (DUPLICATE)
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-002
WORK ORDER: DGV61
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 19:00
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV61-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
PCBs (8082) LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal STL: Aroclors (I-60-QH-01) DGV61-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV61-1-03 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Cyanide, Total tomated) DISTILLATION, MICRO/MIDI - Acid (I-06-QP-01) DGV61-1-04 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Reactive Cyanide 3) DISTILLATION, MACRO - Acid (I-08-GI-01) DGV61-1-05 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGV61 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGV61 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGV61-1-0F Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,500P,3XLG
STORAGE LOC: V6J,6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: RC3W (DUPLICATE)
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-002
WORK ORDER: DGV61
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 19:00
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge	06	7/26/00	0/00/00	8/08/00

(I-15-WU-01) DGV61-1-0G Protocol: A QC Program: STANDARD TEST SET

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,500P,3XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: RC1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-003
WORK ORDER: DGV63
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 17:40
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV63-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
PCBs (8082) LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal STL: Aroclors (I-60-QH-01) DGV63-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV63-1-03 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Cyanide, Total tomated) DISTILLATION, MICRO/MIDI - Acid (I-06-QP-01) DGV63-1-04 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Reactive Cyanide 3) DISTILLATION, MACRO - Acid (I-08-GI-01) DGV63-1-05 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGV63 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGV63 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGV63-1-0F Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,500P,3XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: RC1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-003
WORK ORDER: DGV63
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 17:40
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGV63-1-0G Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,500P,3XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: RC2W
QC PACKAGE: Report
SAMPLE COMMENTS:
SAMPLE CONTAINS FREE PETROLEUM PRODUCT.
Beginning Depth: .00 **Ending Depth:** .00

QUOTE/SAR #: 37419
LAB ID: F-0G260239-004
WORK ORDER: DGV66
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 18:10
RECEIVING TIME: 13:55

SDG# :

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV66-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
PCBs (8082) LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal STL: Aroclors (I-60-QH-01) DGV66-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV66-1-03 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Cyanide, Total tomated) DISTILLATION, MICRO/MIDI - Acid (I-06-QP-01) DGV66-1-04 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Reactive Cyanide 3) DISTILLATION, MACRO - Acid (I-08-GI-01) DGV66-1-05 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGV66 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGV66 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGV66-1-0F Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,500P,3XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: RC2W
QC PACKAGE: Report
SAMPLE COMMENTS:
SAMPLE CONTAINS FREE PETROLEUM PRODUCT.
Beginning Depth: .00 **Ending Depth:** .00

QUOTE/SAR #: 37419
LAB ID: F-0G260239-004
WORK ORDER: DGV66
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 18:10
RECEIVING TIME: 13:55

SDG# :

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGV66-1-0G Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,500P,2XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B22E3
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-005
WORK ORDER: DGV6D
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 17:00
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV6D-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
PCBs (8082) LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal STL: Aroclors (I-60-QH-01) DGV6D-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV6D-1-03 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGV6D Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGV6D Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGV6D-1-0D Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGV6D-1-0E Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,500P,2XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B22E2W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-006
WORK ORDER: DGV6J
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 16:20
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV6J-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV6J-1-03 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGV6J Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-08-01) DGV6J Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGV6J-1-0D Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGV6J-1-0E Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,500P,3XLG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B27I9W
QC PACKAGE: Report
SAMPLE COMMENTS:
SAMPLE CONTAINS FREE PETROLEUM PRODUCT.
Beginning Depth: .00 **Ending Depth:** .00

QUOTE/SAR #: 37419
LAB ID: F-0G260239-007
WORK ORDER: DGV77
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 20:00
RECEIVING TIME: 13:55

SDG# :

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV77-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV77-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGV77 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGV77 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGV77-1-0C Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGV77-1-0D Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,500P,LG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B27I9W (DUPLICATE)
QC PACKAGE: Report
SAMPLE COMMENTS:
SAMPLE CONTAINS FREE PETROLEUM PRODUCT.
Beginning Depth: .00 **Ending Depth:** .00

QUOTE/SAR #: 37419
LAB ID: F-0G260239-008
WORK ORDER: DGV7C
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 20:00
RECEIVING TIME: 13:55

SDG# :

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV7C-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV7C-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGV7C Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-08-01) DGV7C Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGV7C-1-0C Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGV7C-1-0D Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: LG
STORAGE LOC: T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B29I1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-009
WORK ORDER: DGV7D
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 14:20
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
√ Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV7D-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: LG
STORAGE LOC: T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: HW1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-010
WORK ORDER: DGV7F
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 8:20
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV7F-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: LG
STORAGE LOC: T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B27I2
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-011
WORK ORDER: DGV7H
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 20:30
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
✓ Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGV7H-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	8/01/00	9/10/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 40ML,LG
STORAGE LOC: V6J,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B221E1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-012
WORK ORDER: DGV7W
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 15:25
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal	06	7/26/00	8/01/00	9/10/00
(I-09-HS-01) DGV7W-1-01 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge	06	7/26/00	0/00/00	8/08/00
(I-15-WU-01) DGV7W-1-02 Protocol: A QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X40
STORAGE LOC: V6J
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B29E1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-013
WORK ORDER: DGV8K
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 15:30
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
√Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGV8K-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40
STORAGE LOC: V6J
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B27I6W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-014
WORK ORDER: DGV8Q
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 19:30
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
√ Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV8Q-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
√ Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGV8Q-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 40ML
STORAGE LOC: V6J
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: TRIP BLANK
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-015
WORK ORDER: DGV9C
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME:
RECEIVING TIME: 13:55
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGV9C-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: RC2-7
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-016
WORK ORDER: DGV9E
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 13:40
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGV9E-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Soils MT6010_S AG,AS,BA,CD,CR,PB,SE (A-46-QM-01) DGV9E Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7471A, Cold Vapor) - Solids METALS, TOTAL (Method Exclusive) - Solids M7471_S HG (A-70-O9-01) DGV9E Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Polynuclear Aromatic (HPLC SONICATION - Low Level (A-13-SG-01) DGV9E-1-0A Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
PCBs (8082) SONICATION w/ACID STRIP (PCB) (A-71-QH-01) DGV9E-1-0C Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGV9E-1-0D Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGV9E-1-0E Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Reactive Cyanide 3) DISTILLATION, MACRO - Acid (A-08-GI-01) DGV9E-1-0F Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: RC2-7
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-016
WORK ORDER: DGV9E
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 13:40
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Cyanide, Total tomated) DISTILLATION, MICRO/MIDI - Acid (A-06-QP-01) DGV9E-1-0G Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGV9E-1-0H Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B27I9-9
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-017
WORK ORDER: DGV9W
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 9:55
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGV9W-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Soils MT6010_S AG,AS,BA,CD,CR,PB,SE (A-46-QM-01) DGV9W Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7471A, Cold Vapor) - Solids METALS, TOTAL (Method Exclusive) - Solids M7471_S HG (A-70-O9-01) DGV9W Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Polynuclear Aromatic (HPLC SONICATION - Low Level (A-13-SG-01) DGV9W-1-0A Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
PCBs (8082) SONICATION w/ACID STRIP (PCB) (A-71-QH-01) DGV9W-1-0C Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGV9W-1-0D Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGV9W-1-0E Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGV9W-1-0H Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B27I6-8 (DUPLICATE)
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-018
WORK ORDER: DGVA2
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 9:15
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGVA2-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Soils MT6010_S AG,AS,BA,CD,CR,PB,SE (A-46-QM-01) DGVA2 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7471A, Cold Vapor) - Solids METALS, TOTAL (Method Exclusive) - Solids M7471_S HG (A-70-O9-01) DGVA2 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Polynuclear Aromatic (HPLC SONICATION - Low Level (A-13-SG-01) DGVA2-1-0A Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
PCBs (8082) SONICATION w/ACID STRIP (PCB) (A-71-QH-01) DGVA2-1-0C Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGVA2-1-0D Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGVA2-1-0E Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGVA2-1-0F Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B27I6-8
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-019
WORK ORDER: DGVA3
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 9:15
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGVA3-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Soils MT6010_S AG,AS,BA,CD,CR,PB,SE (A-46-QM-01) DGVA3 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7471A, Cold Vapor) - Solids METALS, TOTAL (Method Exclusive) - Solids M7471_S HG (A-70-O9-01) DGVA3 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Polynuclear Aromatic (HPLC SONICATION - Low Level (A-13-SG-01) DGVA3-1-0A Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
PCBs (8082) SONICATION w/ACID STRIP (PCB) (A-71-QH-01) DGVA3-1-0C Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGVA3-1-0D Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGVA3-1-0E Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGVA3-1-0F Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: RC1-7
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-020
WORK ORDER: DGVA5
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 10:45
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGVA5-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Soils MT6010_S AG,AS,BA,CD,CR,PB,SE (A-46-QM-01) DGVA5 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7471A, Cold Vapor) - Solids METALS, TOTAL (Method Exclusive) - Solids M7471_S HG (A-70-O9-01) DGVA5 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Polynuclear Aromatic (HPLC SONICATION - Low Level (A-13-SG-01) DGVA5-1-0A Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
PCBs (8082) SONICATION w/ACID STRIP (PCB) (A-71-QH-01) DGVA5-1-0C Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGVA5-1-0D Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGVA5-1-0E Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Reactive Cyanide 3) DISTILLATION, MACRO - Acid (A-08-GI-01) DGVA5-1-0F Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: RC1-7
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-020
WORK ORDER: DGVA5
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 10:45
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Cyanide, Total tomated)	06	7/26/00	0/00/00	8/08/00
DISTILLATION, MICRO/MIDI - Acid				
(A-06-QP-01) DGVA5-1-0G Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/26/00	0/00/00	8/08/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DGVA5-1-0H Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: RC3-5
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-021
WORK ORDER: DGVA6
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 14:30
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGVA6-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Soils MT6010_S AG,AS,BA,CD,CR,PB,SE (A-46-QM-01) DGVA6 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	1/21/01
Mercury (7471A, Cold Vapor) - Solids METALS, TOTAL (Method Exclusive) - Solids M7471_S HG (A-70-O9-01) DGVA6 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/22/00
Hydrocarbons, Polynuclear Aromatic (HPLC SONICATION - Low Level (A-13-SG-01) DGVA6-1-0A Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
PCBs (8082) SONICATION w/ACID STRIP (PCB) (A-71-QH-01) DGVA6-1-0C Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGVA6-1-0D Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGVA6-1-0E Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Reactive Cyanide 3) DISTILLATION, MACRO - Acid (A-08-GI-01) DGVA6-1-0F Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: RC3-5
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-021
WORK ORDER: DGVA6
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 14:30
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
✓Cyanide, Total tomated) DISTILLATION, MICRO/MIDI - Acid (A-06-QP-01) DGVA6-1-0G Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
✓Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGVA6-1-0H Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: RC3-5 (DUPLICATE)
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-022
WORK ORDER: DGVA9
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 14:30
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/26/00	0/00/00	11/01/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DGVA9-1-01 Protocol: B QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/26/00	0/00/00	1/21/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DGVA9 Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/26/00	0/00/00	8/22/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DGVA9 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/26/00	8/08/00	9/17/00
SONICATION - Low Level				
(A-13-SG-01) DGVA9-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/26/00	8/08/00	9/17/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DGVA9-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/26/00	0/00/00	8/08/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DGVA9-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/26/00	8/08/00	9/17/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DGVA9-1-0E Protocol: B QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/26/00	0/00/00	8/08/00
DISTILLATION, MACRO - Acid				
(A-08-GI-01) DGVA9-1-0F Protocol: B QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: RC3-5 (DUPLICATE)
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-022
WORK ORDER: DGVA9
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 14:30
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Cyanide, Total tomated) DISTILLATION, MICRO/MIDI - Acid (A-06-QP-01) DGVA9-1-0G Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGVA9-1-0H Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B22E3-6
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-023
WORK ORDER: DGVAD
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 15:30
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGVAD-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGVAD-1-02 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGVAD-1-03 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGVAD-1-04 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

PSL20300
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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B22E2-6
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-024
WORK ORDER: DGVCD
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 15:15
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGVCD-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (A-15-WU-01) DGVCD-1-02 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00
Hydrocarbons, Extractable Petroleum (801 EXTRACTION, SOLID/SOLVENT (Auto shaker) (A-0B-HS-01) DGVCD-1-03 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGVCD-1-04 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: QUSER

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6EF
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B29I1-17
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-025
WORK ORDER: DGVCE
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 13:10
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3) NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION (A-88-WM-01) DGVCE-1-01 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	11/01/00
Hydrocarbons, Polynuclear Aromatic (HPLC SONICATION - Low Level (A-13-SG-01) DGVCE-1-02 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	8/08/00	9/17/00
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 5 mL purge STL: VOA CLP 3/90 (A-15-QK-01) DGVCE-1-03 Protocol: B QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 2X40
STORAGE LOC: V6J
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B220I1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-026
WORK ORDER: DGVFM
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 14:20
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGVFM-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/26/00	0/00/00	8/08/00

PSL20300
Page 1

SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/26/00
Time: 18:06:54
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: LG
STORAGE LOC: T6F
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B220N1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G260239-027
WORK ORDER: DGVFQ
RECEIVING DATE: 7/26/00
SAMPLING DATE: 7/25/00
ANALYTICAL DUE DATE: 8/02/00N
REPORT DUE DATE: 8/05/00
PRIORITY: 07
SAMPLING TIME: 14:50
RECEIVING TIME: 13:55

SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) (I-09-HS-01) DGVFQ-1-01 Protocol: A	06 - Nominal	7/26/00	8/01/00	9/10/00

QC Program: STANDARD TEST SET

LOT F0G260239

STL ST. LOUIS

0068

Environmental Science & Engineering, Inc.
A CH2M HILL Company

11665 Lilburn Park Road, St. Louis, MO 63146-3535
Telephone: (314) 567-4600 -- Fax: (314) 567-5030

FOR LAB USE ONLY
Project Number: _____

Chain of Custody Record

Client: ESE
Address: 3199 Riverport Tech Center
Md Hts.

Phone #: (__)____-_____ Fax #: (__)____-_____
P.O. #:
Client Contact: Doug Marian
Project # / Location: Boeing Phase II

Sample Type:
1. Water
2. Soil
3. Sludge
4. Oil
5. Tissue
Other : _____

Container Type:
P - Plastic
G - Glass
V - VOC

Preservative:
1. None
2. H2SO4
3. HNO3
4. NaOH
5. HCl

Analyses

	Sample I.D. (10 Characters ONLY)	Sample Type	Container Size	Container Type	Container No.	Sampling Date	Sampling Time	Preservative	Lab I.D.	VOC	TPH	PAH	PCB	RCRA Metals		Total/Reactive CN				pH	Specific Conductivity	Temperature	Comments
15	Trip Blank	H_2O				7-25-00				X													1X40
16	RC2-7	Soil				7-25-00	1340			X	X	X	X	X		X		120G, 250G					
17	B27I9-9	↓				↓	0955			X	X	X	X	X				↓					
18	B27I6-8 dupe						0915			X	X	X	X	X									
19	B27I6-8						0915			X	X	X	X	X									
20	RC1-7						1045			X	X	X	X	X		X		1X120G, 1X250G					
21	RC3-5 + (5) SW						1430			X	X	X	X	X		X		2X250G					
22	RC3-5 dupe						1430			X	X	X	X	X		X		↓					
23	B22E3-6						1530			X	X												
24	B22E2-6						1515			X	X												
25	B29I1-17	↓				↓	1310			X		X						120G, 250G					

Relinquished By:	Date:	Received By:	Date:
CR Fuller	7-26-00	Sue Mc/802-572	07-26-00
	Time: 13:55		Time: 1355
Relinquished By:	Date: -- --	Received For Lab By:	Date: -- --
	Time: :		Time: :

FOR LAB USE ONLY
Samples Received Chilled
☐ Yes ☐ No _____ °C

SPECIAL INSTRUCTIONS:

Copies: White - Client Canary - Lab Receiving Pink - Lab File Goldenrod - Retained by Sampler

[redacted]

Chain of Custody Record

Quanterra

QUA-4124

CWR 321

Client: ESE	Project Manager: Doug Marion	Date:	Chain Of Custody Number: 47047
Address: 3199 Riverport Tech Center	Telephone Number (Area Code)/Fax Number:	Lab Number:	Page ____ of ____
City: Md. Hts / State: / Zip Code:	Site Contact:		
Project Name: Boeing PHASE II	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: ~~did not receive~~ - SW 07.26.00			

	Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOCs	TPH	PCB	PAH	RCRA Metals		Total/React. CN					
1	RC3W	7-25-00	1840	H_2O	250P, 500P,			~~4~~ 3 SW 4x40	4x LG	x	x	x	x	x		x					
2	RC3W (duplicate)		1900	(labels do not say dup.)					same as above	x	x	x	x	x		x					
9	B29I1W		1420		LG								x								
10	HW1W		0820		LG			3 SW					x								
3	RC1W (TPH label reads RC1)		1740		4x40, 250P, 500P, 4x LG					x	x	x	x	x		x	PCB ½ full				
13	B29E1W		1530		2x40				2x40		x										
4	RC2W (vials read RC2)		1810		4x40, 250P, 500P, ~~2~~ 3 SW x LG					x	x	x	x	x		x					
27	B220N1W		1450		LG						x										
12	B221E1W vial reads 221E1		1525		LG, 1x40						x										
14	B27I6W		1930						4x40	x	x										
~~15~~	B220I1W 26		1420						2x40	x											
5	B22E3		1700		4x40, ~~32~~ 3 SW x LG, 500P					x	x	x	x	x		all ½ full					
6	B22E2W		1620		4x40, 500P, 2x LG					x	x		x	x							
11	B27I2		2030		LG								x								
7	B27I9W (label reads dup.)		2000		4x40 500P, ~~3~~ 2 SW x LG					x	x		x	x							
8	B27I9W dupe		2000		4x40 500P, LG					x	x		x	x							

Special Instructions: RC2 & B27I9 (& dupe) have free (petroleum?) product

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required: ☐ Normal ☐ Rush

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-26-00	13:55	1. Received By: [signature] STL	07.26.00	1355
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments: B220N1W - DID recv. 1x LG / ~~B29I~~ SW 7.26.00

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Committed to *Your* Success

Condition Upon Receipt Variance Report
St. Louis Laboratory

Lot No.: F0G260239

Client: ESE

Quote No: 37414

Shipper/No: client delivered

Date: 07.26.00 Time: ~~07~~ 8M 1355

Initiated by: [illegible] 07.26.00

RFA/COC Numbers: 47047, 0068

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below)

☐ **No variances were noted during sample receipt.**

☐ **Cooler Temperature Upon Receipt in °C:** 6°, 5°, 6°

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: ① RC3W duplicate on c-o-c, labels do not read duplicate, segregated by sampling time. ② RC1W on c-o-c is just RC1 on labels. ③ RC2W on c-o-c is RC2 on label. ④ B220N/W - did not receive. MJZ 7/27/00

Corrective Action: all 100% full except as noted on c-o-c. PH's correct.

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is".

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [signature] Date: 07.26.00

Project Management Review: [signature] Date: 7-27-00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

ANALYTICAL REPORT

Boeing

Lot #: F0G270337

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

August 10, 2000

Case Narrative
LOT NUMBER: **F0G270337**

This report contains the analytical results for the 22 samples received under chain of custody by STL St. Louis on July 27, 2000. These samples are associated with your Boeing project.

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

Observations/Nonconformances

Nonconformance F01001 and F01025
Affected Samples:
11: MW1-W 12: MW2-W
13: MW4-W 14: MW6-W
15: MW8-W

Affected Methods:
9012A

Case Narrative Details:
Samples were received with incorrect preservation. Samples are supposed to be preserved to PH greater than or equal to 12.

DGXXF = 10 *DGXXP = 10*
DGXXX = 9 *DH216 = 10*
DH22L = 10 *DH231 = 9*
DH246 = 8

Corrective Action:
None.

Nonconformance F01018
Affected Samples:
11: MW1-W 12: MW2-W
13: MW4-W 14: MW6-W
15: MW8-W

Affected Methods:
9310 MOD

Case Narrative Details:
The MDA was not met due to reduction of sample size due to high residue mass. Data will be reported with MDA's achieved.

Corrective Action:
None.

Nonconformance F01039
Affected Samples:
17: B28N1-7

Affected Methods:
8260B

Case Narrative Details:
017 and 017 RE were quantitated using 174 ion for BFB instead of ion 95. This is due to late eluting hydrocarbons interfering with ion 95.

Corrective Action:
None.

Nonconformance F01062
Affected Samples:

16: B28E1-6	17: B28N1-7
18: B221E3-7	19: B221E2-8

Affected Methods:
8015 MOD Diesel Range Organics

Case Narrative Details:
Batch QC not performed. Batch QC performed includes Blank, LCS, and LCSD.

Corrective Action:
The analyst is now aware of the batch QC requirements.

Nonconformance F01063 and F01089
Affected Samples:

2: B29AW1W	3: B28E1W
4: B28N1W	5: B221E3W
6: B221E2W	8: B27I6W
11: MW1-W	12: MW2-W
13: MW4-W	14: MW6-W
15: MW8-W	

Affected Methods:
8015 MOD Diesel Range Organics

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Some of these samples have elevated detection limits due to a lack of sample volume.

Corrective Action:
None.

Nonconformance F01068
Affected Samples:
16: B28E1-6 17: B28N1-7

Affected Methods:
8310

Case Narrative Details:
These samples were re-extracted within holding time due to low recoveries in the LCS. The re-extracts were acceptable.

Corrective Action:
None.

Nonconformance F01070
Affected Samples:
3: B28E1W 4: B28N1W
7: B29I1W 8: B27I6W
11: MW1-W 12: MW2-W
13: MW4-W 14: MW6-W
15: MW8-W

Affected Methods:
8310

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Corrective Action:
None.

Nonconformance F01073
Affected Samples:
3: B28E1W 4: B28N1W
11: MW1-W 12: MW2-W
13: MW4-W 14: MW6-W
15: MW8-W

Affected Methods:
8082

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Samples 12: MW2-W, 14: MW6-W, 15: MW8-W *and* 4: B28N1W *have elevated detection limits due to a lack of sample volume.*

Corrective Action:
None.

Nonconformance F01082
Affected Samples:
1: B27I2W 2: B29AW1W

Affected Methods:
8015 MOD Gasoline Range Organics

Case Narrative Details:
The surrogate in the MS/MSD is out high. Sample 002 was analyzed twice to confirm low surrogate recoveries.

Corrective Action:
None.

