

GW - 97

Work Plan

Date: June 1998

315



June 26, 1998

CERTIFIED MAIL NO. Z 235 400 923
RETURN RECEIPT REQUESTED

Mr. Mark Ashley
State of New Mexico
Energy, Minerals, and Natural Resources Department
Oil Conservation Division
2040 South Pacheco
State Land Office Building
Santa Fe, NM 87505

RECEIVED
JUN 29 1998
OIL CON. DIV.
DIST. 3

RE: BJ Services Company, USA; Farmington, NM Facility; Acidic Waste Tank
and Field Waste Tank Removal Documentation Report

Dear Mr. Ashley:

Please find enclosed a copy of the report, *6,000 Gallon Underground Acidic Waste Tank and 18,000 gallon Underground Field Waste Tank Removal Documentation Report* dated June 26, 1998.

If you have any questions or concerns regarding the information presented, feel free to contact me at (281) 363-7521. Thank you.

Sincerely,

Rick N. Johnson
Environmental Specialist

Enclosure

c: Mr. Denny Faust, OCD Aztec Office (w/ enclosure)
Mr. Jack Harless, BJ Services Company, U.S.A. (w/ enclosure)
Ms. Jo Ann Cobb, BJ Services Company, U.S.A. (w/o enclosure)
Mr. Charles Smith, BJ Services Company, U.S.A. (w/o enclosure)

RECEIVED
JUN 29 1998

**OIL CON. DIV.
DIST. 3**

**6,000 GALLON UNDERGROUND ACIDIC WASTE TANK AND 18,000
GALLON UNDERGROUND FIELD WASTE TANK
REMOVAL DOCUMENTATION REPORT**

**BJ Services Company, U.S.A.
Farmington, New Mexico Facility**

June 26, 1998

Prepared by



BJ Services Company, U.S.A.
8701 New Trails Drive
The Woodlands, Texas

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	FIELD ACTIVITIES.....	2
2.1	Preparation for Removal.....	2
2.2	Unit Removal and Field Observations	3
2.3	Excavation Observations, Overexcavation, and Soil Sampling.....	4
2.4	Waste Soil Management	6
3.0	DATA EVALUATION AND SCREENING	8
3.1	Presentation and Evaluation of Removal Data	8
3.2	Background Data	9
3.3	Inorganic Data Screening Comparisons	9
3.4	Organic Data Screening Comparisons.....	10
3.5	Data Screening Results.....	10
4.0	CONCLUSIONS AND RECOMMENDATIONS	11
4.1	Conclusions.....	11
4.2	Recommendations	12

FIGURES

TABLES

APPENDICES

FIGURES

- Figure 1 Site Location Map
- Figure 2 Site Layout Map
- Figure 3 Former AWT Diagram
- Figure 4 Former FWT Diagram

TABLES

- Table 1 AWT Soil Analytical Results
- Table 2 FWT Soil Analytical Results
- Table 3 Inorganic Data Screening Comparison
- Table 4 Organic Data Screening Comparison

APPENDICES

- Appendix A AWT Solids/Washwater Disposal Documentation
- Appendix B FWT Solids/Washwater Disposal Documentation
- Appendix C Photographs of Removal
- Appendix D Removal Contractor Report and Tank Destruction Certificates
- Appendix E Soil Analytical Laboratory Report for Confirmation and Waste Soil Characterization Samples
- Appendix F Waste Soil Disposal Documentation

1.0 INTRODUCTION

On February 9 through 11, 1998, one 6,000 gallon acidic waste tank and one 18,000 gallon field waste tank were permanently removed from service from the BJ Services Company, U.S.A. (BJ Services) facility in Farmington, NM located at 3250 Southside River Road. Prior to their excavation, both of these tanks were thought to be approximately 6,000 gallons. A site location map is presented as Figure 1 and site layout map is presented as Figure 2.

The closure activities were performed according to the OCD guidance document entitled, *Unlined Surface Impoundment Closure Guidelines* (1993) and with the closure plan submitted by BJ Services and approved by OCD.

The purpose of this report is to document the field work related to the waste tank removal activities, to document the management of the waste generated by the tank removals, to present and evaluate the findings of the analytical tests which were run on confirmation samples, and to recommend the course of action which should be taken to pursue final closure.

2.0 FIELD ACTIVITIES

All field activities related to the removal of the tank were carried out from February 9, 1998 to April 29, 1998. The following sections outline each step of the removal process.

2.1 Preparation for Removal

Both the AWT and the FWT were thought to be empty before the removal contractor was asked to be on location. Upon uncovering of the tanks, it was discovered that solids were present in both tanks.

The AWT contained approximately 1,000 gallons of solid material while the FWT contained approximately 2,000 gallons of solid material. Once the AWT was uncovered and exposed, Riley Industrial Services (RIS) was retained to clean the solid material out of this tank and place it into 55 gallon drums for characterization and disposal with OCD approval. RIS used a water jet and vacuum hose to remove the solids from the tank. Once the material had been removed from the tank, the solid material was placed into 55 gallon drums