METHODS SUMMARY

F0G270337

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 8015 Mod.
Gross Alpha/Beta by GFPC Th230/Sr90-Y90 cal	EPA 900.0 MOD	
Gross Alpha/Beta by GFPC Th230/Sr90-Y90 cal	SW846 9310 MOD	
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3520
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 8082
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G270337

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGXVX	001	B27I2W	07/26/00	12:00
DGXW1	002	B29AW1W	07/26/00	10:20
DGXW2	003	B28E1W	07/26/00	16:20
DGXW7	004	B28N1W	07/26/00	17:00
DGXWC	005	B221E3W	07/26/00	17:35
DGXWE	006	B221E2W	07/26/00	17:55
DGXWG	007	B29I1W	07/26/00	14:10
DGXWJ	008	B27I6W	07/26/00	09:50
DGXWN	009	TRIP BLANK	07/26/00	
DGXWT	010	TRIP BLANK	07/27/00	
DGXX3	011	MW1-W	07/27/00	13:20
DGXXC	012	MW2-W	07/27/00	14:00
DGXXF	013	MW4-W	07/27/00	11:55
DGXXP	014	MW6-W	07/27/00	10:25
DGXXX	015	MW8-W	07/27/00	11:05
DH004	016	B28E1-6	07/26/00	09:05
DH00H	017	B28N1-7	07/26/00	09:25
DH00K	018	B221E3-7	07/26/00	10:25
DH00L	019	B221E2-8	07/26/00	10:40
DH00M	020	EP1-P	07/26/00	15:15
DH01J	021	EP2-P	07/26/00	15:35
DH01M	022	EP3-P	07/26/00	15:55

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I2W

GC Volatiles

Lot-Sample #...: F0G270337-001
Date Sampled...: 07/26/00 12:00
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXVX101
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 19:04

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	0.11	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	122	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1W

GC Semivolatiles

Lot-Sample #...: F0G270337-002 Work Order #...: DGXW1102 Matrix.....: WATER
Date Sampled...: 07/26/00 10:20 Date Received..: 07/27/00
Prep Date.....: 08/02/00 Analysis Date..: 08/04/00
Prep Batch #...: 0216470 Analysis Time..: 13:42
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	1.0	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	75	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1W

GC/MS Volatiles

Lot-Sample #...: F0G270337-002 **Work Order #...:** DGXW1101 **Matrix.....:** WATER
Date Sampled...: 07/26/00 10:20 **Date Received..:** 07/27/00
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214138 **Analysis Time..:** 17:01
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.40 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	96	(78 - 124)
Toluene-d8	109	(71 - 129)
Dibromofluoromethane	95	(74 - 135)
1,2-Dichloroethane-d4	84	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1W

GC/MS Volatiles

Lot-Sample #...: F0G270337-002 Work Order #...: DGXW1101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1W

GC Volatiles

Lot-Sample #...: F0G270337-002
Date Sampled...: 07/26/00 10:20
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXW1103
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 19:30

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	13 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29AW1W

GC Volatiles

Lot-Sample #...: F0G270337-002
Date Sampled...: 07/26/00 10:20
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXW1203
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 00:13

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	44 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1W

GC Semivolatiles

Lot-Sample #...: F0G270337-003
Date Sampled...: 07/26/00 16:20
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXW210D
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 14:05

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	67	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1W

GC Semivolatiles

Lot-Sample #...: F0G270337-003
Date Sampled...: 07/26/00 16:20
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DGXW2102
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 18:15

Method.....: SW846 8082

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	106	(12 - 167)
Decachlorobiphenyl	66	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1W

GC/MS Volatiles

Lot-Sample #...: F0G270337-003 **Work Order #...:** DGXW2101 **Matrix.....:** WATER
Date Sampled...: 07/26/00 16:20 **Date Received..:** 07/27/00
Prep Date.....: 07/31/00 **Analysis Date..:** 07/31/00
Prep Batch #...: 0214138 **Analysis Time..:** 17:38
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.37 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.39 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	103	(78 - 124)
Toluene-d8	91	(71 - 129)
Dibromofluoromethane	103	(74 - 135)
1,2-Dichloroethane-d4	96	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1W

GC/MS Volatiles

Lot-Sample #...: F0G270337-003 Work Order #...: DGXW2101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1W

HPLC

Lot-Sample #...: F0G270337-003
Date Sampled...: 07/26/00 16:20
Prep Date.....: 08/02/00
Prep Batch #...: 0216476
Dilution Factor: 1

Work Order #...: DGXW2103
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 04:34

Matrix.....: WATER

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	56	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1W

GC Volatiles

Lot-Sample #...: F0G270337-003
Date Sampled...: 07/26/00 16:20
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXW210E
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 19:56

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	78	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1W

GC Semivolatiles

Lot-Sample #...: F0G270337-004
Date Sampled...: 07/26/00 17:00
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXW710D
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 14:29

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	84	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1W

GC Semivolatiles

Lot-Sample #...: F0G270337-004
Date Sampled...: 07/26/00 17:00
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DGXW7102
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 18:29

Method.....: SW846 8082

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	106	(12 - 167)
Decachlorobiphenyl	63	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1W

GC/MS Volatiles

Lot-Sample #...: F0G270337-004 **Work Order #...:** DGXW7101 **Matrix.....:** WATER
Date Sampled...: 07/26/00 17:00 **Date Received..:** 07/27/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/02/00
Prep Batch #...: 0216134 **Analysis Time..:** 09:11
Dilution Factor: 50

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	50	ug/L
1,2-Dichloropropane	ND	50	ug/L
cis-1,3-Dichloropropene	ND	50	ug/L
Trichloroethene	ND	50	ug/L
Dibromochloromethane	ND	50	ug/L
1,1,2-Trichloroethane	ND	50	ug/L
Benzene	**44 J**	**50**	**ug/L**
trans-1,3-Dichloropropene	ND	50	ug/L
Bromoform	ND	50	ug/L
4-Methyl-2-pentanone	ND	250	ug/L
2-Hexanone	ND	250	ug/L
Tetrachloroethene	ND	50	ug/L
Toluene	ND	50	ug/L
Chlorobenzene	ND	50	ug/L
Ethylbenzene	ND	50	ug/L
Styrene	ND	50	ug/L
Chloromethane	ND	100	ug/L
Bromomethane	ND	100	ug/L
Vinyl chloride	**260**	**100**	**ug/L**
Chloroethane	ND	100	ug/L
Methylene chloride	**43 J,B**	**50**	**ug/L**
Acetone	ND	500	ug/L
Carbon disulfide	ND	50	ug/L
1,1-Dichloroethene	ND	50	ug/L
1,1-Dichloroethane	ND	50	ug/L
1,2-Dichloroethene (total)	**1900**	**50**	**ug/L**
Chloroform	ND	50	ug/L
1,2-Dichloroethane	ND	50	ug/L
2-Butanone	ND	250	ug/L
1,1,1-Trichloroethane	ND	50	ug/L
Carbon tetrachloride	ND	50	ug/L
Bromodichloromethane	ND	50	ug/L
1,1,2,2-Tetrachloroethane	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(78 - 124)
Toluene-d8	105	(71 - 129)
Dibromofluoromethane	102	(74 - 135)
1,2-Dichloroethane-d4	84	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1W

GC/MS Volatiles

Lot-Sample #...: F0G270337-004 Work Order #...: DGXW7101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1W

HPLC

Lot-Sample #...: F0G270337-004 **Work Order #...:** DGXW7103 **Matrix.....:** WATER
Date Sampled...: 07/26/00 17:00 **Date Received..:** 07/27/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216476 **Analysis Time..:** 05:00
Dilution Factor: 1
Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	60	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1W

GC Volatiles

Lot-Sample #...: F0G270337-004
Date Sampled...: 07/26/00 17:00
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXW710E
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 00:39

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	1.0	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	100	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E3W

GC Semivolatiles

Lot-Sample #...: F0G270337-005
Date Sampled...: 07/26/00 17:35
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXWC102
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 14:53

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	68	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E3W

GC/MS Volatiles

Lot-Sample #...: F0G270337-005 Work Order #...: DGXWC101 Matrix.....: WATER
Date Sampled...: 07/26/00 17:35 Date Received..: 07/27/00
Prep Date.....: 07/31/00 Analysis Date..: 07/31/00
Prep Batch #...: 0214138 Analysis Time..: 18:51
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.46 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	98	(78 - 124)
Toluene-d8	104	(71 - 129)
Dibromofluoromethane	98	(74 - 135)
1,2-Dichloroethane-d4	84	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E3W

GC/MS Volatiles

Lot-Sample #...: F0G270337-005 Work Order #...: DGXWC101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E3W

GC Volatiles

Lot-Sample #...: F0G270337-005
Date Sampled...: 07/26/00 17:35
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXWC103
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 01:05

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	94	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E2W

GC Semivolatiles

Lot-Sample #...: F0G270337-006
Date Sampled...: 07/26/00 17:55
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXWE102
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 15:16

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.83	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	14	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E2W

GC/MS Volatiles

Lot-Sample #...: F0G270337-006 Work Order #...: DGXWE101 Matrix.....: WATER
Date Sampled...: 07/26/00 17:55 Date Received..: 07/27/00
Prep Date.....: 07/31/00 Analysis Date..: 07/31/00
Prep Batch #...: 0214138 Analysis Time..: 19:28
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.57 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	92	(71 - 129)
Dibromofluoromethane	106	(74 - 135)
1,2-Dichloroethane-d4	99	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E2W

GC/MS Volatiles

Lot-Sample #...: F0G270337-006 Work Order #...: DGXWE101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E2W

GC Volatiles

Lot-Sample #...: F0G270337-006
Date Sampled...: 07/26/00 17:55
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXWE103
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 01:31

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	93	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29I1W

GC/MS Volatiles

Lot-Sample #...: F0G270337-007 Work Order #...: DGXWG101 Matrix.....: WATER
Date Sampled...: 07/26/00 14:10 Date Received..: 07/27/00
Prep Date.....: 07/31/00 Analysis Date..: 07/31/00
Prep Batch #...: 0214138 Analysis Time..: 20:04
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**2.1**	**1.0**	**ug/L**
Dibromochloromethane	**0.37 J**	**1.0**	**ug/L**
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.77 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	**1.7**	**1.0**	**ug/L**
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	**0.60 J**	**1.0**	**ug/L**
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	94	(71 - 129)
Dibromofluoromethane	106	(74 - 135)
1,2-Dichloroethane-d4	98	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29I1W

GC/MS Volatiles

Lot-Sample #...: F0G270337-007 Work Order #...: DGXWG101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B29I1W

HPLC

Lot-Sample #...: F0G270337-007
Date Sampled...: 07/26/00 14:10
Prep Date.....: 08/02/00
Prep Batch #...: 0216476
Dilution Factor: 1

Work Order #...: DGXWG102
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 05:26

Matrix.....: WATER

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	50	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6W

GC Semivolatiles

Lot-Sample #...: F0G270337-008
Date Sampled...: 07/26/00 09:50
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXWJ10A
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 02:54

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	8.0	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	135	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6W

HPLC

Lot-Sample #...: F0G270337-008 Work Order #...: DGXWJ101 Matrix.....: WATER
Date Sampled...: 07/26/00 09:50 Date Received..: 07/27/00
Prep Date.....: 08/02/00 Analysis Date..: 08/04/00
Prep Batch #...: 0216476 Analysis Time..: 05:51
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	31	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G270337-009
Date Sampled...: 07/26/00
Prep Date.....: 07/31/00
Prep Batch #...: 0214138
Dilution Factor: 1

Work Order #...: DGXWN101
Date Received..: 07/27/00
Analysis Date..: 07/31/00
Analysis Time..: 20:41

Matrix.....: WATER

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**1.4 B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(78 - 124)
Toluene-d8	90	(71 - 129)
Dibromofluoromethane	106	(74 - 135)
1,2-Dichloroethane-d4	100	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G270337-009 Work Order #...: DGXWN101 Matrix.....: WATER

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G270337-010
Date Sampled...: 07/27/00
Prep Date.....: 07/31/00
Prep Batch #...: 0214138
Dilution Factor: 1

Work Order #...: DGXWT101
Date Received..: 07/27/00
Analysis Date..: 07/31/00
Analysis Time..: 21:17

Matrix.....: WATER

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**1.3 B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	101	(78 - 124)
Toluene-d8	94	(71 - 129)
Dibromofluoromethane	105	(74 - 135)
1,2-Dichloroethane-d4	93	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G270337-010 Work Order #...: DGXWT101 Matrix.....: WATER

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW1-W

GC Semivolatiles

Lot-Sample #...: F0G270337-011
Date Sampled...: 07/27/00 13:20
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXX310F
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 04:04

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	47	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW1-W

GC Semivolatiles

Lot-Sample #...: F0G270337-011
Date Sampled...: 07/27/00 13:20
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DGXX3102
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 18:43

Matrix.....: WATER

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	118	(12 - 167)
Decachlorobiphenyl	48	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW1-W

GC/MS Volatiles

Lot-Sample #...: F0G270337-011
Date Sampled...: 07/27/00 13:20
Prep Date.....: 08/02/00
Prep Batch #...: 0216134
Dilution Factor: 1

Work Order #...: DGXX3101
Date Received..: 07/27/00
Analysis Date..: 08/02/00
Analysis Time..: 09:47

Matrix.....: WATER

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(78 - 124)
Toluene-d8	108	(71 - 129)
Dibromofluoromethane	96	(74 - 135)
1,2-Dichloroethane-d4	79	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW1-W

HPLC

Lot-Sample #...: F0G270337-011
Date Sampled...: 07/27/00 13:20
Prep Date.....: 08/02/00
Prep Batch #...: 0216476
Dilution Factor: 1

Work Order #...: DGXX3103
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 06:17

Matrix.....: WATER

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW1-W

GC Volatiles

Lot-Sample #...: F0G270337-011
Date Sampled...: 07/27/00 13:20
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXX310G
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 13:34

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	93	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW1-W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-011
Work Order: DGXX3
Matrix: WATER

Date Collected: 07/27/00 1320
Date Received: 07/27/00 1455

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			pCi/L		9310 MOD			
Gross Alpha	4.5E+01		2.7E+01	3.9E+01	07/28/00	08/02/00	0210264	
Gross Beta	7.7E+01		2.4E+01	3.4E+01	07/28/00	08/02/00	0210264	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

GC Semivolatiles

Lot-Sample #...: F0G270337-012
Date Sampled...: 07/27/00 14:00
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXXC10F
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 04:28

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	32	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

GC Semivolatiles

Lot-Sample #...: F0G270337-012
Date Sampled...: 07/27/00 14:00
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DGXXC102
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 18:56

Matrix.....: WATER

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.1	ug/L
Aroclor 1221	ND	1.1	ug/L
Aroclor 1232	ND	1.1	ug/L
Aroclor 1242	ND	1.1	ug/L
Aroclor 1248	ND	1.1	ug/L
Aroclor 1254	ND	1.1	ug/L
Aroclor 1260	ND	1.1	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	107	(12 - 167)
Decachlorobiphenyl	60	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

GC/MS Volatiles

Lot-Sample #...: F0G270337-012
Date Sampled...: 07/27/00 14:00
Prep Date.....: 08/02/00
Prep Batch #...: 0216134
Dilution Factor: 1

Work Order #...: DGXXC101
Date Received..: 07/27/00
Analysis Date..: 08/02/00
Analysis Time..: 11:01

Matrix.....: WATER

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**0.66 J**	**1.0**	**ug/L**
Chloroform	**0.34 J**	**1.0**	**ug/L**
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	114	(78 - 124)
Toluene-d8	97	(71 - 129)
Dibromofluoromethane	96	(74 - 135)
1,2-Dichloroethane-d4	88	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

GC/MS Volatiles

Lot-Sample #...: F0G270337-012 Work Order #...: DGXXC101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

HPLC

Lot-Sample #...: F0G270337-012
Date Sampled...: 07/27/00 14:00
Prep Date.....: 08/02/00
Prep Batch #...: 0216476
Dilution Factor: 1

Work Order #...: DGXXC103
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 07:34

Matrix.....: WATER

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	60	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

GC Volatiles

Lot-Sample #...: F0G270337-012
Date Sampled...: 07/27/00 14:00
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXXC10G
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 14:55

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	91	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-012
Work Order: DGXXC
Matrix: WATER

Date Collected: 07/27/00 1400
Date Received: 07/27/00 1455

Parameter	Result	Qual	Total Uncert. (2 σ+/-)		MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				pCi/L		9310 MOD			
Gross Alpha	2.8E+01		1.8E+01		2.8E+01	07/28/00	08/02/00	0210264	
Gross Beta	4.1E+01		1.5E+01		2.3E+01	07/28/00	08/02/00	0210264	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW4-W

GC Semivolatiles

Lot-Sample #...: F0G270337-013
Date Sampled...: 07/27/00 11:55
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXXF10F
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 04:51

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	66	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW4-W

GC Semivolatiles

Lot-Sample #...: F0G270337-013
Date Sampled...: 07/27/00 11:55
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DGXXF102
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 19:10

Method.....: SW846 8082

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(12 - 167)
Decachlorobiphenyl	39	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW4-W

GC/MS Volatiles

Lot-Sample #...: F0G270337-013 Work Order #...: DGXXF101 Matrix.....: WATER
Date Sampled...: 07/27/00 11:55 Date Received..: 07/27/00
Prep Date.....: 08/02/00 Analysis Date..: 08/02/00
Prep Batch #...: 0216134 Analysis Time..: 11:38
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(78 - 124)
Toluene-d8	95	(71 - 129)
Dibromofluoromethane	104	(74 - 135)
1,2-Dichloroethane-d4	92	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW4-W

HPLC

Lot-Sample #...: F0G270337-013 **Work Order #...:** DGXXF103 **Matrix.....:** WATER
Date Sampled...: 07/27/00 11:55 **Date Received..:** 07/27/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216476 **Analysis Time..:** 08:00
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	37	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW4-W

GC Volatiles

Lot-Sample #...: F0G270337-013
Date Sampled...: 07/27/00 11:55
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXXF10G
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 01:57

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	96	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW4-W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-013
Work Order: DGXXF
Matrix: WATER

Date Collected: 07/27/00 1155
Date Received: 07/27/00 1455

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			pCi/L		9310 MOD			
Gross Alpha	5.9E+01		3.0E+01	4.1E+01	07/28/00	08/02/00	0210264	
Gross Beta	1.80E+02		3.5E+01	4.2E+01	07/28/00	08/02/00	0210264	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

GC Semivolatiles

Lot-Sample #...: F0G270337-014
Date Sampled...: 07/27/00 10:25
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DGXXP10F
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 05:14

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	62	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

GC Semivolatiles

Lot-Sample #...: F0G270337-014
Date Sampled...: 07/27/00 10:25
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DGXXP102
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 19:24

Method.....: SW846 8082

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	2.0	ug/L
Aroclor 1221	ND	2.0	ug/L
Aroclor 1232	ND	2.0	ug/L
Aroclor 1242	ND	2.0	ug/L
Aroclor 1248	ND	2.0	ug/L
Aroclor 1254	ND	2.0	ug/L
Aroclor 1260	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	114	(12 - 167)
Decachlorobiphenyl	113	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

GC/MS Volatiles

Lot-Sample #...: F0G270337-014 **Work Order #...:** DGXXP101 **Matrix.....:** WATER
Date Sampled...: 07/27/00 10:25 **Date Received..:** 07/27/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/02/00
Prep Batch #...: 0216134 **Analysis Time..:** 15:54
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**3.9**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	**7.7**	**1.0**	**ug/L**
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	**0.35 J**	**1.0**	**ug/L**
1,1-Dichloroethane	**0.96 J**	**1.0**	**ug/L**
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	**0.97 J**	**1.0**	**ug/L**
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	101	(78 - 124)
Toluene-d8	104	(71 - 129)
Dibromofluoromethane	89	(74 - 135)
1,2-Dichloroethane-d4	77	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

GC/MS Volatiles

Lot-Sample #...: F0G270337-014 Work Order #...: DGXXP101 Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

HPLC

Lot-Sample #...: F0G270337-014
Date Sampled...: 07/27/00 10:25
Prep Date.....: 08/02/00
Prep Batch #...: 0216476
Dilution Factor: 1

Work Order #...: DGXXP103
Date Received..: 07/27/00
Analysis Date..: 08/04/00
Analysis Time..: 08:25

Matrix.....: WATER

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	53	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

GC Volatiles

Lot-Sample #...: F0G270337-014
Date Sampled...: 07/27/00 10:25
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXXP10G
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 02:24

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	101	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-014
Work Order: DGXXP
Matrix: WATER

Date Collected: 07/27/00 1025
Date Received: 07/27/00 1455

Parameter	Result	Qual	Total Uncert. (2 σ+/-)		MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				pCi/L		9310 MOD			
Gross Alpha	7.1E+01		3.2E+01		4.0E+01	07/28/00	08/02/00	0210264	
Gross Beta	1.11E+02		2.7E+01		3.5E+01	07/28/00	08/02/00	0210264	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW8-W

GC Semivolatiles

Lot-Sample #...:	F0G270337-015	**Work Order #...:**	DGXXX10F	**Matrix.....:**	WATER
Date Sampled...:	07/27/00 11:05	**Date Received..:**	07/27/00		
Prep Date.....:	08/02/00	**Analysis Date..:**	08/04/00		
Prep Batch #...:	0216470	**Analysis Time..:**	05:38		
Dilution Factor:	1				
		Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	52	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW8-W

GC Semivolatiles

Lot-Sample #...: F0G270337-015
Date Sampled...: 07/27/00 11:05
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DGXXX102
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 19:37

Matrix.....: WATER

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	2.0	ug/L
Aroclor 1221	ND	2.0	ug/L
Aroclor 1232	ND	2.0	ug/L
Aroclor 1242	ND	2.0	ug/L
Aroclor 1248	ND	2.0	ug/L
Aroclor 1254	ND	2.0	ug/L
Aroclor 1260	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	113	(12 - 167)
Decachlorobiphenyl	97	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW8-W

GC/MS Volatiles

Lot-Sample #...: F0G270337-015
Date Sampled...: 07/27/00 11:05
Prep Date.....: 08/02/00
Prep Batch #...: 0216134
Dilution Factor: 1

Work Order #...: DGXXX101
Date Received..: 07/27/00
Analysis Date..: 08/02/00
Analysis Time..: 12:51

Matrix.....: WATER

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	ND	1.0	ug/L
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**5.8**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	112	(78 - 124)
Toluene-d8	95	(71 - 129)
Dibromofluoromethane	108	(74 - 135)
1,2-Dichloroethane-d4	97	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW8-W

HPLC

Lot-Sample #...: F0G270337-015 **Work Order #...:** DGXXX103 **Matrix.....:** WATER
Date Sampled...: 07/27/00 11:05 **Date Received..:** 07/27/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216476 **Analysis Time..:** 08:51
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	47	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW8-W

GC Volatiles

Lot-Sample #...: F0G270337-015
Date Sampled...: 07/27/00 11:05
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXXX10G
Date Received..: 07/27/00
Analysis Date..: 08/08/00
Analysis Time..: 02:50

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	90	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW8-W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-015
Work Order: DGXXX
Matrix: WATER

Date Collected: 07/27/00 1105
Date Received: 07/27/00 1455

Parameter	Result	Qual	Total Uncert. (2 σ+/-)		MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				pCi/L		9310 MOD			
Gross Alpha	5.1E+01		2.2E+01		2.7E+01	07/28/00	08/02/00	0210264	
Gross Beta	5.3E+01		1.9E+01		2.8E+01	07/28/00	08/02/00	0210264	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1-6

GC Semivolatiles

Lot-Sample #...:	F0G270337-016	**Work Order #...:**	DH00410E	**Matrix.....:**	SOLID
Date Sampled...:	07/26/00 09:05	**Date Received..:**	07/27/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	08:35		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	32	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1-6

GC Semivolatiles

Lot-Sample #...: F0G270337-016 **Work Order #...:** DH00410C **Matrix.....:** SOLID
Date Sampled...: 07/26/00 09:05 **Date Received..:** 07/27/00
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 15:33
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(10 - 199)
Decachlorobiphenyl	95	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1-6

GC/MS Volatiles

Lot-Sample #...: F0G270337-016 Work Order #...: DH00410F Matrix.....: SOLID
Date Sampled...: 07/26/00 09:05 Date Received..: 07/27/00
Prep Date.....: 07/30/00 Analysis Date..: 07/30/00
Prep Batch #...: 0213262 Analysis Time..: 21:10
Dilution Factor: 1
% Moisture.....: 22 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	**21 J**	**26**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	85	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	108	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1-6

GC/MS Volatiles

Lot-Sample #...: F0G270337-016 **Work Order #...:** DH00410F **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1-6

HPLC

Lot-Sample #...: F0G270337-016
Date Sampled...: 07/26/00 09:05
Prep Date.....: 08/04/00
Prep Batch #...: 0217527
Dilution Factor: 1
% Moisture.....: 22

Work Order #...: DH00420A
Date Received..: 07/27/00
Analysis Date..: 08/06/00
Analysis Time..: 23:17

Method.....: SW846 8310

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	39	ug/kg
Acenaphthylene	ND	39	ug/kg
Anthracene	ND	39	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	39	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	ND	19	ug/kg
Dibenz(a,h)anthracene	ND	39	ug/kg
Fluoranthene	ND	39	ug/kg
Fluorene	ND	39	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	39	ug/kg
Phenanthrene	ND	39	ug/kg
Pyrene	ND	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	51	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1-6

GC Volatiles

Lot-Sample #...:	F0G270337-016	**Work Order #...:**	DH00410D	**Matrix.....:**	SOLID
Date Sampled...:	07/26/00 09:05	**Date Received..:**	07/27/00		
Prep Date.....:	08/07/00	**Analysis Date..:**	08/08/00		
Prep Batch #...:	0221367	**Analysis Time..:**	03:16		
Dilution Factor:	1				
% Moisture.....:	22	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	78	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

GC Semivolatiles

Lot-Sample #...:	F0G270337-017	Work Order #...:	DH00H10E	Matrix.....:	SOLID
Date Sampled...:	07/26/00 09:25	Date Received..:	07/27/00		
Prep Date.....:	07/29/00	Analysis Date..:	08/01/00		
Prep Batch #...:	0213175	Analysis Time..:	09:01		
Dilution Factor:	1				
% Moisture.....:	22	Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	40	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

GC Semivolatiles

Lot-Sample #...: F0G270337-017 Work Order #...: DH00H10C Matrix.....: SOLID
Date Sampled...: 07/26/00 09:25 Date Received..: 07/27/00
Prep Date.....: 08/01/00 Analysis Date..: 08/03/00
Prep Batch #...: 0215145 Analysis Time..: 15:47
Dilution Factor: 1
% Moisture.....: 22 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(10 - 199)
Decachlorobiphenyl	86	(10 - 200)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

GC/MS Volatiles

Lot-Sample #...: F0G270337-017 Work Order #...: DH00H10F Matrix.....: SOLID
Date Sampled...: 07/26/00 09:25 Date Received..: 07/27/00
Prep Date.....: 08/01/00 Analysis Date..: 08/01/00
Prep Batch #...: 0215223 Analysis Time..: 15:51
Dilution Factor: 1
% Moisture.....: 22 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	**13**	**6.4**	**ug/kg**
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	**72**	**6.4**	**ug/kg**
Acetone	**33 B**	**26**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	63 *	(73 - 109)
Toluene-d8	105	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	98	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

GC/MS Volatiles

Lot-Sample #...: F0G270337-017 Work Order #...: DH00H10F Matrix.....: SOLID

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

GC/MS Volatiles

Lot-Sample #...: F0G270337-017 Work Order #...: DH00H20F Matrix.....: SOLID
Date Sampled...: 07/26/00 09:25 Date Received..: 07/27/00
Prep Date.....: 08/02/00 Analysis Date..: 08/02/00
Prep Batch #...: 0216156 Analysis Time..: 17:01
Dilution Factor: 1
% Moisture.....: 22 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	**30**	**6.4**	**ug/kg**
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	**24 J,B**	**26**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	65 *	(73 - 109)
Toluene-d8	105	(82 - 119)
Dibromofluoromethane	97	(82 - 132)
1,2-Dichloroethane-d4	108	(60 - 140)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

GC/MS Volatiles

Lot-Sample #...: F0G270337-017 Work Order #...: DH00H20F Matrix.....: SOLID

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

HPLC

Lot-Sample #...: F0G270337-017 **Work Order #...:** DH00H20A **Matrix.....:** SOLID
Date Sampled...: 07/26/00 09:25 **Date Received..:** 07/27/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/07/00
Prep Batch #...: 0217527 **Analysis Time..:** 00:34
Dilution Factor: 1
% Moisture.....: 22 **Method.....:** SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	39	ug/kg
Acenaphthylene	ND	39	ug/kg
Anthracene	ND	39	ug/kg
Benzo(a)anthracene	ND	19	ug/kg
Benzo(a)pyrene	ND	19	ug/kg
Benzo(b)fluoranthene	ND	19	ug/kg
Benzo(ghi)perylene	ND	39	ug/kg
Benzo(k)fluoranthene	ND	19	ug/kg
Chrysene	**110**	**19**	**ug/kg**
Dibenz(a,h)anthracene	ND	39	ug/kg
Fluoranthene	ND	39	ug/kg
Fluorene	ND	39	ug/kg
Indeno(1,2,3-cd)pyrene	ND	19	ug/kg
Naphthalene	ND	39	ug/kg
Phenanthrene	ND	39	ug/kg
Pyrene	ND	39	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	47	(44 - 140)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

GC Volatiles

Lot-Sample #...: F0G270337-017 Work Order #...: DH00H10D Matrix.....: SOLID
Date Sampled...: 07/26/00 09:25 Date Received..: 07/27/00
Prep Date.....: 08/07/00 Analysis Date..: 08/08/00
Prep Batch #...: 0221368 Analysis Time..: 13:08
Dilution Factor: 5
% Moisture.....: 22 Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	16	0.64	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	124	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E3-7

GC Semivolatiles

Lot-Sample #...:	F0G270337-018	**Work Order #...:**	DH00K10E	**Matrix.....:**	SOLID
Date Sampled...:	07/26/00 10:25	**Date Received..:**	07/27/00		
Prep Date.....:	07/29/00	**Analysis Date..:**	08/01/00		
Prep Batch #...:	0213175	**Analysis Time..:**	10:21		
Dilution Factor:	1				
% Moisture.....:	20	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	31	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	41	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E3-7

GC/MS Volatiles

Lot-Sample #...: F0G270337-018 **Work Order #...:** DH00K10F **Matrix.....:** SOLID
Date Sampled...: 07/26/00 10:25 **Date Received..:** 07/27/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 21:44
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Trichloroethene	ND	6.3	ug/kg
Dibromochloromethane	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.3	ug/kg
Acetone	**27**	**25**	**ug/kg**
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	100	(82 - 132)
1,2-Dichloroethane-d4	108	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E3-7

GC/MS Volatiles

Lot-Sample #...: F0G270337-018 Work Order #...: DH00K10F Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E3-7

GC Volatiles

Lot-Sample #...:	F0G270337-018	**Work Order #...:**	DH00K10D	**Matrix.....:**	SOLID
Date Sampled...:	07/26/00 10:25	**Date Received..:**	07/27/00		
Prep Date.....:	08/07/00	**Analysis Date..:**	08/08/00		
Prep Batch #...:	0221367	**Analysis Time..:**	12:16		
Dilution Factor:	1				
% Moisture.....:	20	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	**0.22**	**0.13**	**mg/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	89	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E2-8

GC Semivolatiles

Lot-Sample #...: F0G270337-019
Date Sampled...: 07/26/00 10:40
Prep Date.....: 07/29/00
Prep Batch #...: 0213175
Dilution Factor: 1
% Moisture.....: 21

Work Order #...: DH00L10E
Date Received..: 07/27/00
Analysis Date..: 08/01/00
Analysis Time..: 10:48

Method.....: SW846 8015 MOD

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	32	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	37	(10 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E2-8

GC/MS Volatiles

Lot-Sample #...: F0G270337-019 **Work Order #...:** DH00L10F **Matrix.....:** SOLID
Date Sampled...: 07/26/00 10:40 **Date Received..:** 07/27/00
Prep Date.....: 07/30/00 **Analysis Date..:** 07/30/00
Prep Batch #...: 0213262 **Analysis Time..:** 22:18
Dilution Factor: 1
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
cis-1,3-Dichloropropene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
Dibromochloromethane	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
trans-1,3-Dichloropropene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Toluene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Styrene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	ND	6.4	ug/kg
Acetone	**19 J**	**25**	**ug/kg**
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
1,2-Dichloroethene (total)	ND	6.4	ug/kg
Chloroform	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	84	(73 - 109)
Toluene-d8	101	(82 - 119)
Dibromofluoromethane	103	(82 - 132)
1,2-Dichloroethane-d4	112	(60 - 140)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E2-8

GC/MS Volatiles

Lot-Sample #...: F0G270337-019 Work Order #...: DH00L10F Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B221E2-8

GC Volatiles

Lot-Sample #...:	F0G270337-019	**Work Order #...:**	DH00L10D	**Matrix.....:**	SOLID
Date Sampled...:	07/26/00 10:40	**Date Received..:**	07/27/00		
Prep Date.....:	08/07/00	**Analysis Date..:**	08/08/00		
Prep Batch #...:	0221367	**Analysis Time..:**	12:42		
Dilution Factor:	1				
% Moisture.....:	21	**Method.....:**	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	87	(50 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EP1-P

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-020
Work Order: DH00M
Matrix: SOLID

Date Collected: 07/26/00 1515
Date Received: 07/27/00 1130

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD			pCi/g		900.0 MOD			
Gross Alpha	-5E-02	U	1.3E-01	3.3E-01	08/01/00	08/09/00	0214146	
Gross Beta	**1.14E+00**	**J**	**5.9E-01**	**8.9E-01**	**08/01/00**	**08/09/00**	**0214146**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EP1-P DUP

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-020X
Work Order: DH00M
Matrix: SOLID

Date Collected: 07/26/00 1515
Date Received: 07/27/00 1130

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD				**pCi/g**	**900.0 MOD**			
Gross Alpha	6E-02	U	1.3E-01	2.5E-01	08/01/00	08/09/00	0214146	
Gross Beta	1.8E-01	U	3.9E-01	6.7E-01	08/01/00	08/09/00	0214146	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EP2-P

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-021
Work Order: DH01J
Matrix: SOLID

Date Collected: 07/26/00 1535
Date Received: 07/27/00 1130

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD				**pCi/g**	**900.0 MOD**			
Gross Alpha	1.1E-01	U	1.4E-01	2.3E-01	08/01/00	08/09/00	0214146	
Gross Beta	1.6E-01	U	3.2E-01	5.6E-01	08/01/00	08/09/00	0214146	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EP3-P

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G270337-022
Work Order: DH01M
Matrix: SOLID

Date Collected: 07/26/00 1555
Date Received: 07/27/00 1130

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD				**pCi/g**	**900.0 MOD**			
Gross Alpha	10E-02	U	1.5E-01	2.7E-01	08/01/00	08/09/00	0214146	
Gross Beta	3.3E-01	U	3.9E-01	6.5E-01	08/01/00	08/09/00	0214146	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW1-W

General Chemistry

Lot-Sample #...: F0G270337-011 Work Order #...: DGXX3 Matrix.....: WATER
Date Sampled...: 07/27/00 13:20 Date Received..: 07/27/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1		Analysis Time..: 16:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

General Chemistry

Lot-Sample #...: F0G270337-012 Work Order #...: DGXXC Matrix.....: WATER
Date Sampled...: 07/27/00 14:00 Date Received..: 07/27/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1		Analysis Time..: 16:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW4-W

General Chemistry

Lot-Sample #...: F0G270337-013 Work Order #...: DGXXF Matrix.....: WATER
Date Sampled...: 07/27/00 11:55 Date Received..: 07/27/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1		Analysis Time..: 13:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

General Chemistry

Lot-Sample #...: F0G270337-014 Work Order #...: DGXXP Matrix.....: WATER
Date Sampled...: 07/27/00 10:25 Date Received..: 07/27/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1		Analysis Time..: 13:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW8-W

General Chemistry

Lot-Sample #...: F0G270337-015 Work Order #...: DGXXX Matrix.....: WATER
Date Sampled...: 07/27/00 11:05 Date Received..: 07/27/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1		Analysis Time..: 13:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1W

TOTAL Metals

Lot-Sample #...: F0G270337-003 Matrix.....: WATER
Date Sampled...: 07/26/00 16:20 Date Received..: 07/27/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW2108
		Dilution Factor: 1		Analysis Time..: 08:51		
Arsenic	82.8	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW2104
		Dilution Factor: 1		Analysis Time..: 08:51		
Barium	1620	200	ug/L	SW846 6010B	07/31-08/04/00	DGXW2105
		Dilution Factor: 1		Analysis Time..: 08:51		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW2109
		Dilution Factor: 1		Analysis Time..: 08:51		
Chromium	301	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW210A
		Dilution Factor: 1		Analysis Time..: 08:51		
Lead	105	3.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW2106
		Dilution Factor: 1		Analysis Time..: 08:51		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW2107
		Dilution Factor: 1		Analysis Time..: 08:51		
Prep Batch #...: 0213275						
Mercury	0.43	0.20	ug/L	SW846 7470A	07/31-08/01/00	DGXW210C
		Dilution Factor: 1		Analysis Time..: 10:16		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1W

TOTAL Metals

Lot-Sample #...: F0G270337-004 Matrix.....: WATER
Date Sampled...: 07/26/00 17:00 Date Received..: 07/27/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW7108
		Dilution Factor: 1		Analysis Time..: 08:55		
Arsenic	23.2	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW7104
		Dilution Factor: 1		Analysis Time..: 08:55		
Barium	637	200	ug/L	SW846 6010B	07/31-08/04/00	DGXW7105
		Dilution Factor: 1		Analysis Time..: 08:55		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW7109
		Dilution Factor: 1		Analysis Time..: 08:55		
Chromium	54.6	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW710A
		Dilution Factor: 1		Analysis Time..: 08:55		
Lead	19.2	3.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW7106
		Dilution Factor: 1		Analysis Time..: 08:55		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXW7107
		Dilution Factor: 1		Analysis Time..: 08:55		
Prep Batch #...: 0213275						
Mercury	0.077 B	0.20	ug/L	SW846 7470A	07/31-08/01/00	DGXW710C
		Dilution Factor: 1		Analysis Time..: 10:25		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B27I6W

TOTAL Metals

Lot-Sample #...: F0G270337-008 Matrix.....: WATER
Date Sampled...: 07/26/00 09:50 Date Received..: 07/27/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXWJ106
		Dilution Factor: 1		Analysis Time..: 09:00		
Arsenic	16.1	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXWJ102
		Dilution Factor: 1		Analysis Time..: 09:00		
Barium	1020	200	ug/L	SW846 6010B	07/31-08/04/00	DGXWJ103
		Dilution Factor: 1		Analysis Time..: 09:00		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXWJ107
		Dilution Factor: 1		Analysis Time..: 09:00		
Chromium	2650	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXWJ108
		Dilution Factor: 1		Analysis Time..: 09:00		
Lead	33.2	3.0	ug/L	SW846 6010B	07/31-08/04/00	DGXWJ104
		Dilution Factor: 1		Analysis Time..: 09:00		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXWJ105
		Dilution Factor: 1		Analysis Time..: 09:00		
Prep Batch #...: 0213275						
Mercury	0.087 B	0.20	ug/L	SW846 7470A	07/31-08/01/00	DGXWJ109
		Dilution Factor: 1		Analysis Time..: 10:14		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW1-W

TOTAL Metals

Lot-Sample #...: F0G270337-011 Matrix.....: WATER
Date Sampled...: 07/27/00 13:20 Date Received..: 07/27/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXX310A
		Dilution Factor: 1		Analysis Time..: 09:05		
Arsenic	11.9	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXX3106
		Dilution Factor: 1		Analysis Time..: 09:05		
Barium	479	200	ug/L	SW846 6010B	07/31-08/04/00	DGXX3107
		Dilution Factor: 1		Analysis Time..: 09:05		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXX310C
		Dilution Factor: 1		Analysis Time..: 09:05		
Chromium	57.6	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXX310D
		Dilution Factor: 1		Analysis Time..: 09:05		
Lead	18.8	3.0	ug/L	SW846 6010B	07/31-08/04/00	DGXX3108
		Dilution Factor: 1		Analysis Time..: 09:05		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXX3109
		Dilution Factor: 1		Analysis Time..: 09:05		
Prep Batch #...: 0213275						
Mercury	0.075 B	0.20	ug/L	SW846 7470A	07/31-08/01/00	DGXX310E
		Dilution Factor: 1		Analysis Time..: 10:36		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW2-W

TOTAL Metals

Lot-Sample #...: F0G270337-012 Matrix.....: WATER
Date Sampled...: 07/27/00 14:00 Date Received..: 07/27/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXC10A
		Dilution Factor: 1		Analysis Time..: 09:09		
Arsenic	16.8	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXC106
		Dilution Factor: 1		Analysis Time..: 09:09		
Barium	664	200	ug/L	SW846 6010B	07/31-08/04/00	DGXXC107
		Dilution Factor: 1		Analysis Time..: 09:09		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXC10C
		Dilution Factor: 1		Analysis Time..: 09:09		
Chromium	140	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXC10D
		Dilution Factor: 1		Analysis Time..: 09:09		
Lead	27.5	3.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXC108
		Dilution Factor: 1		Analysis Time..: 09:09		
Selenium	5.0	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXC109
		Dilution Factor: 1		Analysis Time..: 09:09		
Prep Batch #...: 0213275						
Mercury	0.083 B	0.20	ug/L	SW846 7470A	07/31-08/01/00	DGXXC10E
		Dilution Factor: 1		Analysis Time..: 10:27		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW4-W

TOTAL Metals

Lot-Sample #...: F0G270337-013 Matrix.....: WATER
Date Sampled...: 07/27/00 11:55 Date Received..: 07/27/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXF10A
		Dilution Factor: 1		Analysis Time..: 09:23		
Arsenic	34.9	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXF106
		Dilution Factor: 1		Analysis Time..: 09:23		
Barium	783	200	ug/L	SW846 6010B	07/31-08/04/00	DGXXF107
		Dilution Factor: 1		Analysis Time..: 09:23		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXF10C
		Dilution Factor: 1		Analysis Time..: 09:23		
Chromium	153	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXF10D
		Dilution Factor: 1		Analysis Time..: 09:23		
Lead	49.3	3.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXF108
		Dilution Factor: 1		Analysis Time..: 09:23		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXF109
		Dilution Factor: 1		Analysis Time..: 09:23		
Prep Batch #...: 0213275						
Mercury	0.11 B	0.20	ug/L	SW846 7470A	07/31-08/01/00	DGXXF10E
		Dilution Factor: 1		Analysis Time..: 10:29		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW6-W

TOTAL Metals

Lot-Sample #...: F0G270337-014 Matrix.....: WATER
Date Sampled...: 07/27/00 10:25 Date Received..: 07/27/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXP10A
		Dilution Factor: 1		Analysis Time..: 09:28		
Arsenic	17.3	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXP106
		Dilution Factor: 1		Analysis Time..: 09:28		
Barium	929	200	ug/L	SW846 6010B	07/31-08/04/00	DGXXP107
		Dilution Factor: 1		Analysis Time..: 09:28		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXP10C
		Dilution Factor: 1		Analysis Time..: 09:28		
Chromium	146	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXP10D
		Dilution Factor: 1		Analysis Time..: 09:28		
Lead	39.2	3.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXP108
		Dilution Factor: 1		Analysis Time..: 09:28		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXP109
		Dilution Factor: 1		Analysis Time..: 09:28		
Prep Batch #...: 0213275						
Mercury	0.13 B	0.20	ug/L	SW846 7470A	07/31-08/01/00	DGXXP10E
		Dilution Factor: 1		Analysis Time..: 10:32		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW8-W

TOTAL Metals

Lot-Sample #...: F0G270337-015 Matrix.....: WATER
Date Sampled...: 07/27/00 11:05 Date Received..: 07/27/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXX10A
		Dilution Factor: 1		Analysis Time..: 09:32		
Arsenic	17.3	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXX106
		Dilution Factor: 1		Analysis Time..: 09:32		
Barium	711	200	ug/L	SW846 6010B	07/31-08/04/00	DGXXX107
		Dilution Factor: 1		Analysis Time..: 09:32		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXX10C
		Dilution Factor: 1		Analysis Time..: 09:32		
Chromium	95.7	10.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXX10D
		Dilution Factor: 1		Analysis Time..: 09:32		
Lead	26.7	3.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXX108
		Dilution Factor: 1		Analysis Time..: 09:32		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DGXXX109
		Dilution Factor: 1		Analysis Time..: 09:32		
Prep Batch #...: 0213275						
Mercury	0.10 B	0.20	ug/L	SW846 7470A	07/31-08/01/00	DGXXX10E
		Dilution Factor: 1		Analysis Time..: 10:34		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28E1-6

TOTAL Metals

Matrix.....: SOLID

Lot-Sample #...: F0G270337-016
Date Sampled...: 07/26/00 09:05 Date Received..: 07/27/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	ND	0.043	mg/kg	SW846 7471A	07/31/00	DH004108
		Dilution Factor: 1		Analysis Time..: 17:30		
Prep Batch #...: 0213224						
Silver	ND	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DH004101
		Dilution Factor: 1		Analysis Time..: 19:21		
Arsenic	3.0	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DH004102
		Dilution Factor: 1		Analysis Time..: 19:21		
Barium	82.6	25.7	mg/kg	SW846 6010B	07/31-08/01/00	DH004103
		Dilution Factor: 1		Analysis Time..: 19:21		
Cadmium	ND	0.64	mg/kg	SW846 6010B	07/31-08/01/00	DH004104
		Dilution Factor: 1		Analysis Time..: 19:21		
Chromium	10.5	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DH004105
		Dilution Factor: 1		Analysis Time..: 19:21		
Lead	7.1	0.39	mg/kg	SW846 6010B	07/31-08/01/00	DH004106
		Dilution Factor: 1		Analysis Time..: 19:21		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/31-08/01/00	DH004107
		Dilution Factor: 1		Analysis Time..: 19:21		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: B28N1-7

TOTAL Metals

Lot-Sample #...: F0G270337-017 Matrix.....: SOLID
Date Sampled...: 07/26/00 09:25 Date Received..: 07/27/00
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0209271						
Mercury	0.038 B	0.043	mg/kg	SW846 7471A	07/31/00	DH00H108
		Dilution Factor: 1		Analysis Time..: 17:27		
Prep Batch #...: 0213224						
Silver	ND	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DH00H101
		Dilution Factor: 1		Analysis Time..: 19:26		
Arsenic	6.1	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DH00H102
		Dilution Factor: 1		Analysis Time..: 19:26		
Barium	118	25.7	mg/kg	SW846 6010B	07/31-08/01/00	DH00H103
		Dilution Factor: 1		Analysis Time..: 19:26		
Cadmium	ND	0.64	mg/kg	SW846 6010B	07/31-08/01/00	DH00H104
		Dilution Factor: 1		Analysis Time..: 19:26		
Chromium	13.0	1.3	mg/kg	SW846 6010B	07/31-08/01/00	DH00H105
		Dilution Factor: 1		Analysis Time..: 19:26		
Lead	8.0	0.39	mg/kg	SW846 6010B	07/31-08/01/00	DH00H106
		Dilution Factor: 1		Analysis Time..: 19:26		
Selenium	ND	0.64	mg/kg	SW846 6010B	07/31-08/01/00	DH00H107
		Dilution Factor: 1		Analysis Time..: 19:26		

NOTE(S):

B Estimated result. Result is less than RL.

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H030000-470
Analysis Date..: 08/03/00
Dilution Factor: 1

Work Order #...: DHC1L101
Prep Date.....: 08/02/00
Prep Batch #...: 0216470

Matrix.....: WATER
Analysis Time..: 23:46

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	0.50	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	69	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G270337
MB Lot-Sample #: F0H030000-476

Work Order #...: DHC43101

Matrix.....: WATER

Prep Date.....: 08/02/00
Prep Batch #...: 0216476

Analysis Time..: 03:17

Analysis Date..: 08/04/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	5.0	ug/L	SW846 8310
Acenaphthylene	ND	5.0	ug/L	SW846 8310
Anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)pyrene	ND	5.0	ug/L	SW846 8310
Benzo(b)fluoranthene	ND	5.0	ug/L	SW846 8310
Benzo(ghi)perylene	ND	5.0	ug/L	SW846 8310
Benzo(k)fluoranthene	ND	5.0	ug/L	SW846 8310
Chrysene	ND	5.0	ug/L	SW846 8310
Dibenz(a,h)anthracene	ND	5.0	ug/L	SW846 8310
Fluoranthene	ND	5.0	ug/L	SW846 8310
Fluorene	ND	5.0	ug/L	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L	SW846 8310
Naphthalene	ND	5.0	ug/L	SW846 8310
Phenanthrene	ND	5.0	ug/L	SW846 8310
Pyrene	ND	5.0	ug/L	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	66	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H030000-480

Work Order #...: DHC7H101

Matrix.....: WATER

Prep Date.....: 08/02/00
Prep Batch #...: 0216480

Analysis Time..: 17:34

Analysis Date..: 08/07/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	121	(12 - 167)
Decachlorobiphenyl	117	(10 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G270337
MB Lot-Sample #: F0H040000-527

Work Order #...: DHEN0101

Matrix.....: SOLID

Prep Date.....: 08/04/00
Prep Batch #...: 0217527

Analysis Time..: 16:52

Analysis Date..: 08/06/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	30	ug/kg	SW846 8310
Acenaphthylene	ND	30	ug/kg	SW846 8310
Anthracene	ND	30	ug/kg	SW846 8310
Benzo(a)anthracene	ND	15	ug/kg	SW846 8310
Benzo(a)pyrene	ND	15	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	15	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	30	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	15	ug/kg	SW846 8310
Chrysene	ND	15	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	30	ug/kg	SW846 8310
Fluoranthene	ND	30	ug/kg	SW846 8310
Fluorene	ND	30	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	15	ug/kg	SW846 8310
Naphthalene	ND	30	ug/kg	SW846 8310
Phenanthrene	ND	30	ug/kg	SW846 8310
Pyrene	ND	30	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H080000-249
Analysis Date..: 08/07/00
Dilution Factor: 1

Work Order #...: DHHH7101
Prep Date.....: 08/07/00
Prep Batch #...: 0221249

Matrix.....: WATER
Analysis Time..: 18:33

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	81	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H080000-367

Work Order #...: DHJ26101

Matrix.....: SOLID

Prep Date.....: 08/07/00
Prep Batch #...: 0221367

Analysis Time..: 18:33

Analysis Date..: 08/07/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	81	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H080000-368

Work Order #...: DHJ28101

Matrix.....: SOLID

Prep Date.....: 08/07/00
Prep Batch #...: 0221368

Analysis Time..: 18:33

Analysis Date..: 08/07/00
Dilution Factor: 5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.50	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	81	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G270337
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD			pCi/g	900.0 MOD			F0H010000-146B	
Gross Alpha	8E-02	U	1.7E-01	3.2E-01	08/01/00	08/09/00	0214146	
Gross Beta	2.2E-01	U	3.5E-01	6.0E-01	08/01/00	08/09/00	0214146	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only

Bold results are greater than the MDC

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G270337
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			**pCi/L**	**9310 MOD**			**F0G280000-264B**	
Gross Alpha	-10E-02	U	4.3E-01	8.7E-01	07/28/00	08/02/00	0210264	
Gross Beta	4E-01	U	1.0E+00	1.7E+00	07/28/00	08/02/00	0210264	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only

Bold results are greater than the MDC

U Result is less than the sample detection limit.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0G310000-175
Analysis Date..: 08/01/00
Dilution Factor: 1

Work Order #...: DH3J5101
Prep Date.....: 07/29/00
Prep Batch #...: 0213175

Matrix.....: SOLID
Analysis Time..: 02:23

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	25	mg/kg	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	39	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0G310000-262

Work Order #...: DH3Q4101

Matrix.....: SOLID

Prep Date.....: 07/30/00
Prep Batch #...: 0213262

Analysis Time..: 11:54

Analysis Date..: 07/30/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	97	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	110	(60 - 140)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G270337 Work Order #...: DH3Q4101 Matrix.....: SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H010000-138

Analysis Date..: 07/31/00
Dilution Factor: 1

Work Order #...: DH4Q3101

Prep Date.....: 07/31/00
Prep Batch #...: 0214138

Matrix.....: WATER

Analysis Time..: 10:36

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**0.97 J,B**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	98	(78 - 124)
Toluene-d8	105	(71 - 129)
Dibromofluoromethane	101	(74 - 135)
1,2-Dichloroethane-d4	92	(70 - 130)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G270337 Work Order #...: DH4Q3101 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H020000-145

Work Order #...: DH6PG101

Matrix.....: SOLID

Prep Date.....: 08/01/00
Prep Batch #...: 0215145

Analysis Time..: 11:25

Analysis Date..: 08/03/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	113	(10 - 199)
Decachlorobiphenyl	124	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H020000-223

Analysis Date..: 08/01/00
Dilution Factor: 1

Work Order #...: DH6W5101

Prep Date.....: 08/01/00
Prep Batch #...: 0215223

Matrix.....: SOLID

Analysis Time..: 09:07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	**16 J**	**20**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	91	(82 - 119)
Dibromofluoromethane	97	(82 - 132)
1,2-Dichloroethane-d4	107	(60 - 140)

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GC/MS Volatiles

Client Lot #...: F0G270337 Work Order #...: DH6W5101 Matrix.....: SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H030000-134

Work Order #...: DH8QP101

Matrix.....: WATER

Prep Date.....: 08/02/00
Prep Batch #...: 0216134

Analysis Time..: 07:21

Analysis Date..: 08/02/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**1.3**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	112	(78 - 124)
Toluene-d8	97	(71 - 129)
Dibromofluoromethane	109	(74 - 135)
1,2-Dichloroethane-d4	96	(70 - 130)

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GC/MS Volatiles

Client Lot #...: F0G270337 Work Order #...: DH8QP101 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
MB Lot-Sample #: F0H030000-156

Work Order #...: DH8WQ101

Matrix.....: SOLID

Prep Date.....: 08/02/00
Prep Batch #...: 0216156

Analysis Time..: 12:43

Analysis Date..: 08/02/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	**18 J**	**20**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	77	(73 - 109)
Toluene-d8	98	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
1,2-Dichloroethane-d4	112	(60 - 140)

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GC/MS Volatiles

Client Lot #...: F0G270337 Work Order #...: DH8WQ101 Matrix.....: SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G270337

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G270000-271 **Prep Batch #...:** 0209271						
Mercury	ND	0.033	mg/kg	SW846 7471A	07/31/00	DGWEH101
		Dilution Factor: 1				
		Analysis Time..: 16:53				
MB Lot-Sample #: F0G310000-224 **Prep Batch #...:** 0213224						
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/31-08/01/00	DH3M910J
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Barium	ND	20.0	mg/kg	SW846 6010B	07/31-08/01/00	DH3M911H
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/31-08/01/00	DH3M911J
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Chromium	ND	1.0	mg/kg	SW846 6010B	07/31-08/01/00	DH3M911K
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Lead	ND	0.30	mg/kg	SW846 6010B	07/31-08/01/00	DH3M910K
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/31-08/01/00	DH3M910L
		Dilution Factor: 1				
		Analysis Time..: 18:13				
Silver	ND	1.0	mg/kg	SW846 6010B	07/31-08/01/00	DH3M911G
		Dilution Factor: 1				
		Analysis Time..: 18:13				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G270337 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DH5NK101		MB Lot-Sample #:	F0H010000-315	
	ND	5.0	ug/L	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1				
		Analysis Time..: 16:00				
Cyanide, Total		Work Order #: DH6T1101		MB Lot-Sample #:	F0H020000-187	
	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1				
		Analysis Time..: 13:00				
Reactive Cyanide		Work Order #: DHA2Q101		MB Lot-Sample #:	F0H030000-383	
	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1				
		Analysis Time..: 13:30				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G270337

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G310000-220 **Prep Batch #...:** 0213220						
Arsenic	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M310H
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Barium	ND	200	ug/L	SW846 6010B	07/31-08/04/00	DH3M3127
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M3129
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Chromium	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M312A
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Lead	ND	3.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M310J
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M310K
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M3128
		Dilution Factor: 1				
		Analysis Time..: 08:37				
MB Lot-Sample #: F0G310000-275 **Prep Batch #...:** 0213275						
Mercury	ND	0.20	ug/L	SW846 7470A	07/31-08/01/00	DH3RM101
		Dilution Factor: 1				
		Analysis Time..: 10:06				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H030000-470
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DHC1L102-LCS
DHC1L103-LCSD
Analysis Date..: 08/04/00
Analysis Time..: 00:10

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	65	(10 - 148)			SW846 8015 MOD
	70	(10 - 148)	8.2	(0-25)	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	85	(10 - 150)
	86	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H030000-476
Prep Date.....: 08/02/00
Prep Batch #...: 0216476
Dilution Factor: 1

Work Order #...: DHC43102-LCS
DHC43103-LCSD
Analysis Date..: 08/04/00
Analysis Time..: 03:43

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	79	(45 - 134)			SW846 8310
	89	(45 - 134)	11	(0-82)	SW846 8310
Acenaphthylene	77	(46 - 124)			SW846 8310
	89	(46 - 124)	14	(0-56)	SW846 8310
Anthracene	60	(28 - 158)			SW846 8310
	66	(28 - 158)	8.4	(0-46)	SW846 8310
Benzo(a)anthracene	76	(52 - 132)			SW846 8310
	79	(52 - 132)	3.2	(0-43)	SW846 8310
Benzo(a)pyrene	73	(22 - 117)			SW846 8310
	75	(22 - 117)	2.6	(0-67)	SW846 8310
Benzo(b)fluoranthene	86	(39 - 109)			SW846 8310
	89	(39 - 109)	3.6	(0-47)	SW846 8310
Benzo(ghi)perylene	78	(10 - 115)			SW846 8310
	81	(10 - 115)	4.1	(0-72)	SW846 8310
Benzo(k)fluoranthene	77	(25 - 116)			SW846 8310
	79	(25 - 116)	2.6	(0-50)	SW846 8310
Chrysene	76	(29 - 130)			SW846 8310
	78	(29 - 130)	2.9	(0-76)	SW846 8310
Dibenz(a,h)anthracene	78	(10 - 122)			SW846 8310
	82	(10 - 122)	4.9	(0-62)	SW846 8310
Fluoranthene	76	(36 - 126)			SW846 8310
	79	(36 - 126)	3.8	(0-43)	SW846 8310
Fluorene	72	(52 - 128)			SW846 8310
	77	(52 - 128)	6.9	(0-60)	SW846 8310
Indeno(1,2,3-cd)pyrene	81	(10 - 101)			SW846 8310
	84	(10 - 101)	4.5	(0-66)	SW846 8310
Naphthalene	82	(42 - 102)			SW846 8310
	89	(42 - 102)	8.1	(0-44)	SW846 8310
Phenanthrene	72	(49 - 126)			SW846 8310
	76	(49 - 126)	5.4	(0-50)	SW846 8310
Pyrene	64	(14 - 116)			SW846 8310
	67	(14 - 116)	3.8	(0-46)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	66	(27 - 128)
	67	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H030000-480
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DHC7H102-LCS
DHC7H103-LCSD
Analysis Date..: 08/07/00
Analysis Time..: 17:48

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**123**	**(58 - 125)**			**SW846 8082**
	121	**(58 - 125)**	**1.4**	**(0-20)**	**SW846 8082**
Aroclor 1260	**114**	**(58 - 124)**			**SW846 8082**
	112	**(58 - 124)**	**1.2**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	125	(39 - 153)
	127	(39 - 153)
Decachlorobiphenyl	120	(10 - 127)
	122	(10 - 127)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0G310000-175
Prep Date.....: 07/29/00
Prep Batch #...: 0213175
Dilution Factor: 1

Work Order #...: DH3J5102-LCS
DH3J5103-LCSD
Analysis Date..: 08/01/00
Analysis Time..: 02:50

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**44**	**(10 - 164)**			**SW846 8015 MOD**
	56	**(10 - 164)**	**24**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	54	(10 - 150)
	62	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G270337

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	112	(58 - 142)			SW846 7471A	07/31/00	0209271
	101	(58 - 142)	9.7	(0-20)	SW846 7471A	07/31/00	0209271

Dilution Factor: 5

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G270337 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DH5NK102-LCS/DH5NK103-LCSD				LCS Lot-Sample#: F0H010000-315	
	94	(80 - 120)			SW846 9012A	07/31-08/01/00	0214315
	92	(80 - 120)	1.4	(0-20)	SW846 9012A	07/31-08/01/00	0214315
		Dilution Factor: 1					
Cyanide, Total		WO#:DH6T1102-LCS/DH6T1103-LCSD				LCS Lot-Sample#: F0H020000-187	
	97	(80 - 120)			SW846 9012A	08/01/00	0215187
	103	(80 - 120)	5.9	(0-20)	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1					
Reactive Cyanide		WO#:DHA2Q102-LCS/DHA2Q103-LCSD				LCS Lot-Sample#: F0H030000-383	
	14 N	(0.0- 0.0)			SW846 7.3.3	08/03/00	0216383
	16 N,*	(0.0- 0.0)	11	(0-0.0)	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G270337 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Arsenic	107	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	106	(80 - 120)	1.1	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Barium	106	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	104	(80 - 120)	1.2	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Cadmium	106	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	105	(80 - 120)	1.0	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Chromium	104	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	103	(80 - 120)	1.6	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Lead	103	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	102	(80 - 120)	1.2	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Selenium	105	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	104	(80 - 120)	1.2	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Silver	105	(49 - 135)			SW846 6010B	07/31-08/04/00	0213220
	105	(49 - 135)	0.35	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Mercury	86	(80 - 120)			SW846 7470A	07/31-08/01/00	0213275
	86	(80 - 120)	0.81	(0-20)	SW846 7470A	07/31-08/01/00	0213275
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H040000-527
Prep Date.....: 08/04/00
Prep Batch #...: 0217527
Dilution Factor: 1

Work Order #...: DHEN0102
Analysis Date..: 08/06/00
Analysis Time..: 17:18

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	58	(22 - 109)	SW846 8310
Acenaphthylene	66	(9.0- 125)	SW846 8310
Anthracene	53	(45 - 110)	SW846 8310
Benzo(a)anthracene	66	(43 - 132)	SW846 8310
Benzo(a)pyrene	59	(24 - 156)	SW846 8310
Benzo(b)fluoranthene	73	(46 - 132)	SW846 8310
Benzo(ghi)perylene	65	(50 - 104)	SW846 8310
Benzo(k)fluoranthene	65	(47 - 126)	SW846 8310
Chrysene	66	(39 - 142)	SW846 8310
Dibenz(a,h)anthracene	72	(52 - 110)	SW846 8310
Fluoranthene	65	(16 - 131)	SW846 8310
Fluorene	60	(40 - 108)	SW846 8310
Indeno(1,2,3-cd)pyrene	67	(49 - 124)	SW846 8310
Naphthalene	62	(20 - 115)	SW846 8310
Phenanthrene	63	(50 - 103)	SW846 8310
Pyrene	56	(48 - 100)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	57	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H080000-249
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DHHH7102
Analysis Date..: 08/07/00
Analysis Time..: 22:32

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**98**	**(70 - 130)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	117	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H080000-367
Prep Date.....: 08/07/00
Prep Batch #...: 0221367
Dilution Factor: 1

Work Order #...: DHJ26102
Analysis Date..: 08/07/00
Analysis Time..: 22:32

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**98**	**(50 - 150)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	117	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G270337 **Work Order #...:** DHJ28102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0H080000-368
Prep Date.....: 08/07/00 **Analysis Date..:** 08/07/00
Prep Batch #...: 0221368 **Analysis Time..:** 22:32
Dilution Factor: 5

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**98**	**(50 - 150)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	117	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Laboratory Control Sample Report

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G270337
Matrix: SOLID

Parameter	Spike Amount	Result		Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec		Lab Sample ID QC Control Limits
GROSS A/B BY GFPC EPA 900.0 MOD		**pCi/g**			**900.0 MOD**				**F0H010000-146C**
Gross Alpha	7.49E+01	9.7E+01	+	1.0E+01	3E-01		129	+	48 - 147
Gross Beta	7.18E+01	7.66E+01		7.8E+00	6E-01		107		68 - 145
	Batch #:	0214146			**AnalysisDate**	08/09/00			

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

\+ For informational purposes only. The detection limit does not follow significant figures SOP.

Laboratory Control Sample Report

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G270337
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
GROSS A/B BY GFPC SW846 9310 MOD		pCi/L		9310 MOD			F0G280000-264C
Gross Alpha	4.50E+01	4.66E+01	5.4E+00	10E-01		104	67 - 125
	Batch #:	0210264		AnalysisDate	08/02/00		
GROSS A/B BY GFPC SW846 9310 MOD		pCi/L		9310 MOD			F0G280000-264C
Gross Beta	9.61E+01	8.71E+01	9.1E+00	1.8E+00		91	64 - 125
	Batch #:	0210264		AnalysisDate	08/02/00		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results
For informational purposes only. The detection limit does not follow significant figures SOP.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0G310000-262
Prep Date.....: 07/30/00
Prep Batch #...: 0213262
Dilution Factor: 1

Work Order #...: DH3Q4102
Analysis Date..: 07/30/00
Analysis Time..: 12:28

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**84**	**(72 - 120)**	**SW846 8260B**
Benzene	**92**	**(79 - 125)**	**SW846 8260B**
Toluene	**92**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**89**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**113**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	81	(73 - 109)
Toluene-d8	94	(82 - 119)
Dibromofluoromethane	99	(82 - 132)
1,2-Dichloroethane-d4	105	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H010000-138
Prep Date.....: 07/31/00
Prep Batch #...: 0214138
Dilution Factor: 1

Work Order #...: DH4Q3102
Analysis Date..: 07/31/00
Analysis Time..: 11:13

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**100**	**(71 - 120)**	**SW846 8260B**
Benzene	**107**	**(76 - 127)**	**SW846 8260B**
Toluene	**101**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**101**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**108**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	102	(78 - 124)
Toluene-d8	103	(71 - 129)
Dibromofluoromethane	104	(74 - 135)
1,2-Dichloroethane-d4	92	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G270337 **Work Order #...:** DH6PG102 **Matrix.....:** SOLID
LCS Lot-Sample#: F0H020000-145
Prep Date.....: 08/01/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0215145 **Analysis Time..:** 11:38
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**78**	**(74 - 127)**	**SW846 8082**
Aroclor 1260	**83**	**(74 - 129)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(62 - 162)
Decachlorobiphenyl	98	(53 - 145)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H020000-223
Prep Date.....: 08/01/00
Prep Batch #...: 0215223
Dilution Factor: 1

Work Order #...: DH6W5102
Analysis Date..: 08/01/00
Analysis Time..: 09:41

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**81**	**(72 - 120)**	**SW846 8260B**
Benzene	**93**	**(79 - 125)**	**SW846 8260B**
Toluene	**91**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**87**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**105**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	91	(82 - 119)
Dibromofluoromethane	95	(82 - 132)
1,2-Dichloroethane-d4	104	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H030000-134
Prep Date.....: 08/02/00
Prep Batch #...: 0216134
Dilution Factor: 1

Work Order #...: DH8QP102
Analysis Date..: 08/02/00
Analysis Time..: 07:58

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**99**	**(71 - 120)**	**SW846 8260B**
Benzene	**106**	**(76 - 127)**	**SW846 8260B**
Toluene	**98**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**90**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**107**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	109	(78 - 124)
Toluene-d8	94	(71 - 129)
Dibromofluoromethane	106	(74 - 135)
1,2-Dichloroethane-d4	90	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
LCS Lot-Sample#: F0H030000-156
Prep Date.....: 08/02/00
Prep Batch #...: 0216156
Dilution Factor: 1

Work Order #...: DH8WQ102
Analysis Date..: 08/02/00
Analysis Time..: 11:42

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**86**	**(72 - 120)**	**SW846 8260B**
Benzene	**97**	**(79 - 125)**	**SW846 8260B**
Toluene	**96**	**(75 - 124)**	**SW846 8260B**
Chlorobenzene	**93**	**(81 - 119)**	**SW846 8260B**
1,1-Dichloroethene	**107**	**(70 - 149)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	80	(73 - 109)
Toluene-d8	93	(82 - 119)
Dibromofluoromethane	98	(82 - 132)
1,2-Dichloroethane-d4	103	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G270337

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F0G310000-224 **Prep Batch #...:** 0213224					
Lead	105	(76 - 124)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911A
Selenium	103	(74 - 126)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911C
Silver	109	(75 - 126)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911L
Barium	108	(77 - 122)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911M
Cadmium	107	(77 - 122)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911N
Chromium	98	(77 - 123)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M911P
Arsenic	109	(72 - 128)	SW846 6010B Dilution Factor: 1 Analysis Time..: 18:17	07/31-08/01/00	DH3M9119

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
MS Lot-Sample #: F0G250295-017
Date Sampled...: 07/24/00 09:15
Prep Date.....: 07/30/00
Prep Batch #...: 0213262
Dilution Factor: 1

Work Order #...: DGRDC105-MS
DGRDC106-MSD
Date Received..: 07/25/00
Analysis Date..: 07/30/00
Analysis Time..: 14:24
% Moisture.....: 15

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**80**	**(72 - 120)**			**SW846 8260B**
	83	**(72 - 120)**	**2.8**	**(0-24)**	**SW846 8260B**
Benzene	**98**	**(79 - 125)**			**SW846 8260B**
	99	**(79 - 125)**	**0.46**	**(0-21)**	**SW846 8260B**
Toluene	**100**	**(75 - 124)**			**SW846 8260B**
	101	**(75 - 124)**	**0.75**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**90**	**(81 - 119)**			**SW846 8260B**
	92	**(81 - 119)**	**2.6**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**113**	**(70 - 149)**			**SW846 8260B**
	116	**(70 - 149)**	**2.7**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	55 *	(73 - 109)
	85	(73 - 109)
Toluene-d8	100	(82 - 119)
	103	(82 - 119)
Dibromofluoromethane	101	(82 - 132)
	102	(82 - 132)
1,2-Dichloroethane-d4	109	(60 - 140)
	110	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G270337
MS Lot-Sample #: F0G250295-011
Date Sampled...: 07/24/00 14:25
Prep Date.....: 08/01/00
Prep Batch #...: 0215145
Dilution Factor: 1

Work Order #...: DGRD3105-MS
DGRD3106-MSD
Date Received..: 07/25/00
Analysis Date..: 08/03/00
Analysis Time..: 12:06
% Moisture.....: 21

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**83**	**(10 - 200)**			**SW846 8082**
	83	**(10 - 200)**	**0.36**	**(0-20)**	**SW846 8082**
Aroclor 1260	**84**	**(10 - 183)**			**SW846 8082**
	82	**(10 - 183)**	**2.3**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(10 - 199)
	89	(10 - 199)
Decachlorobiphenyl	98	(10 - 200)
	97	(10 - 200)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G270337 Matrix.....: SOLID
Date Sampled...: 07/25/00 09:15 Date Received..: 07/26/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G260239-018 **Prep Batch #...:** 0209271							
Mercury	101	(75 - 125)			SW846 7471A	07/31/00	DGVA210G
	100	(75 - 125)	0.87	(0-20)	SW846 7471A	07/31/00	DGVA210H
		Dilution Factor: 1					
		Analysis Time..: 17:03					
MS Lot-Sample #: F0G260239-018 **Prep Batch #...:** 0213224							
Arsenic	94	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210L
	96	(75 - 125)	1.2	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210M
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Barium	86	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210N
	108	(75 - 125)	13	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210P
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Cadmium	90	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210Q
	93	(75 - 125)	3.2	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210R
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Chromium	58 N	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210T
	49 N	(75 - 125)	1.9	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210U
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Lead	85	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210V
	100	(75 - 125)	13	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210W
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Selenium	93	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210X
	91	(75 - 125)	1.6	(0-20)	SW846 6010B	07/31-08/01/00	DGVA2110
		Dilution Factor: 1					
		Analysis Time..: 18:40					
Silver	93	(75 - 125)			SW846 6010B	07/31-08/01/00	DGVA210J
	89	(75 - 125)	4.7	(0-20)	SW846 6010B	07/31-08/01/00	DGVA210K
		Dilution Factor: 1					
		Analysis Time..: 18:40					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G270337
MS Lot-Sample #: F0G270337-001
Date Sampled...: 07/26/00 12:00
Prep Date.....: 08/07/00
Prep Batch #...: 0221249
Dilution Factor: 1

Work Order #...: DGXVX102-MS
DGXVX103-MSD
Date Received..: 07/27/00
Analysis Date..: 08/07/00
Analysis Time..: 21:40

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Volatile Petroleum	**108**	**(70 - 130)**			**SW846 8015 MOD**
Hydrocarbons	**113**	**(70 - 130)**	**4.7**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	301 *	(70 - 130)
	303 *	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G270337
MS Lot-Sample #: F0G270362-001
Date Sampled...: 07/24/00
Prep Date.....: 08/01/00
Prep Batch #...: 0215223
Dilution Factor: 5

Work Order #...: DH053102-MS
DH053103-MSD
Date Received..: 07/27/00
Analysis Date..: 08/01/00
Analysis Time..: 16:59
% Moisture.....: 0.0

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**75**	**(72 - 120)**			**SW846 8260B**
	81	**(72 - 120)**	**8.7**	**(0-24)**	**SW846 8260B**
Benzene	**102**	**(79 - 125)**			**SW846 8260B**
	100	**(79 - 125)**	**1.9**	**(0-21)**	**SW846 8260B**
Toluene	**84**	**(75 - 124)**			**SW846 8260B**
	38 a,p	**(75 - 124)**	**28**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**93**	**(81 - 119)**			**SW846 8260B**
	96	**(81 - 119)**	**3.8**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**129**	**(70 - 149)**			**SW846 8260B**
	118	**(70 - 149)**	**8.7**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	96	(73 - 109)
	94	(73 - 109)
Toluene-d8	106	(82 - 119)
	108	(82 - 119)
Dibromofluoromethane	119	(82 - 132)
	106	(82 - 132)
1,2-Dichloroethane-d4	136	(60 - 140)
	121	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G270337 **Matrix.....:** WATER
Date Sampled...: 07/25/00 02:40 **Date Received..:** 07/25/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G280210-001 **Prep Batch #...:** 0213275							
Mercury	87	(75 - 125)			SW846 7470A	07/31-08/01/00	DH19G102
	86	(75 - 125)	0.57	(0-20)	SW846 7470A	07/31-08/01/00	DH19G103

Dilution Factor: 1
Analysis Time..: 10:44

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Lot-Sample #...: F0G270337
MS Lot-Sample #: F0G270337-016
Date Sampled...: 07/26/00 09:05
Prep Date.....: 08/04/00
Prep Batch #...: 0217527
Dilution Factor: 1

Work Order #...: DH00420G
Date Received..: 07/27/00
Analysis Date..: 08/06/00
Percnt Moisture: 22

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	0	(22 - 109)	SW846 8310
Acenaphthylene	0	(9.0- 125)	SW846 8310
Anthracene	0	(45 - 110)	SW846 8310
Benzo(a)anthracene	0	(28 - 121)	SW846 8310
Benzo(a)pyrene	0	(13 - 136)	SW846 8310
Benzo(b)fluoranthene	0	(28 - 124)	SW846 8310
Benzo(ghi)perylene	0	(50 - 104)	SW846 8310
Benzo(k)fluoranthene	0	(29 - 116)	SW846 8310
Chrysene	0	(10 - 173)	SW846 8310
Dibenz(a,h)anthracene	0	(52 - 110)	SW846 8310
Fluoranthene	0	(16 - 131)	SW846 8310
Fluorene	0	(40 - 108)	SW846 8310
Indeno(1,2,3-cd)pyrene	0	(29 - 117)	SW846 8310
Naphthalene	0	(20 - 115)	SW846 8310
Phenanthrene	0	(50 - 103)	SW846 8310
Pyrene	0	(48 - 100)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(44 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

DUPLICATE EVALUATION REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G270337
Work Order #: DH00
Matrix: SOLID

Date Sampled: 07/26/00
Date Received: 07/27/00

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
GROSS A/B BY GFPC EPA 900.0	**pCi/g**			**900.0 MOD**					**F0G270337-020**	
Gross Alpha	-5E-02	U	1.3E-01		6E-02	U	1.3E-01		3,530	%RPD
Gross Beta	1.14E+00	J	5.9E-01		1.8E-01	U	3.9E-01		145	%RPD
	Batch #:		0214146 (Sample)		0214146 (Duplicate)					

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G270337
Work Order #: DGRP
Matrix: WATER

Date Sampled: 07/21/00
Date Received: 07/25/00

Parameter	SAMPLE Result		Total Uncert. (2σ +/-)	% Yld	DUPLICATE Result	Total Uncert. (2 σ +/-)	% Yld	QC Sample ID Precision	
GROSS A/B BY GFPC SW846		**pCi/L**		**9310 MOD**				**A0G260107-001**	
Gross Alpha	1E-01	U	3.6E+00		-1.4E+00 U	3.2E+00		-245	%RPD
Gross Beta	5.9E+00	U	4.4E+00		1.03E+01	4.5E+00		55	%RPD
	Batch #:		0210264 (Sample)		0210264 (Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-001
PROJECT #: WORK ORDER: DGXVX
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 2X40 REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 12:00
MATRIX: WATER RECEIVING TIME: 11:30
SAMPLE ID: B27I2W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00

PURGE AND TRAP - 5 mL purge
(I-15-WU-01) DGXVX-1-01 Protocol: A QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-002
PROJECT #: WORK ORDER: DGXW1
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,LG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:20
MATRIX: WATER RECEIVING TIME: 11:30
SAMPLE ID: B29AW1W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXW1-1-01 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/02/00	9/11/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXW1-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXW1-1-03 Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-003
PROJECT #: WORK ORDER: DGXW2
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,500P,3XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 16:20
MATRIX: WATER RECEIVING TIME: 11:30
SAMPLE ID: B28E1W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXW2-1-01 Protocol: A QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/27/00	8/02/00	9/11/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGXW2-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/02/00	9/11/00
LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal				
(I-10-SG-01) DGXW2-1-03 Protocol: A QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/27/00	0/00/00	1/22/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGXW2 Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/27/00	0/00/00	8/23/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGXW2 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/02/00	9/11/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXW2-1-0D Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXW2-1-0E Protocol: A QC Program: STANDARD TEST SET				

PSL20300
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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/27/00
Time: 17:25:30
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,500P,3XLG
STORAGE LOC: V7B,T6F
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: B28N1W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G270337-004
WORK ORDER: DGXW7
RECEIVING DATE: 7/27/00
SAMPLING DATE: 7/26/00
ANALYTICAL DUE DATE: 8/03/00N
REPORT DUE DATE: 8/07/00
PRIORITY: 07
SAMPLING TIME: 17:00
RECEIVING TIME: 11:30
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B) PURGE AND TRAP - 25 mL purge (Waters) STL: VOA CLP 3/90 (I-25-QK-01) DGXW7-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	0/00/00	8/09/00
PCBs (8082) LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal STL: Aroclors (I-60-QH-01) DGXW7-1-02 Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	8/02/00	9/11/00
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGXW7-1-03 Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	8/02/00	9/11/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGXW7 Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	0/00/00	1/22/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGXW7 Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	0/00/00	8/23/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGXW7-1-0D Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	8/02/00	9/11/00
Hydrocarbons, Volatile Petroleum (8015 M PURGE AND TRAP - 5 mL purge (I-15-WU-01) DGXW7-1-0E Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	0/00/00	8/09/00

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-005
PROJECT #: WORK ORDER: DGXWC
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,LG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 17:35
MATRIX: WATER RECEIVING TIME: 11:30
SAMPLE ID: B221E3W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXWC-1-01 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/02/00	9/11/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXWC-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXWC-1-03 Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-006
PROJECT #: WORK ORDER: DGXWE
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,LG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 17:55
MATRIX: WATER RECEIVING TIME: 11:30
SAMPLE ID: B221E2W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXWE-1-01 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/02/00	9/11/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXWE-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXWE-1-03 Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-007
PROJECT #: WORK ORDER: DGXWG
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 2X40,LG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 14:10
MATRIX: WATER RECEIVING TIME: 11:30
SAMPLE ID: B29I1W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXWG-1-01 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/02/00	9/11/00
LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal				
(I-10-SG-01) DGXWG-1-02 Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-008
PROJECT #: WORK ORDER: DGXWJ
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 500P,2XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 9:50
MATRIX: WATER RECEIVING TIME: 11:30
SAMPLE ID: B27I6W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Polynuclear Aromatic (HPLC LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal (I-10-SG-01) DGXWJ-1-01 Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	8/02/00	9/11/00
Inductively Coupled Plasma (6010B Trace) METALS, TOTAL - Waters MT6010_L AG,AS,BA,CD,CR,PB,SE (I-05-QM-01) DGXWJ Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	0/00/00	1/22/01
Mercury (7470A, Cold Vapor) - Liquid METALS, TOTAL (Method exclusive) - Waters M7470_L HG (I-19-O8-01) DGXWJ Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	0/00/00	8/23/00
Hydrocarbons, Extractable Petroleum (801 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal (I-09-HS-01) DGXWJ-1-0A Protocol: A QC Program: STANDARD TEST SET	06	7/27/00	8/02/00	9/11/00

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-009
PROJECT #: WORK ORDER: DGXWN
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: VIAL40 REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME:
MATRIX: WATER RECEIVING TIME: 11:30
SAMPLE ID: TRIP BLANK
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00

PURGE AND TRAP - 25 mL purge (Waters)
STL: VOA CLP 3/90
(I-25-QK-01) DGXWN-1-01 Protocol: A QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-010
PROJECT #: WORK ORDER: DGXWT
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 2XVIAL40 REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME:
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: TRIP BLANK
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/10/00

PURGE AND TRAP - 25 mL purge (Waters)
STL: VOA CLP 3/90
(I-25-QK-01) DGXWT-1-01 Protocol: A QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-011
PROJECT #: WORK ORDER: DGXX3
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,3XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 13:20
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW1-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXX3-1-01 Protocol: A QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGXX3-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal				
(I-10-SG-01) DGXX3-1-03 Protocol: A QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MICRO/MIDI - Acid				
(I-06-QP-01) DGXX3-1-04 Protocol: A QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MACRO - Acid				
(I-08-GI-01) DGXX3-1-05 Protocol: A QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/27/00	0/00/00	1/23/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGXX3 Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/27/00	0/00/00	8/24/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGXX3 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXX3-1-0F Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 2 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-011
PROJECT #: WORK ORDER: DGXX3
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,3XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 13:20
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW1-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXX3-1-0G Protocol: A QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC SW846 9310 MOD	06	7/27/00	0/00/00	1/23/01
PREP & SEP RC-0020, CT SL-13021				
(I-FR-ZA-01) DGXX3-1-0H Protocol: A QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/27/00
Time: 17:25:30
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 4X40,250P,2X500P,3XLG
STORAGE LOC: V7B,T6F
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: WATER
SAMPLE ID: MW2-W
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G270337-012
WORK ORDER: DGXXC
RECEIVING DATE: 7/27/00
SAMPLING DATE: 7/27/00
ANALYTICAL DUE DATE: 8/03/00N
REPORT DUE DATE: 8/07/00
PRIORITY: 07
SAMPLING TIME: 14:00
RECEIVING TIME: 14:55
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXXC-1-01 Protocol: A QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGXXC-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal				
(I-10-SG-01) DGXXC-1-03 Protocol: A QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MICRO/MIDI - Acid				
(I-06-QP-01) DGXXC-1-04 Protocol: A QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MACRO - Acid				
(I-08-GI-01) DGXXC-1-05 Protocol: A QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/27/00	0/00/00	1/23/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGXXC Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/27/00	0/00/00	8/24/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGXXC Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXXC-1-0F Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 2 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-012
PROJECT #: WORK ORDER: DGXXC
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,3XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 14:00
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW2-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXXC-1-0G Protocol: A QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC SW846 9310 MOD	06	7/27/00	0/00/00	1/23/01
PREP & SEP RC-0020, CT SL-13021				
(I-FR-ZA-01) DGXXC-1-0H Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-013
PROJECT #: WORK ORDER: DGXXF
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,3XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 11:55
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW4-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXXF-1-01 Protocol: A QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGXXF-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal				
(I-10-SG-01) DGXXF-1-03 Protocol: A QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MICRO/MIDI - Acid				
(I-06-QP-01) DGXXF-1-04 Protocol: A QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MACRO - Acid				
(I-08-GI-01) DGXXF-1-05 Protocol: A QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/27/00	0/00/00	1/23/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGXXF Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/27/00	0/00/00	8/24/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGXXF Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXXF-1-0F Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 2 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-013
PROJECT #: WORK ORDER: DGXXF
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,3XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 11:55
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW4-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXXF-1-0G Protocol: A QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC SW846 9310 MOD	06	7/27/00	0/00/00	1/23/01
PREP & SEP RC-0020, CT SL-13021				
(I-FR-ZA-01) DGXXF-1-0H Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-014
PROJECT #: WORK ORDER: DGXXP
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,2XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:25
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW6-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXXP-1-01 Protocol: A QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGXXP-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal				
(I-10-SG-01) DGXXP-1-03 Protocol: A QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MICRO/MIDI - Acid				
(I-06-QP-01) DGXXP-1-04 Protocol: A QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MACRO - Acid				
(I-08-GI-01) DGXXP-1-05 Protocol: A QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/27/00	0/00/00	1/23/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGXXP Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/27/00	0/00/00	8/24/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGXXP Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXXP-1-0F Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 2 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-014
PROJECT #: WORK ORDER: DGXXP
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,3XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:25
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW6-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXXP-1-0G Protocol: A QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC SW846 9310 MOD	06	7/27/00	0/00/00	1/23/01
PREP & SEP RC-0020, CT SL-13021				
(I-FR-ZA-01) DGXXP-1-0H Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-015
PROJECT #: WORK ORDER: DGXXX
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,3XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 11:05
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW8-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 25 mL purge (Waters)				
STL: VOA CLP 3/90				
(I-25-QK-01) DGXXX-1-01 Protocol: A QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal				
STL: Aroclors				
(I-60-QH-01) DGXXX-1-02 Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, CONT (PAH,P/P,TPH) - Nominal				
(I-10-SG-01) DGXXX-1-03 Protocol: A QC Program: STANDARD TEST SET				
Cyanide, Total tomated)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MICRO/MIDI - Acid				
(I-06-QP-01) DGXXX-1-04 Protocol: A QC Program: STANDARD TEST SET				
Reactive Cyanide 3)	06	7/27/00	0/00/00	8/10/00
DISTILLATION, MACRO - Acid				
(I-08-GI-01) DGXXX-1-05 Protocol: A QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/27/00	0/00/00	1/23/01
METALS, TOTAL - Waters				
MT6010_L AG,AS,BA,CD,CR,PB,SE				
(I-05-QM-01) DGXXX Protocol: A QC Program: STANDARD TEST SET				
Mercury (7470A, Cold Vapor) - Liquid	06	7/27/00	0/00/00	8/24/00
METALS, TOTAL (Method exclusive) - Waters				
M7470_L HG				
(I-19-O8-01) DGXXX Protocol: A QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/03/00	9/12/00
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal				
(I-09-HS-01) DGXXX-1-0F Protocol: A QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 2 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-015
PROJECT #: WORK ORDER: DGXXX
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/27/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 4X40,250P,2X500P,~~3~~2XLG REPORT DUE DATE: 8/07/00
STORAGE LOC: V7B,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 11:05
MATRIX: WATER RECEIVING TIME: 14:55
SAMPLE ID: MW8-W
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

SW 07.27.00

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/10/00
PURGE AND TRAP - 5 mL purge				
(I-15-WU-01) DGXXX-1-0G Protocol: A QC Program: STANDARD TEST SET				
GROSS A/B BY GFPC SW846 9310 MOD	06	7/27/00	0/00/00	1/23/01
PREP & SEP RC-0020, CT SL-13021				
(I-FR-ZA-01) DGXXX-1-0H Protocol: A QC Program: STANDARD TEST SET				

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SEVERN TRENT LABORATORIES, INC
CLIENT ANALYSIS SUMMARY
STL St. Louis

Run Date: 7/27/00
Time: 17:25:30
User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC
PROJECT MANAGER: Mark J. Loeb
PROJECT #:
REPORT TO: Doug Marian
P.O. NUMBER:
SITE: Boeing
AMOUNT REC"D: 120G,250G
STORAGE LOC: V10,T6F
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba
MATRIX: SOLID
SAMPLE ID: B28E1-6
QC PACKAGE: Report
SAMPLE COMMENTS:

QUOTE/SAR #: 37419
LAB ID: F-0G270337-016
WORK ORDER: DH004
RECEIVING DATE: 7/27/00
SAMPLING DATE: 7/26/00
ANALYTICAL DUE DATE: 8/03/00N
REPORT DUE DATE: 8/07/00
PRIORITY: 07
SAMPLING TIME: 9:05
RECEIVING TIME: 11:30
SDG# :

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
PCBs (8082)	06	7/27/00	8/09/00	9/18/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DH004-1-0C Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DH004-1-0F Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DH004-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/09/00	9/18/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DH004-1-0E Protocol: B QC Program: STANDARD TEST SET				
Inductively Coupled Plasma (6010B Trace)	06	7/27/00	0/00/00	1/22/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DH004 Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/27/00	0/00/00	8/23/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DH004 Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/27/00	0/00/00	11/02/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DH004-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/09/00	9/18/00
SONICATION - Low Level				
(A-13-SG-01) DH004-1-0A Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-017
PROJECT #: WORK ORDER: DH00H
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/07/00
STORAGE LOC: V10,T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 9:25
MATRIX: SOLID RECEIVING TIME: 11:30
SAMPLE ID: B28N1-7
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Inductively Coupled Plasma (6010B Trace)	06	7/27/00	0/00/00	1/22/01
METALS, TOTAL - Soils				
MT6010_S AG,AS,BA,CD,CR,PB,SE				
(A-46-QM-01) DH00H Protocol: B QC Program: STANDARD TEST SET				
Mercury (7471A, Cold Vapor) - Solids	06	7/27/00	0/00/00	8/23/00
METALS, TOTAL (Method Exclusive) - Solids				
M7471_S HG				
(A-70-O9-01) DH00H Protocol: B QC Program: STANDARD TEST SET				
Moisture, Percent (160.3)	06	7/27/00	0/00/00	11/02/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DH00H-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Polynuclear Aromatic (HPLC	06	7/27/00	8/09/00	9/18/00
SONICATION - Low Level				
(A-13-SG-01) DH00H-1-0A Protocol: B QC Program: STANDARD TEST SET				
PCBs (8082)	06	7/27/00	8/09/00	9/18/00
SONICATION w/ACID STRIP (PCB)				
(A-71-QH-01) DH00H-1-0C Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DH00H-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/09/00	9/18/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DH00H-1-0E Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DH00H-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/29/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 9:47:47
STL St. Louis User Id.: LOEBM

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-018
PROJECT #: WORK ORDER: DH00K
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/04/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/07/00
STORAGE LOC: V10,T6F PRIORITY: 08
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:25
MATRIX: SOLID RECEIVING TIME: 11:30
SAMPLE ID: B221E3-7
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/27/00	0/00/00	11/02/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DH00K-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DH00K-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/09/00	9/18/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DH00K-1-0E Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DH00K-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC. Run Date: 7/29/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 9:47:47
STL St. Louis User Id.: LOEBM

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-019
PROJECT #: WORK ORDER: DH00L
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/04/00N
AMOUNT REC"D: 120G,250G REPORT DUE DATE: 8/07/00
STORAGE LOC: V10,T6F PRIORITY: 08
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 10:40
MATRIX: SOLID RECEIVING TIME: 11:30
SAMPLE ID: B221E2-8
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
Moisture, Percent (160.3)	06	7/27/00	0/00/00	11/02/00
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION				
(A-88-WM-01) DH00L-1-09 Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Volatile Petroleum (8015 M	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
(A-15-WU-01) DH00L-1-0D Protocol: B QC Program: STANDARD TEST SET				
Hydrocarbons, Extractable Petroleum (801	06	7/27/00	8/09/00	9/18/00
EXTRACTION, SOLID/SOLVENT (Auto shaker)				
(A-0B-HS-01) DH00L-1-0E Protocol: B QC Program: STANDARD TEST SET				
Volatile Organics, GC/MS (8260B)	06	7/27/00	0/00/00	8/09/00
PURGE AND TRAP - 5 mL purge				
STL: VOA CLP 3/90				
(A-15-QK-01) DH00L-1-0F Protocol: B QC Program: STANDARD TEST SET				

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-020
PROJECT #: WORK ORDER: DH00M
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: WIPE REPORT DUE DATE: 8/07/00
STORAGE LOC: T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 15:15
MATRIX: SOLID RECEIVING TIME: 11:30
SAMPLE ID: EP1-P
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/27/00	0/00/00	1/22/01

PREP RC-0003, SEP RC-0020, CT SL-13021
(A-FS-Y9-01) DH00M-1-01 Protocol: C QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-021
PROJECT #: WORK ORDER: DH01J
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: WIPE REPORT DUE DATE: 8/07/00
STORAGE LOC: T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 15:35
MATRIX: SOLID RECEIVING TIME: 11:30
SAMPLE ID: EP2-P
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
GROSS A/B BY GFPC EPA 900.0 MOD	06	7/27/00	0/00/00	1/22/01

PREP RC-0003, SEP RC-0020, CT SL-13021
(A-FS-Y9-01) DH01J-1-01 Protocol: C QC Program: STANDARD TEST SET

PSL20300 SEVERN TRENT LABORATORIES, INC Run Date: 7/27/00
Page 1 CLIENT ANALYSIS SUMMARY Time: 17:25:30
STL St. Louis User Id.: WILSONS

CLIENT: 411952 ENVIRONMENTAL SCIENCE & ENGINEERING INC QUOTE/SAR #: 37419
PROJECT MANAGER: Mark J. Loeb LAB ID: F-0G270337-022
PROJECT #: WORK ORDER: DH01M
REPORT TO: Doug Marian RECEIVING DATE: 7/27/00
P.O. NUMBER: SAMPLING DATE: 7/26/00
SITE: Boeing ANALYTICAL DUE DATE: 8/03/00N
AMOUNT REC"D: WIPE REPORT DUE DATE: 8/07/00
STORAGE LOC: T6F PRIORITY: 07
LOT COMMENTS: Soils to be reported on a "Dry Weight Ba SAMPLING TIME: 15:55
MATRIX: SOLID RECEIVING TIME: 11:30
SAMPLE ID: EP3-P
QC PACKAGE: Report SDG# :
SAMPLE COMMENTS:

Beginning Depth: .00 **Ending Depth:** .00

***** ANALYSIS *****	WRK LOC	REQUEST DATE	EXTRACTION EXP DATE	ANALYSIS EXP DATE
✓GROSS A/B BY GFPC EPA 900.0 MOD	06	7/27/00	0/00/00	1/22/01

PREP RC-0003, SEP RC-0020, CT SL-13021
(A-FS-Y9-01) DH01M-1-01 Protocol: C QC Program: STANDARD TEST SET

LOT# F0G270337

STL ST. LOUIS

[redacted]

Chain of Custody Record

5°, 6° Cur 327

Quanterra

QUA-4124

Client: ESE	Project Manager: DOUG MARIAN	Date: 7/26/00	Chain Of Custody Number: 47050
Address: 3199 RIVERPORT TECH CENTER	Telephone Number (Area Code)/Fax Number: (314) 209-5900	Lab Number	Page ____ of ____
City: ST. LOUIS; State: MO; Zip Code: 63043	Site Contact: DENNIS BRINKLEY		
Project Name: BOEING	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

	Sample I.D. No. and Description (% full)	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	VOC	TPH	PAH	RCRA METALS	PCB			RADIATION			
1	B29I2W	7/26/00	1200 DLG	H_2O	80 ml	40 ml	2	HCl	2x40		X									
2	B29AW1W TPH 1/2	7/26/00	1020	H_2O	1160 ml	40 ml	4	HCl	4x40, LG	X	X									
3	B28E1W	7/26/00	1620	H_2O	3500 ml		8	yes	4x40, 500P, 3xLG	X	X	X	X	X						
4	B28N1W	7/26/00	1700	H_2O	3500		8	yes	4x40, 500P, 3xLG	X	X	X	X	X						
5	B221E3W	7/26/00	1735	H_2O	1160		5	HCl	4x40, LG	X	X									
6	B221E2W TPH 1/2	7/26/00	1755	H_2O	1160		5	HCl	4x40, LG	X	X									
7	B29I1W	7/26/00	1410	H_2O	1080		3	HCl (NONE)	2x40, LG	X		X								
8	B27I6W PAH 1/2	7/26/00	950	H_2O	2500		3	yes	500P, 2xLG		X	X	X							
9	TRIP BLANK	7/26/00	—	H_2O	40 ml		2	HCl	1x40	X										
16	B28E1-6	7/26/00	905	SOIL			2	120G	250G	X	X	X	X	X						
17	B28N1-7	7/26/00	925	SOIL			2			X	X	X	X	X						
18	B221E3-7	7/26/00	1025	SOIL			2			X	X									
19	B221E2-8	7/26/00	1040	SOIL						X	X									
20	EP1-P	7/26/00	1515	PAPER DISK	1		1		wipe								X			
21	EP2-P		1535		1		1										X			
22	EP3-P		1555		1		1										X			

Special Instructions: all bottles 100% full except where noted.

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required: ☐ Normal ☐ Rush

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/27/00	1130	1. Received By: [signature] STL	07.27.00	1130
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

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LOT# F0G270337

[redacted]

Chain of Custody Record

Quanterra

QUA-4124 0797

Client: ESE	Project Manager: Doug Marian	Date	Chain of Custody Number: 54028
Address: 3199 Riverport Tech Center	Telephone Number (Area Code)/Fax Number	Lab Number	Page ____ of ____
City: Maryhts; State: MO; Zip Code	Site Contact	Lab Contact	
Project Name: Boeing Phase II	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

	Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): VOC	TPH	PCB	PAH	T/R CN	Rad	RCRA Metals					Special Instructions/ Conditions of Receipt
11	MW1-W	7-27-00	1320	X		3xLG	90% full								X	X	X	X	X	X	X		4x40ml			
12	MW2-W	↓	1400	X		3xLG	90% full								X	X	X	X	X	X	X		↓			
13	~~MW3~~ MW4-W		1155	X		3xLG	90% full								X	X	X	X	X	X	X					
14	MW6-W		1025	X		2xLG	90% full								X	X	X	X	X	X	X					
15	MW8-W		1105	X		2xLG	90% full								X	X	X	X	X	X	X					
																~~3xLG~~										
																LG	LG	LG	500ml	500ml						
10	2x40ml Trip Blank																		100% full	100% full	100% full					

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-27-00	1455	1. Received By: [signature] SIR	07.27.00	1455
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

STL ST. LOUIS

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Committed to *Your* Success

Lot No.: F0G270337

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: ESE

Quote No: 37419

Shipper/No: client delivered

Date: 07.27.00 Time: 1138

Initiated by: [illegible]

RFA/COC Numbers: 47050

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below) _____

☐ **No variances were noted during sample receipt.**

☐ **Cooler Temperature Upon Receipt in °C:** 5°, 6°

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: B28E1W, (TPH) LG, pH was 7, per M. Loeb, add HCL to sample so that pH is <2. done SY 07.27.00

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is".

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [illegible] Date: 07.27.00

Project Management Review: [illegible] Date: 7-27-00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

Committed to *Your* Success

Lot No.: F0G270337

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: ESE

Quote No: 37419

Shipper/No: Client

Date: 7/27/00 Time: 1455

Initiated by: SW

RFA/COC Numbers: 54028

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing/not tamper evident type (circle all that apply).
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Sample volume insufficient for analysis
11. ☐ Other (explain below) _____

☒ **No variances were noted during sample receipt.**

☒ **Cooler Temperature Upon Receipt in °C:** 3

Temperature Variance Does Not Affect the Following Analyses: _____

Notes: _____

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) [signature] Date: 7/27/00

Project Management Review: [signature] Date: 7/29/00

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY HIS/HER INITIALS AND THE DATE NEXT TO THAT ITEM

Form: SL-ADMIN-0004, Revised 6/21/00 SOP Reference: STL-QA-0006

ANALYTICAL REPORT

Boeing

Lot #: F0G280299

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

August 9, 2000

Case Narrative
LOT NUMBER: **F0G280299**

This report contains the analytical results for the five samples received under chain of custody by STL St. Louis on July 28, 2000. These samples are associated with your Boeing project.

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

Observations/Nonconformances

Nonconformance F01025
Affected Samples:
1: MW5-W 2: MW3-W
3: MW3-DW 4: MW7-W

Affected Methods:
9012A

Case Narrative Details:
Samples not correctly preserved to PH greater than or equal to 12.

DGXXF = 10 DGXXP = 10
DGXXX = 9 DH216 = 10
DH22L = 10 DH231 = 9
DH246 = 8

Corrective Action:
None.

Nonconformance F01032
Affected Samples:
4: MW7-W

Affected Methods:
9310 MOD - Radiochemistry

Case Narrative Details:
The Gross Alpha MDA was >CRDL due to sample matrix. Limited sample volume had to be used due to mass associated with sample.

Corrective Action:
None.

Nonconformance F01063
Affected Samples:
1: MW5-W 2: MW3-W
3: MW3-DW 4: MW7-W

Affected Methods:
8015 MOD – Diesel Range Organics

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Sample 001 has an elevated detection limit due to a lack of sample volume.

Corrective Action:
None.

Nonconformance F01070
Affected Samples:
1: MW5-W 2: MW3-W
3: MW3-DW 4: MW7-W

Affected Methods:
8310

Case Narrative Details:
A MS/MSD was not performed on these samples due to insufficient sample volume received. A LCS/LCSD was performed instead.

Corrective Action:
None.

Nonconformance F01073
Affected Samples:
1: MW5-W 2: MW3-W
3: MW3-DW 4: MW7-W

Affected Methods:
8082

Case Narrative Details:
A MS/MSD was not performed on these sample(s) due to insufficient sample volume received. A LCS/LCSD was performed instead.

Samples 12,14,15 and 299-004 have elevated detection limits due to a lack of sample volume.

Corrective Action:
None.

Nonconformance F01091

Affected Samples:
2: MW3-W 3: MW3-DW

Affected Methods:
8015 MOD – Vola

Case Narrative:
These samples were analyzed twice to confirm high surrogate recoveries.

Details:
These samples were analyzed twice to confirm high surrogate recoveries.

Corrective Action:
None.

METHODS SUMMARY

F0G280299

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510
Gross Alpha/Beta by GFPC Th230/Sr90-Y90 cal	SW846 9310 MOD	
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3520
PCBs by SW-846 8082	SW846 8082	SW846 8082
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F0G280299

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DH216	001	MW5-W	07/28/00	09:55
DH22L	002	MW3-W	07/28/00	10:40
DH231	003	MW3-DW	07/28/00	10:40
DH246	004	MW7-W	07/28/00	11:40
DH28E	005	TRIP BLANK	07/28/00	11:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

GC Semivolatiles

Lot-Sample #...: F0G280299-001 **Work Order #...:** DH21610E **Matrix.....:** WATER
Date Sampled...: 07/28/00 09:55 **Date Received..:** 07/28/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216470 **Analysis Time..:** 06:01
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.63	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	51	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

GC Semivolatiles

Lot-Sample #...: F0G280299-001 **Work Order #...:** DH216101 **Matrix.....:** WATER
Date Sampled...: 07/28/00 09:55 **Date Received..:** 07/28/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/07/00
Prep Batch #...: 0216480 **Analysis Time..:** 20:18
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	123	(12 - 167)
Decachlorobiphenyl	59	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

GC/MS Volatiles

Lot-Sample #...: F0G280299-001 **Work Order #...:** DH21610H **Matrix.....:** WATER
Date Sampled...: 07/28/00 09:55 **Date Received..:** 07/28/00
Prep Date.....: 08/03/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0217104 **Analysis Time..:** 16:30
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**29**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**13**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.55 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**16**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	109	(78 - 124)
Toluene-d8	91	(71 - 129)
Dibromofluoromethane	96	(74 - 135)
1,2-Dichloroethane-d4	84	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

GC/MS Volatiles

Lot-Sample #...: F0G280299-001 **Work Order #...:** DH21610H **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

HPLC

Lot-Sample #...: F0G280299-001 **Work Order #...:** DH216102 **Matrix.....:** WATER
Date Sampled...: 07/28/00 09:55 **Date Received..:** 07/28/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216476 **Analysis Time..:** 09:17
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	60	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

GC Volatiles

Lot-Sample #...: F0G280299-001 **Work Order #...:** DH21610F **Matrix.....:** WATER
Date Sampled...: 07/28/00 09:55 **Date Received..:** 07/28/00
Prep Date.....: 08/08/00 **Analysis Date..:** 08/08/00
Prep Batch #...: 0221469 **Analysis Time..:** 16:55
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	129	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G280299-001
Work Order: DH216
Matrix: WATER

Date Collected: 07/28/00 0955
Date Received: 07/28/00 1350

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				pCi/L	9310 MOD			
Gross Alpha	2.1E+01		1.1E+01	1.5E+01	08/01/00	08/02/00	0214266	
Gross Beta	3.7E+01		1.4E+01	2.0E+01	08/01/00	08/02/00	0214266	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

GC Semivolatiles

Lot-Sample #...: F0G280299-002 **Work Order #...:** DH22L10E **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216470 **Analysis Time..:** 06:25
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	53	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

GC Semivolatiles

Lot-Sample #...: F0G280299-002
Date Sampled...: 07/28/00 10:40
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DH22L101
Date Received..: 07/28/00
Analysis Date..: 08/07/00
Analysis Time..: 20:32

Matrix.....: WATER

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	106	(12 - 167)
Decachlorobiphenyl	51	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

GC/MS Volatiles

Lot-Sample #...: F0G280299-002 **Work Order #...:** DH22L10H **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00
Prep Date.....: 08/03/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0217104 **Analysis Time..:** 17:06
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**510 E**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.50 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**32**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.43 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	**0.37 J**	**1.0**	**ug/L**
1,1-Dichloroethene	**7.1**	**1.0**	**ug/L**
1,1-Dichloroethane	**3.4**	**1.0**	**ug/L**
1,2-Dichloroethene (total)	**850 E**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	89	(71 - 129)
Dibromofluoromethane	104	(74 - 135)
1,2-Dichloroethane-d4	86	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

GC/MS Volatiles

Lot-Sample #...: F0G280299-002 **Work Order #...:** DH22L10H **Matrix.....:** WATER

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

GC/MS Volatiles

Lot-Sample #...: F0G280299-002 **Work Order #...:** DH22L20H **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0220121 **Analysis Time..:** 09:45
Dilution Factor: 100

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	100	ug/L
1,2-Dichloropropane	ND	100	ug/L
cis-1,3-Dichloropropene	ND	100	ug/L
Trichloroethene	**1700 D**	**100**	**ug/L**
Dibromochloromethane	ND	100	ug/L
1,1,2-Trichloroethane	ND	100	ug/L
Benzene	ND	100	ug/L
trans-1,3-Dichloropropene	ND	100	ug/L
Bromoform	ND	100	ug/L
4-Methyl-2-pentanone	ND	500	ug/L
2-Hexanone	ND	500	ug/L
Tetrachloroethene	ND	100	ug/L
Toluene	ND	100	ug/L
Chlorobenzene	ND	100	ug/L
Ethylbenzene	ND	100	ug/L
Styrene	ND	100	ug/L
Chloromethane	ND	200	ug/L
Bromomethane	ND	200	ug/L
Vinyl chloride	**31 J,D**	**200**	**ug/L**
Chloroethane	ND	200	ug/L
Methylene chloride	**51 J,B,D**	**100**	**ug/L**
Acetone	ND	1000	ug/L
Carbon disulfide	ND	100	ug/L
1,1-Dichloroethene	ND	100	ug/L
1,1-Dichloroethane	ND	100	ug/L
1,2-Dichloroethene (total)	**2100 D**	**100**	**ug/L**
Chloroform	ND	100	ug/L
1,2-Dichloroethane	ND	100	ug/L
2-Butanone	ND	500	ug/L
1,1,1-Trichloroethane	ND	100	ug/L
Carbon tetrachloride	ND	100	ug/L
Bromodichloromethane	ND	100	ug/L
1,1,2,2-Tetrachloroethane	ND	100	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	109	(78 - 124)
Toluene-d8	91	(71 - 129)
Dibromofluoromethane	89	(74 - 135)
1,2-Dichloroethane-d4	89	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

GC/MS Volatiles

Lot-Sample #...: F0G280299-002 **Work Order #...:** DH22L20H **Matrix.....:** WATER

NOTE(S):

D Result was obtained from the analysis of a dilution.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

HPLC

Lot-Sample #...: F0G280299-002
Date Sampled...: 07/28/00 10:40
Prep Date.....: 08/02/00
Prep Batch #...: 0216476
Dilution Factor: 1

Work Order #...: DH22L102
Date Received..: 07/28/00
Analysis Date..: 08/04/00
Analysis Time..: 09:42

Matrix.....: WATER

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	49	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

GC Volatiles

Lot-Sample #...: F0G280299-002
Date Sampled...: 07/28/00 10:40
Prep Date.....: 08/08/00
Prep Batch #...: 0221469
Dilution Factor: 1

Work Order #...: DH22L10F
Date Received..: 07/28/00
Analysis Date..: 08/08/00
Analysis Time..: 17:21

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	1.7	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	2690 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

GC Volatiles

Lot-Sample #...: F0G280299-002
Date Sampled...: 07/28/00 10:40
Prep Date.....: 08/08/00
Prep Batch #...: 0221469
Dilution Factor: 1

Work Order #...: DH22L20F
Date Received..: 07/28/00
Analysis Date..: 08/08/00
Analysis Time..: 19:05

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	1.4	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	2280 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G280299-002
Work Order: DH22L
Matrix: WATER

Date Collected: 07/28/00 1040
Date Received: 07/28/00 1350

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			pCi/L		9310 MOD			
Gross Alpha	3.0E+01		2.0E+01	2.9E+01	08/01/00	08/02/00	0214266	
Gross Beta	7.0E+01		2.0E+01	2.7E+01	08/01/00	08/02/00	0214266	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

GC Semivolatiles

Lot-Sample #...: F0G280299-003 **Work Order #...:** DH23110E **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216470 **Analysis Time..:** 06:49
Dilution Factor: 1

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	45	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

GC Semivolatiles

Lot-Sample #...: F0G280299-003 **Work Order #...:** DH231101 **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/07/00
Prep Batch #...: 0216480 **Analysis Time..:** 20:46
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	111	(12 - 167)
Decachlorobiphenyl	44	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

GC/MS Volatiles

Lot-Sample #...: F0G280299-003 **Work Order #...:** DH23110H **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00
Prep Date.....: 08/03/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0217104 **Analysis Time..:** 17:43
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**520 E**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**0.51 J**	**1.0**	**ug/L**
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	**30**	**2.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.86 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	**0.40 J**	**1.0**	**ug/L**
1,1-Dichloroethene	**6.9**	**1.0**	**ug/L**
1,1-Dichloroethane	**3.5**	**1.0**	**ug/L**
1,2-Dichloroethene (total)	**880 E**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	106	(78 - 124)
Toluene-d8	95	(71 - 129)
Dibromofluoromethane	103	(74 - 135)
1,2-Dichloroethane-d4	82	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

GC/MS Volatiles

Lot-Sample #...: F0G280299-003 **Work Order #...:** DH23110H **Matrix.....:** WATER

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

GC/MS Volatiles

Lot-Sample #...: F0G280299-003 **Work Order #...:** DH23120H **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00
Prep Date.....: 08/04/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0220121 **Analysis Time..:** 10:21
Dilution Factor: 250

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	250	ug/L
1,2-Dichloropropane	ND	250	ug/L
cis-1,3-Dichloropropene	ND	250	ug/L
Trichloroethene	**5400 D**	**250**	**ug/L**
Dibromochloromethane	ND	250	ug/L
1,1,2-Trichloroethane	ND	250	ug/L
Benzene	ND	250	ug/L
trans-1,3-Dichloropropene	ND	250	ug/L
Bromoform	ND	250	ug/L
4-Methyl-2-pentanone	ND	1200	ug/L
2-Hexanone	ND	1200	ug/L
Tetrachloroethene	ND	250	ug/L
Toluene	ND	250	ug/L
Chlorobenzene	ND	250	ug/L
Ethylbenzene	ND	250	ug/L
Styrene	ND	250	ug/L
Chloromethane	ND	500	ug/L
Bromomethane	ND	500	ug/L
Vinyl chloride	**98 J,D**	**500**	**ug/L**
Chloroethane	ND	500	ug/L
Methylene chloride	**130 J,B,D**	**250**	**ug/L**
Acetone	ND	2500	ug/L
Carbon disulfide	ND	250	ug/L
1,1-Dichloroethene	ND	250	ug/L
1,1-Dichloroethane	ND	250	ug/L
1,2-Dichloroethene (total)	**5900 D**	**250**	**ug/L**
Chloroform	ND	250	ug/L
1,2-Dichloroethane	ND	250	ug/L
2-Butanone	ND	1200	ug/L
1,1,1-Trichloroethane	ND	250	ug/L
Carbon tetrachloride	ND	250	ug/L
Bromodichloromethane	ND	250	ug/L
1,1,2,2-Tetrachloroethane	ND	250	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	114	(78 - 124)
Toluene-d8	97	(71 - 129)
Dibromofluoromethane	102	(74 - 135)
1,2-Dichloroethane-d4	95	(70 - 130)

(Continued on next page)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

GC/MS Volatiles

Lot-Sample #...: F0G280299-003 **Work Order #...:** DH23120H **Matrix.....:** WATER

NOTE(S):

D Result was obtained from the analysis of a dilution.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

HPLC

Lot-Sample #...: F0G280299-003 **Work Order #...:** DH231102 **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216476 **Analysis Time..:** 10:08
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	54	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

GC Volatiles

Lot-Sample #...: F0G280299-003
Date Sampled...: 07/28/00 10:40
Prep Date.....: 08/08/00
Prep Batch #...: 0221469
Dilution Factor: 1

Work Order #...: DH23110F
Date Received..: 07/28/00
Analysis Date..: 08/08/00
Analysis Time..: 17:47

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	1.7	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	3100 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

GC Volatiles

Lot-Sample #...: F0G280299-003
Date Sampled...: 07/28/00 10:40
Prep Date.....: 08/08/00
Prep Batch #...: 0221469
Dilution Factor: 1

Work Order #...: DH23120F
Date Received..: 07/28/00
Analysis Date..: 08/08/00
Analysis Time..: 18:39

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	1.7	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	3010 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G280299-003
Work Order: DH231
Matrix: WATER

Date Collected: 07/28/00 1040
Date Received: 07/28/00 1350

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			pCi/L		9310 MOD			
Gross Alpha	2.1E+01		1.4E+01	2.0E+01	08/01/00	08/02/00	0214266	
Gross Beta	3.0E+01		1.5E+01	2.3E+01	08/01/00	08/02/00	0214266	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

GC Semivolatiles

Lot-Sample #...: F0G280299-004
Date Sampled...: 07/28/00 11:40
Prep Date.....: 08/02/00
Prep Batch #...: 0216470
Dilution Factor: 1

Work Order #...: DH24610E
Date Received..: 07/28/00
Analysis Date..: 08/04/00
Analysis Time..: 07:12

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	0.50	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	37	(10 - 150)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

GC Semivolatiles

Lot-Sample #...: F0G280299-004
Date Sampled...: 07/28/00 11:40
Prep Date.....: 08/02/00
Prep Batch #...: 0216480
Dilution Factor: 1

Work Order #...: DH246101
Date Received..: 07/28/00
Analysis Date..: 08/07/00
Analysis Time..: 21:00

Matrix.....: WATER

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.2	ug/L
Aroclor 1221	ND	1.2	ug/L
Aroclor 1232	ND	1.2	ug/L
Aroclor 1242	ND	1.2	ug/L
Aroclor 1248	ND	1.2	ug/L
Aroclor 1254	ND	1.2	ug/L
Aroclor 1260	ND	1.2	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	109	(12 - 167)
Decachlorobiphenyl	55	(10 - 125)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

GC/MS Volatiles

Lot-Sample #...: F0G280299-004 **Work Order #...:** DH24610H **Matrix.....:** WATER
Date Sampled...: 07/28/00 11:40 **Date Received..:** 07/28/00
Prep Date.....: 08/03/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0217104 **Analysis Time..:** 18:19
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	**0.92 J**	**1.0**	**ug/L**
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.69 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	**0.49 J**	**1.0**	**ug/L**
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	99	(78 - 124)
Toluene-d8	104	(71 - 129)
Dibromofluoromethane	96	(74 - 135)
1,2-Dichloroethane-d4	76	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

GC/MS Volatiles

Lot-Sample #...: F0G280299-004 Work Order #...: DH24610H Matrix.....: WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

HPLC

Lot-Sample #...: F0G280299-004 **Work Order #...:** DH246102 **Matrix.....:** WATER
Date Sampled...: 07/28/00 11:40 **Date Received..:** 07/28/00
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216476 **Analysis Time..:** 10:34
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	5.0	ug/L
Acenaphthylene	ND	5.0	ug/L
Anthracene	ND	5.0	ug/L
Benzo(a)anthracene	ND	5.0	ug/L
Benzo(a)pyrene	ND	5.0	ug/L
Benzo(b)fluoranthene	ND	5.0	ug/L
Benzo(ghi)perylene	ND	5.0	ug/L
Benzo(k)fluoranthene	ND	5.0	ug/L
Chrysene	ND	5.0	ug/L
Dibenz(a,h)anthracene	ND	5.0	ug/L
Fluoranthene	ND	5.0	ug/L
Fluorene	ND	5.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
Phenanthrene	ND	5.0	ug/L
Pyrene	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	59	(27 - 128)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

GC Volatiles

Lot-Sample #...: F0G280299-004
Date Sampled...: 07/28/00 11:40
Prep Date.....: 08/08/00
Prep Batch #...: 0221469
Dilution Factor: 1

Work Order #...: DH24610F
Date Received..: 07/28/00
Analysis Date..: 08/08/00
Analysis Time..: 18:13

Matrix.....: WATER

Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	90	(70 - 130)

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0G280299-004
Work Order: DH246
Matrix: WATER

Date Collected: 07/28/00 1140
Date Received: 07/28/00 1350

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/L**	**9310 MOD**			
Gross Alpha	3.6E+01	U	2.6E+01	3.8E+01	08/01/00	08/02/00	0214266	
Gross Beta	**6.0E+01**		**2.3E+01**	**3.4E+01**	**08/01/00**	**08/02/00**	**0214266**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G280299-005 **Work Order #...:** DH28E101 **Matrix.....:** WATER
Date Sampled...: 07/28/00 11:40 **Date Received..:** 07/28/00
Prep Date.....: 08/03/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0217104 **Analysis Time..:** 15:53
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Xylenes (total)	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Methylene chloride	**0.85 J,B**	**1.0**	**ug/L**
Acetone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(78 - 124)
Toluene-d8	100	(71 - 129)
Dibromofluoromethane	97	(74 - 135)
1,2-Dichloroethane-d4	82	(70 - 130)

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ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: F0G280299-005 **Work Order #...:** DH28E101 **Matrix.....:** WATER

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

General Chemistry

Lot-Sample #...: F0G280299-001 **Work Order #...:** DH216 **Matrix.....:** WATER
Date Sampled...: 07/28/00 09:55 **Date Received..:** 07/28/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1		Analysis Time..: 13:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

General Chemistry

Lot-Sample #...: F0G280299-002 **Work Order #...:** DH22L **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1		Analysis Time..: 13:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

General Chemistry

Lot-Sample #...: F0G280299-003 **Work Order #...:** DH231 **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1		Analysis Time..: 13:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

General Chemistry

Lot-Sample #...: F0G280299-004 **Work Order #...:** DH246 **Matrix.....:** WATER
Date Sampled...: 07/28/00 11:40 **Date Received..:** 07/28/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1		Analysis Time..: 13:00		
Reactive Cyanide	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1		Analysis Time..: 13:30		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW5-W

TOTAL Metals

Lot-Sample #...: F0G280299-001 **Matrix.....:** WATER
Date Sampled...: 07/28/00 09:55 **Date Received..:** 07/28/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH216109
		Dilution Factor: 1		Analysis Time..: 10:00		
Arsenic	**8.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH216105**
		Dilution Factor: 1		Analysis Time..: 10:00		
Barium	**498**	**200**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH216106**
		Dilution Factor: 1		Analysis Time..: 10:00		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH21610A
		Dilution Factor: 1		Analysis Time..: 10:00		
Chromium	**46.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH21610C**
		Dilution Factor: 1		Analysis Time..: 10:00		
Lead	**12.9**	**3.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH216107**
		Dilution Factor: 1		Analysis Time..: 10:00		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH216108
		Dilution Factor: 1		Analysis Time..: 10:00		
Prep Batch #...: 0213275						
Mercury	**0.062 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/31-08/01/00**	**DH21610D**
		Dilution Factor: 1		Analysis Time..: 10:54		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-W

TOTAL Metals

Lot-Sample #...: F0G280299-002 **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH22L109
		Dilution Factor: 1		Analysis Time..: 10:04		
Arsenic	**18.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH22L105**
		Dilution Factor: 1		Analysis Time..: 10:04		
Barium	**827**	**200**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH22L106**
		Dilution Factor: 1		Analysis Time..: 10:04		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH22L10A
		Dilution Factor: 1		Analysis Time..: 10:04		
Chromium	**84.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH22L10C**
		Dilution Factor: 1		Analysis Time..: 10:04		
Lead	**21.1**	**3.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH22L107**
		Dilution Factor: 1		Analysis Time..: 10:04		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH22L108
		Dilution Factor: 1		Analysis Time..: 10:04		
Prep Batch #...: 0213275						
Mercury	**0.081 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/31-08/01/00**	**DH22L10D**
		Dilution Factor: 1		Analysis Time..: 10:56		

NOTE(S):

B Estimated result. Result is less than RL.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW3-DW

TOTAL Metals

Lot-Sample #...: F0G280299-003 **Matrix.....:** WATER
Date Sampled...: 07/28/00 10:40 **Date Received..:** 07/28/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH231109
		Dilution Factor: 1		Analysis Time..: 10:18		
Arsenic	**43.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH231105**
		Dilution Factor: 1		Analysis Time..: 10:18		
Barium	**1310**	**200**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH231106**
		Dilution Factor: 1		Analysis Time..: 10:18		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH23110A
		Dilution Factor: 1		Analysis Time..: 10:18		
Chromium	**254**	**10.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH23110C**
		Dilution Factor: 1		Analysis Time..: 10:18		
Lead	**66.3**	**3.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH231107**
		Dilution Factor: 1		Analysis Time..: 10:18		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH231108
		Dilution Factor: 1		Analysis Time..: 10:18		
Prep Batch #...: 0213275						
Mercury	**0.26**	**0.20**	**ug/L**	**SW846 7470A**	**07/31-08/01/00**	**DH23110D**
		Dilution Factor: 1		Analysis Time..: 10:58		

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: MW7-W

TOTAL Metals

Lot-Sample #...: F0G280299-004 **Matrix.....:** WATER
Date Sampled...: 07/28/00 11:40 **Date Received..:** 07/28/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0213220						
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH246109
		Dilution Factor: 1		Analysis Time..: 10:23		
Arsenic	**33.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH246105**
		Dilution Factor: 1		Analysis Time..: 10:23		
Barium	**1370**	**200**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH246106**
		Dilution Factor: 1		Analysis Time..: 10:23		
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH24610A
		Dilution Factor: 1		Analysis Time..: 10:23		
Chromium	**88.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH24610C**
		Dilution Factor: 1		Analysis Time..: 10:23		
Lead	**33.0**	**3.0**	**ug/L**	**SW846 6010B**	**07/31-08/04/00**	**DH246107**
		Dilution Factor: 1		Analysis Time..: 10:23		
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH246108
		Dilution Factor: 1		Analysis Time..: 10:23		
Prep Batch #...: 0213275						
Mercury	**0.078 B**	**0.20**	**ug/L**	**SW846 7470A**	**07/31-08/01/00**	**DH24610D**
		Dilution Factor: 1		Analysis Time..: 11:01		

NOTE(S):

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G280299 **Work Order #...:** DHCPF101 **Matrix.....:** WATER
MB Lot-Sample #: F0H040000-104

Prep Date.....: 08/03/00 **Analysis Time..:** 08:34
Analysis Date..: 08/03/00 **Prep Batch #...:** 0217104
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**1.9**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	107	(78 - 124)
Toluene-d8	100	(71 - 129)
Dibromofluoromethane	113	(74 - 135)
1,2-Dichloroethane-d4	91	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G280299 **Work Order #...:** DHCPF101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G280299
MB Lot-Sample #: F0H030000-470

Work Order #...: DHC1L101

Matrix.....: WATER

Prep Date.....: 08/02/00
Prep Batch #...: 0216470

Analysis Time..: 23:46

Analysis Date..: 08/03/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	0.50	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	69	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: F0G280299 **Work Order #...:** DHC43101 **Matrix.....:** WATER
MB Lot-Sample #: F0H030000-476

Prep Date.....: 08/02/00 **Analysis Time..:** 03:17

Analysis Date..: 08/04/00 **Prep Batch #...:** 0216476
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	5.0	ug/L	SW846 8310
Acenaphthylene	ND	5.0	ug/L	SW846 8310
Anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)anthracene	ND	5.0	ug/L	SW846 8310
Benzo(a)pyrene	ND	5.0	ug/L	SW846 8310
Benzo(b)fluoranthene	ND	5.0	ug/L	SW846 8310
Benzo(ghi)perylene	ND	5.0	ug/L	SW846 8310
Benzo(k)fluoranthene	ND	5.0	ug/L	SW846 8310
Chrysene	ND	5.0	ug/L	SW846 8310
Dibenz(a,h)anthracene	ND	5.0	ug/L	SW846 8310
Fluoranthene	ND	5.0	ug/L	SW846 8310
Fluorene	ND	5.0	ug/L	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/L	SW846 8310
Naphthalene	ND	5.0	ug/L	SW846 8310
Phenanthrene	ND	5.0	ug/L	SW846 8310
Pyrene	ND	5.0	ug/L	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	66	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0G280299
MB Lot-Sample #: F0H030000-480
Work Order #...: DHC7H101
Matrix.....: WATER
Prep Date.....: 08/02/00
Analysis Time..: 17:34
Analysis Date..: 08/07/00
Prep Batch #...: 0216480
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	121	(12 - 167)
Decachlorobiphenyl	117	(10 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G280299
MB Lot-Sample #: F0H070000-121

Work Order #...: DHFEP101

Matrix.....: WATER

Prep Date.....: 08/04/00
Prep Batch #...: 0220121

Analysis Time..: 07:19

Analysis Date..: 08/04/00
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Methylene chloride	**0.83 J**	**1.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	112	(78 - 124)
Toluene-d8	103	(71 - 129)
Dibromofluoromethane	107	(74 - 135)
1,2-Dichloroethane-d4	88	(70 - 130)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0G280299 **Work Order #...:** DHFEP101 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F0G280299
MB Lot-Sample #: F0H080000-469
Analysis Date..: 08/08/00
Dilution Factor: 1

Work Order #...: DHJFP101
Prep Date.....: 08/08/00
Prep Batch #...: 0221469

Matrix.....: WATER
Analysis Time..: 16:03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Volatile Petroleum Hydrocarbons	ND	0.10	mg/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	94	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F0G280299 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F0G310000-220 **Prep Batch #...:** 0213220						
Arsenic	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M310H
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Barium	ND	200	ug/L	SW846 6010B	07/31-08/04/00	DH3M3127
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Cadmium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M3129
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Chromium	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M312A
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Lead	ND	3.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M310J
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Selenium	ND	5.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M310K
		Dilution Factor: 1				
		Analysis Time..: 08:37				
Silver	ND	10.0	ug/L	SW846 6010B	07/31-08/04/00	DH3M3128
		Dilution Factor: 1				
		Analysis Time..: 08:37				
MB Lot-Sample #: F0G310000-275 **Prep Batch #...:** 0213275						
Mercury	ND	0.20	ug/L	SW846 7470A	07/31-08/01/00	DH3RM101
		Dilution Factor: 1				
		Analysis Time..: 10:06				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F0G280299 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DH6T1101		MB Lot-Sample #:	F0H020000-187	
	ND	5.0	ug/L	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1				
		Analysis Time..: 13:00				
Reactive Cyanide		Work Order #: DHA2Q101		MB Lot-Sample #:	F0H030000-383	
	ND	0.050	mg/kg	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1				
		Analysis Time..: 13:30				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G280299
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			**pCi/L**	**9310 MOD**		**F0H010000-266B**		
Gross Alpha	-1.2E-01	U	5.8E-01	1.1E+00	08/01/00	08/02/00	0214266	
Gross Beta	4E-01	U	1.0E+00	1.7E+00	08/01/00	08/02/00	0214266	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G280299 **Work Order #...:** DHC1L102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0H030000-470 DHC1L103-LCSD
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216470 **Analysis Time..:** 00:10
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**65**	**(10 - 148)**			**SW846 8015 MOD**
	70	**(10 - 148)**	**8.2**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	85	(10 - 150)
	86	(10 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0G280299 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:DH6T1102-LCS/DH6T1103-LCSD				LCS Lot-Sample#: F0H020000-187	
	97	(80 - 120)			SW846 9012A	08/01/00	0215187
	103	(80 - 120)	5.9	(0-20)	SW846 9012A	08/01/00	0215187
		Dilution Factor: 1					
Reactive Cyanide		WO#:DHA2Q102-LCS/DHA2Q103-LCSD				LCS Lot-Sample#: F0H030000-383	
	14 N	(0.0- 0.0)			SW846 7.3.3	08/03/00	0216383
	16 N,*	(0.0- 0.0)	11	(0-0.0)	SW846 7.3.3	08/03/00	0216383
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0G280299 **Work Order #...:** DHC7H102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0H030000-480 DHC7H103-LCSD
Prep Date.....: 08/02/00 **Analysis Date..:** 08/07/00
Prep Batch #...: 0216480 **Analysis Time..:** 17:48
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**123**	**(58 - 125)**			**SW846 8082**
	121	**(58 - 125)**	**1.4**	**(0-20)**	**SW846 8082**
Aroclor 1260	**114**	**(58 - 124)**			**SW846 8082**
	112	**(58 - 124)**	**1.2**	**(0-20)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	125	(39 - 153)
	127	(39 - 153)
Decachlorobiphenyl	120	(10 - 127)
	122	(10 - 127)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: F0G280299 **Work Order #...:** DHC43102-LCS **Matrix.....:** WATER
LCS Lot-Sample#: F0H030000-476 DHC43103-LCSD
Prep Date.....: 08/02/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0216476 **Analysis Time..:** 03:43
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**79**	**(45 - 134)**			**SW846 8310**
	89	**(45 - 134)**	**11**	**(0-82)**	**SW846 8310**
Acenaphthylene	**77**	**(46 - 124)**			**SW846 8310**
	89	**(46 - 124)**	**14**	**(0-56)**	**SW846 8310**
Anthracene	**60**	**(28 - 158)**			**SW846 8310**
	66	**(28 - 158)**	**8.4**	**(0-46)**	**SW846 8310**
Benzo(a)anthracene	**76**	**(52 - 132)**			**SW846 8310**
	79	**(52 - 132)**	**3.2**	**(0-43)**	**SW846 8310**
Benzo(a)pyrene	**73**	**(22 - 117)**			**SW846 8310**
	75	**(22 - 117)**	**2.6**	**(0-67)**	**SW846 8310**
Benzo(b)fluoranthene	**86**	**(39 - 109)**			**SW846 8310**
	89	**(39 - 109)**	**3.6**	**(0-47)**	**SW846 8310**
Benzo(ghi)perylene	**78**	**(10 - 115)**			**SW846 8310**
	81	**(10 - 115)**	**4.1**	**(0-72)**	**SW846 8310**
Benzo(k)fluoranthene	**77**	**(25 - 116)**			**SW846 8310**
	79	**(25 - 116)**	**2.6**	**(0-50)**	**SW846 8310**
Chrysene	**76**	**(29 - 130)**			**SW846 8310**
	78	**(29 - 130)**	**2.9**	**(0-76)**	**SW846 8310**
Dibenz(a,h)anthracene	**78**	**(10 - 122)**			**SW846 8310**
	82	**(10 - 122)**	**4.9**	**(0-62)**	**SW846 8310**
Fluoranthene	**76**	**(36 - 126)**			**SW846 8310**
	79	**(36 - 126)**	**3.8**	**(0-43)**	**SW846 8310**
Fluorene	**72**	**(52 - 128)**			**SW846 8310**
	77	**(52 - 128)**	**6.9**	**(0-60)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**81**	**(10 - 101)**			**SW846 8310**
	84	**(10 - 101)**	**4.5**	**(0-66)**	**SW846 8310**
Naphthalene	**82**	**(42 - 102)**			**SW846 8310**
	89	**(42 - 102)**	**8.1**	**(0-44)**	**SW846 8310**
Phenanthrene	**72**	**(49 - 126)**			**SW846 8310**
	76	**(49 - 126)**	**5.4**	**(0-50)**	**SW846 8310**
Pyrene	**64**	**(14 - 116)**			**SW846 8310**
	67	**(14 - 116)**	**3.8**	**(0-46)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	66	(27 - 128)
	67	(27 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G280299 **Work Order #...:** DHCPF102 **Matrix.....:** WATER
LCS Lot-Sample#: F0H040000-104
Prep Date.....: 08/03/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0217104 **Analysis Time..:** 09:11
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**90**	**(71 - 120)**	**SW846 8260B**
Benzene	**94**	**(76 - 127)**	**SW846 8260B**
Toluene	**96**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**95**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**93**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	97	(78 - 124)
Toluene-d8	96	(71 - 129)
Dibromofluoromethane	94	(74 - 135)
1,2-Dichloroethane-d4	88	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

THE CHECK SAMPLE IS THE SAME AD THE LABORATORY CONTROL SAMPLE

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G280299 **Work Order #...:** DHFEP102 **Matrix.....:** WATER
LCS Lot-Sample#: F0H070000-121
Prep Date.....: 08/04/00 **Analysis Date..:** 08/04/00
Prep Batch #...: 0220121 **Analysis Time..:** 07:55
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Trichloroethene	**91**	**(71 - 120)**	**SW846 8260B**
Benzene	**98**	**(76 - 127)**	**SW846 8260B**
Toluene	**103**	**(76 - 125)**	**SW846 8260B**
Chlorobenzene	**107**	**(75 - 130)**	**SW846 8260B**
1,1-Dichloroethene	**99**	**(61 - 145)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(78 - 124)
Toluene-d8	108	(71 - 129)
Dibromofluoromethane	102	(74 - 135)
1,2-Dichloroethane-d4	88	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: F0G280299 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Arsenic	107	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	106	(80 - 120)	1.1	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Barium	106	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	104	(80 - 120)	1.2	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Cadmium	106	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	105	(80 - 120)	1.0	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Chromium	104	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	103	(80 - 120)	1.6	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Lead	103	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	102	(80 - 120)	1.2	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Selenium	105	(80 - 120)			SW846 6010B	07/31-08/04/00	0213220
	104	(80 - 120)	1.2	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Silver	105	(49 - 135)			SW846 6010B	07/31-08/04/00	0213220
	105	(49 - 135)	0.35	(0-20)	SW846 6010B	07/31-08/04/00	0213220
		Dilution Factor: 1					
Mercury	86	(80 - 120)			SW846 7470A	07/31-08/01/00	0213275
	86	(80 - 120)	0.81	(0-20)	SW846 7470A	07/31-08/01/00	0213275
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G280299 **Work Order #...:** DHJFP102 **Matrix.....:** WATER
LCS Lot-Sample#: F0H080000-469
Prep Date.....: 08/08/00 **Analysis Date..:** 08/08/00
Prep Batch #...: 0221469 **Analysis Time..:** 16:29
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**99**	**(70 - 130)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	91	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Laboratory Control Sample Report

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0G280299
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
GROSS A/B BY GFPC SW846 9310 MOD		**pCi/L**		**9310 MOD**			**F0H010000-266C**
Gross Alpha	4.50E+01	4.55E+01	5.3E+00	1.1E+00		101	67 - 125
	Batch #:	0214266		**AnalysisDate**	08/02/00		
GROSS A/B BY GFPC SW846 9310 MOD		**pCi/L**		**9310 MOD**			**F0H010000-266C**
Gross Beta	9.61E+01	8.32E+01	8.7E+00	1.6E+00		87	64 - 125
	Batch #:	0214266		**AnalysisDate**	08/02/00		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F0G280299 **Work Order #...:** DH11Q10X-MS **Matrix.....:** WATER
MS Lot-Sample #: F0G280170-001 DH11Q110-MSD
Date Sampled...: 07/24/00 09:24 **Date Received..:** 07/26/00
Prep Date.....: 08/03/00 **Analysis Date..:** 08/03/00
Prep Batch #...: 0217104 **Analysis Time..:** 14:40
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichloroethene	**97**	**(71 - 120)**			**SW846 8260B**
	94	**(71 - 120)**	**2.9**	**(0-24)**	**SW846 8260B**
Benzene	**93**	**(76 - 127)**			**SW846 8260B**
	104	**(76 - 127)**	**11**	**(0-21)**	**SW846 8260B**
Toluene	**91**	**(76 - 125)**			**SW846 8260B**
	98	**(76 - 125)**	**7.2**	**(0-21)**	**SW846 8260B**
Chlorobenzene	**85**	**(75 - 130)**			**SW846 8260B**
	93	**(75 - 130)**	**8.8**	**(0-21)**	**SW846 8260B**
1,1-Dichloroethene	**104**	**(61 - 145)**			**SW846 8260B**
	97	**(61 - 145)**	**6.4**	**(0-22)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	107	(78 - 124)
	111	(78 - 124)
Toluene-d8	89	(71 - 129)
	95	(71 - 129)
Dibromofluoromethane	104	(74 - 135)
	95	(74 - 135)
1,2-Dichloroethane-d4	88	(70 - 130)
	97	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F0G280299 **Matrix.....:** WATER
Date Sampled...: 07/25/00 02:40 **Date Received..:** 07/25/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F0G280210-001 **Prep Batch #...:** 0213275							
Mercury	87	(75 - 125)			SW846 7470A	07/31-08/01/00	DH19G102
	86	(75 - 125)	0.57	(0-20)	SW846 7470A	07/31-08/01/00	DH19G103

Dilution Factor: 1
Analysis Time..: 10:44

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: F0G280299 **Work Order #...:** DH24610J-MS **Matrix.....:** WATER
MS Lot-Sample #: F0G280299-004 DH24610K-MSD
Date Sampled...: 07/28/00 11:40 **Date Received..:** 07/28/00
Prep Date.....: 08/08/00 **Analysis Date..:** 08/08/00
Prep Batch #...: 0221469 **Analysis Time..:** 19:57
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Volatile Petroleum Hydrocarbons	**122**	**(70 - 130)**			**SW846 8015 MOD**
	114	**(70 - 130)**	**7.1**	**(0-25)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	102	(70 - 130)
	122	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

ANALYTICAL REPORT

Boeing

Lot #: F0H120145

Doug Marian

Environmental Science & Engine
3199 Riverport Tech Ctr Drive
St Louis, MO 63043

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

August 25, 2000

Case Narrative
LOT NUMBER: **F0H120145**

This report contains the analytical results for the three samples received under chain of custody by STL St. Louis on August 11, 2000. These samples are associated with your Boeing project.

All applicable quality control procedures met method-specified acceptance criteria.

This report shall not be reproduced except in full, without the written approval of the laboratory.

METHODS SUMMARY

F0H120145

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Gross Alpha/Beta by GFPC Th230/Sr90-Y90 cal	EPA 900.0 MOD	

References:

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F0H120145

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DHQTD	001	EP1-P2 (#55)	08/11/00	14:30
DHQTP	002	EP2-P2 (#56)	08/11/00	14:20
DHQTQ	003	EP3-P2 (#54)	08/11/00	14:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EP1-P2 (#55)

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0H120145-001
Work Order: DHQTD
Matrix: SOLID

Date Collected: 08/11/00 1430
Date Received: 08/11/00 1520

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD				**pCi/g**	**900.0 MOD**			
Gross Alpha	4E-02	U	1.8E-01	3.6E-01	08/15/00	08/18/00	0228416	
Gross Beta	1.2E-01	U	3.5E-01	6.0E-01	08/15/00	08/18/00	0228416	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EP1-P2 (#55) DUP

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0H120145-001X
Work Order: DHQTD
Matrix: SOLID

Date Collected: 08/11/00 1430
Date Received: 08/11/00 1520

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD				**pCi/g**	**900.0 MOD**			
Gross Alpha	3E-02	U	1.4E-01	2.9E-01	08/15/00	08/18/00	0228416	
Gross Beta	4.0E-01	U	3.8E-01	6.2E-01	08/15/00	08/18/00	0228416	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EP2-P2 (#56)

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0H120145-002
Work Order: DHQTP
Matrix: SOLID

Date Collected: 08/11/00 1420
Date Received: 08/11/00 1520

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD			**pCi/g**		**900.0 MOD**			
Gross Alpha	3E-02	U	1.6E-01	3.3E-01	08/15/00	08/18/00	0228416	
Gross Beta	-5.0E-01	U	4.7E-01	8.9E-01	08/15/00	08/18/00	0228416	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

ENVIRONMENTAL SCIENCE & ENGINEERING INC

Client Sample ID: EP3-P2 (#54)

Quanterra, Inc. - Radiochemistry

Lab Sample ID: F0H120145-003
Work Order: DHQTQ
Matrix: SOLID

Date Collected: 08/11/00 1440
Date Received: 08/11/00 1520

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD				**pCi/g**	**900.0 MOD**			
Gross Alpha	1.1E-01	U	1.9E-01	3.3E-01	08/15/00	08/18/00	0228416	
Gross Beta	2E-02	U	3.1E-01	5.7E-01	08/15/00	08/18/00	0228416	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0H120145
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY GFPC EPA 900.0 MOD			**pCi/g**	**900.0 MOD**			**F0H150000-416B**	
Gross Alpha	-5E-02	U	1.1E-01	2.9E-01	08/15/00	08/18/00	0228416	
Gross Beta	1.2E-01	U	3.6E-01	6.2E-01	08/15/00	08/18/00	0228416	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0H120145
Work Order #: DHQT
Matrix: SOLID

Date Sampled: 08/11/00
Date Received: 08/11/00

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2σ+/-)	% Yld	QC Sample ID Precision	
GROSS A/B BY GFPC EPA 900.0	**pCi/g**			**900.0 MOD**					**F0H120145-001**	
Gross Alpha	**4E-02**	U	**1.8E-01**		**3E-02**	U	**1.4E-01**		18	%RPD
Gross Beta	1.2E-01	U	3.5E-01		4.0E-01	U	3.8E-01		110	%RPD
	Batch #:		0228416 (Sample)		0228416 (Duplicate)					

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Quanterra, Inc. - Radiochemistry

Client Lot ID: F0H120145
Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
GROSS A/B BY GFPC EPA 900.0 MOD		**pCi/g**		**900.0 MOD**			**F0H150000-416C**
Gross Alpha	7.49E+01	8.87E+01	9.2E+00	3E-01		118	48 - 147
Gross Beta	7.19E+01	7.75E+01	7.9E+00	6E-01		108	68 - 145
	Batch #:	0228416		**AnalysisDate**	08/18/00		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

Appendix C

Geotechnical Laboratory Report
(Prepared by Shively Geotechnical, Inc.)

Shively Geotechnical, Inc.

October 16, 2000
Project No. SG7-1673

Doug Marion
Environmental Science & Engineering
3199 Riverport Tech Center Drive
Maryland Heights, Missouri 63043

Subject: Geotechnical Results for
Boeing Phase II ESA

Dear Mr. Marion:

Shively Geotechnical, Inc., is pleased to present the results of tests performed for the Boeing project in St. Louis, Missouri. Five Shelby tube samples were obtained by Environmental Science & Engineering. Our technicians picked the samples up on site and delivered them to our laboratory in Fairview Heights, Illinois. Particle size analysis and hydraulic conductivity testing were performed on all five of the samples.

The tests were performed in accordance with the following American Society for Testing and Materials (ASTM) test methods: Particle Size analysis - D 422; and Hydraulic Conductivity - D 5084. Results are summarized on the attached Laboratory Test Results table and Grain Size Distribution Curves.

We appreciate the opportunity to be of service to Environmental Science & Engineering. Please let us know if there are any questions or if we can be of further assistance.

Sincerely,

SHIVELY GEOTECHNICAL, INC.

Janet M. Jacobi

Janet M. Jacobi
Technical Services Manager

Attachments

11 French Village Industrial Park
Fairview Heights, Illinois 62208
618/398-1414 Fax: 618/398-1492

1741 New Jamestown Road
St. Louis, Missouri 63138
314/355-7400 Fax: 314/355-7044

2700 West Lawrence Avenue, Suite J4
Springfield, Illinois 62704
217/793-2700 Fax: 217/793-2610

E-mail: shively@apci.net

LABORATORY TEST RESULTS
FOR
ENVIRONMENTAL SCIENCE & ENGINEERING

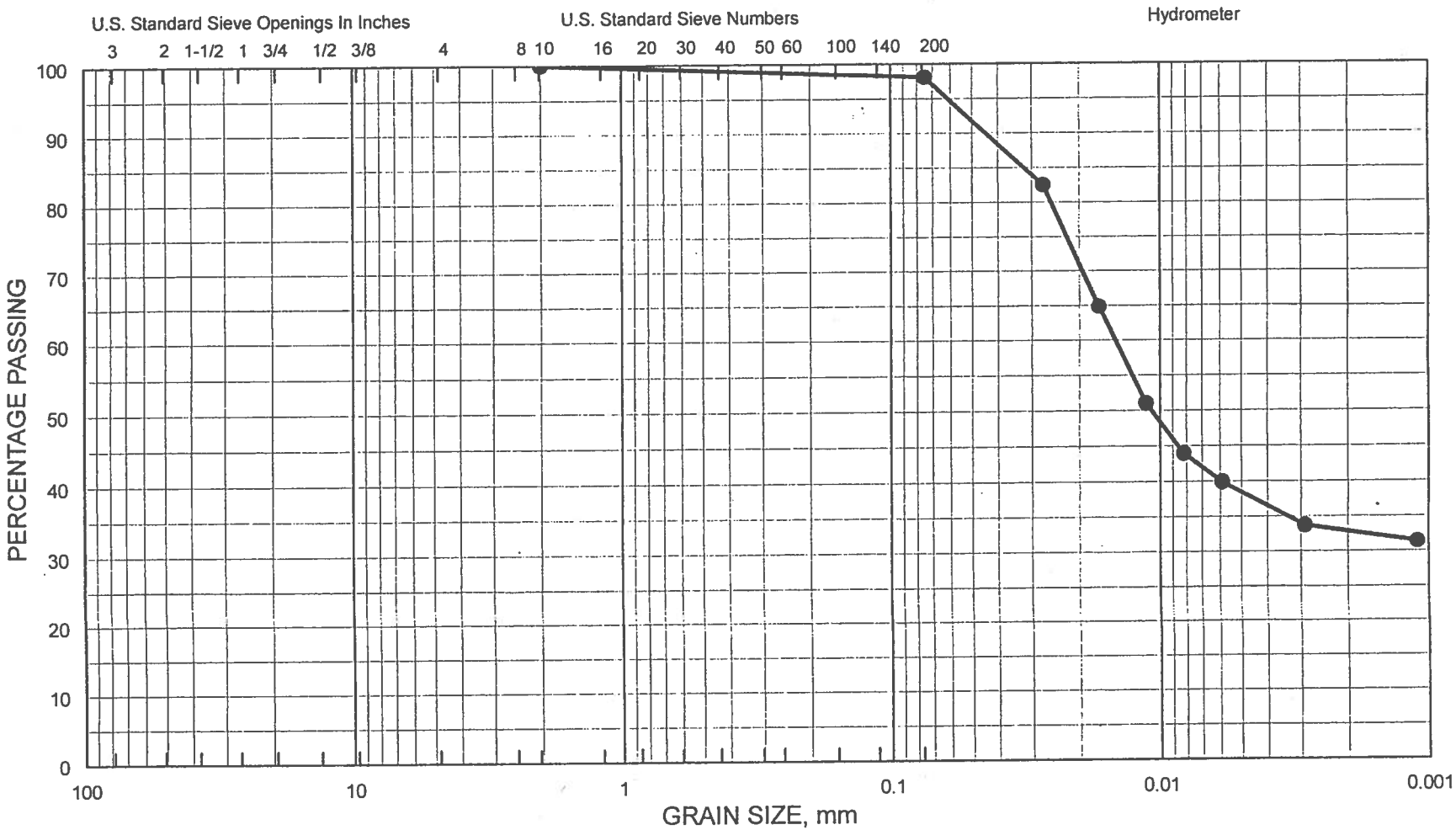
GEOTECHNICAL RESULTS
FOR
BOEING PHASE II ESA

Boring Number	Sample Depth (Feet)	Moisture Content, %	Dry Unit Weight, pcf	Hydraulic Conductivity, cm/sec	Range of Hydraulic Gradient
MW-5AD	29.0 - 30.0	20.7	105.2	1.4×10^{-5}	0.3 - 2.5
MW-5AD	75.0 – 76.0	15.4	116.5	1.2×10^{-8}	14.8 - 15.1
MW-8AD	39.0 – 41.0	30.1	93.6	5.4×10^{-7}	2.3 - 10.5
MW-8AD	64.0 – 66.0	20.5	104.1	2.7×10^{-7}	6.4 - 9.2
MW-8AS	10.0 – 12.0	28.1	95.2	3.1×10^{-4}	0.2 - 2.2

% - Percent
cm/sec - Centimeters per Second
pcf - Pounds per cubic foot

October 16, 2000
Project No. SG7-1673
SHIVELY GEOTECHNICAL, INC.

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

PROJECT NUMBER: SG7-1673 BORING: MW5AD PROJECT: Geotechnical Results for

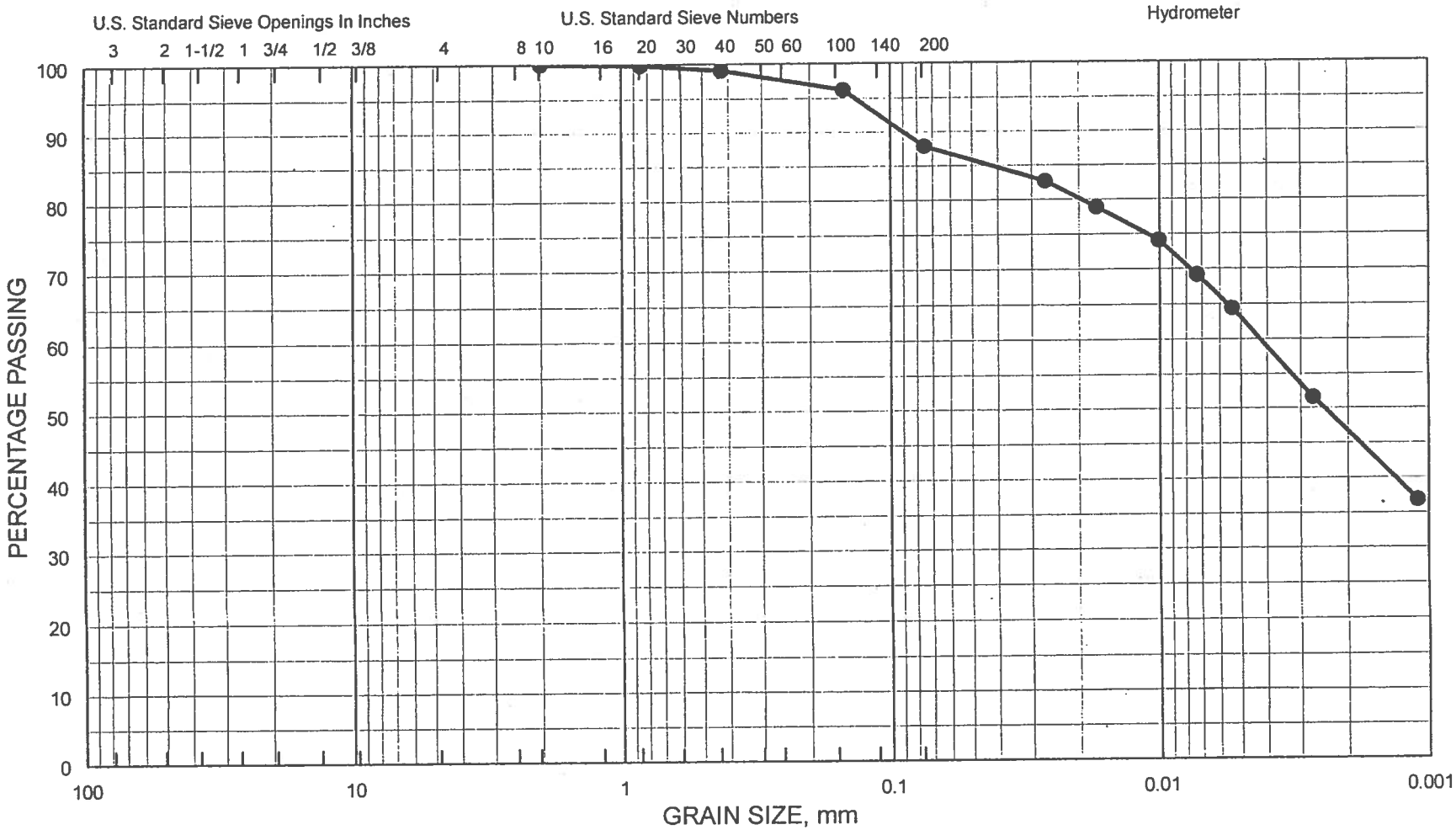
DATE: October 16, 2000 SAMPLE: -- Boeing Phase II ESA

CURVE NUMBER: 1 DEPTH Ft.: 29.0-31.0 DESCRIPTION: Gray-Brown Silty CLAY, CL

SHIVELY GEOTECHNICAL, INC.

314-355-7400

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

PROJECT NUMBER: SG7-1673 BORING: MW5AD PROJECT: Geotechnical Results for

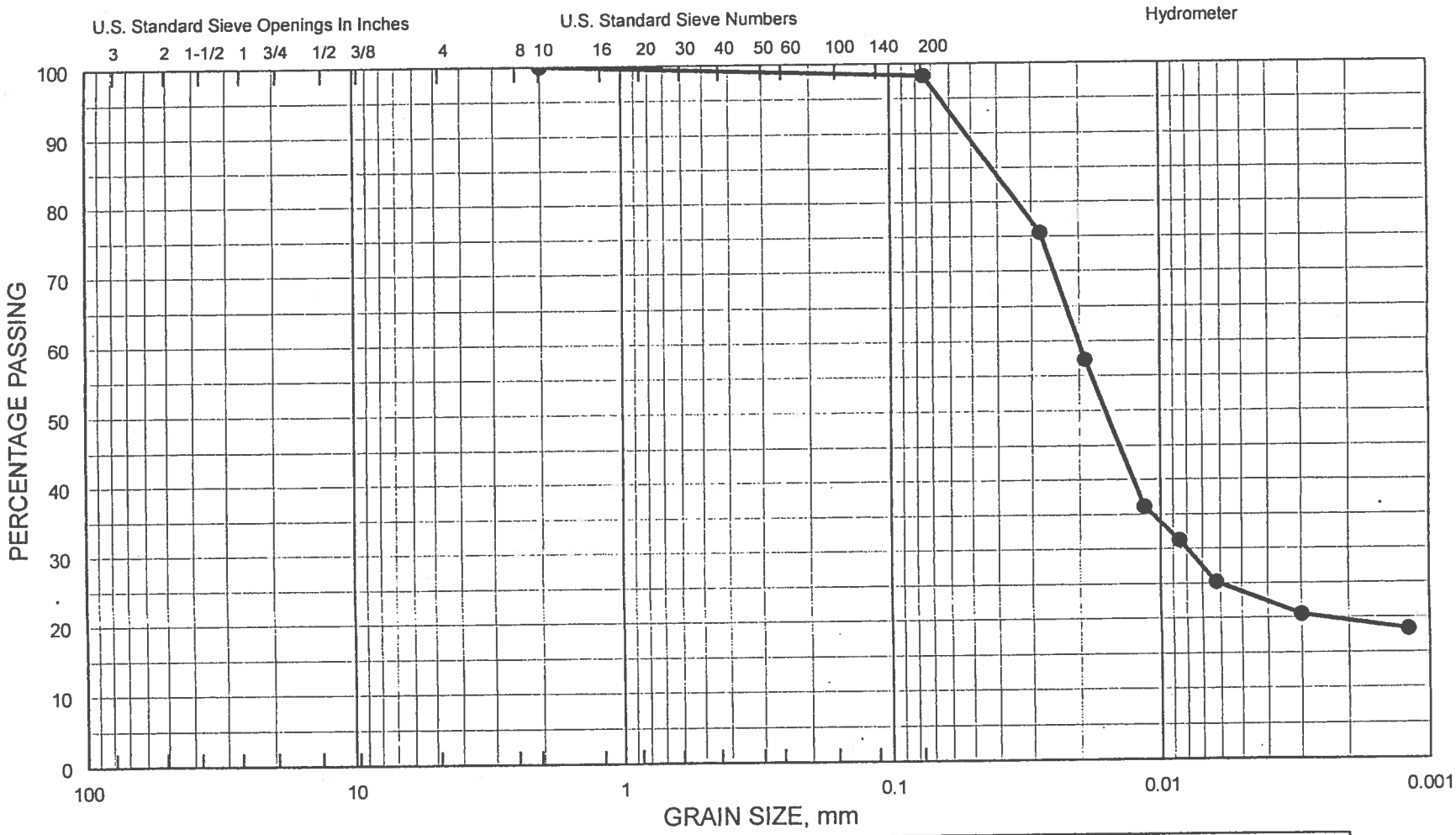
DATE: October 16, 2000 SAMPLE: -- Boeing Phase II ESA

CURVE NUMBER: 2 DEPTH Ft.: 75.0-76.0 DESCRIPTION: Light Gray-Brown CLAY, with Silt, CH

SHIVELY GEOTECHNICAL, INC.

314-355-7400

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

PROJECT NUMBER: SG7-1673 BORING: MW8AD PROJECT: Geotechnical Results for

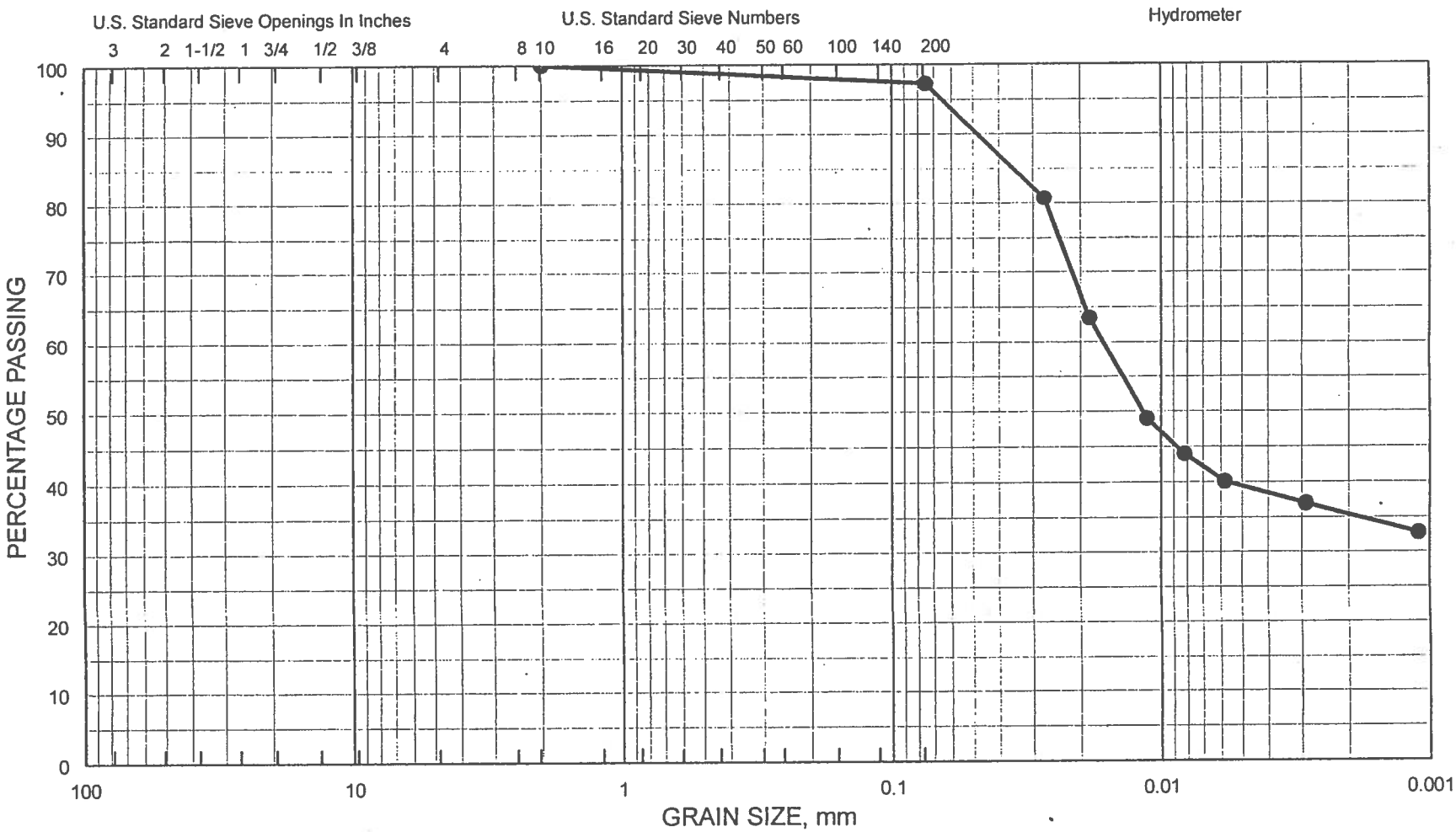
DATE: October 16, 2000 SAMPLE: -- Boeing Phase II ESA

CURVE NUMBER: 3 DEPTH Ft.: 39.0-41.0 DESCRIPTION: Gray-Brown Silty CLAY, CL

SHIVELY GEOTECHNICAL, INC.

314-355-7400

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

PROJECT NUMBER: SG7-1673 BORING: MW8AD PROJECT: Geotechnical Results for

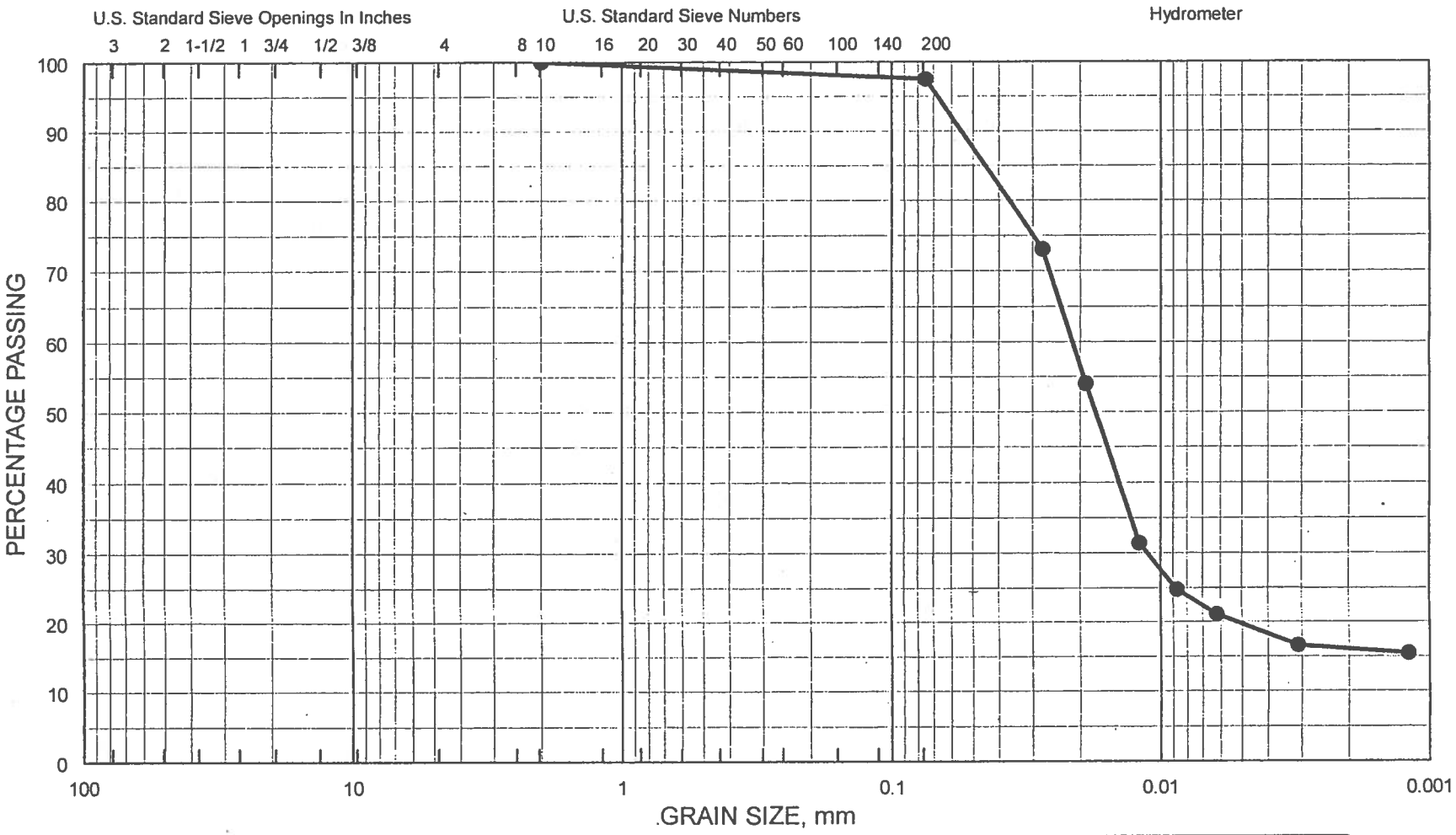
DATE: October 16, 2000 SAMPLE: -- Boeing Phase II ESA

CURVE NUMBER: 4 DEPTH Ft.: 64.0-66.0 DESCRIPTION: Gray-Brown Silty CLAY, CL/CH

SHIVELY GEOTECHNICAL, INC.

314-355-7400

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

PROJECT NUMBER: SG7-1673 BORING: MW8AD PROJECT: Geotechnical Results for

DATE: October 16, 2000 SAMPLE: -- Boeing Phase II ESA

CURVE NUMBER: 5 DEPTH Ft.: 10.0-12.0 DESCRIPTION: Gray SILT, ML

SHIVELY GEOTECHNICAL, INC.

314-355-7400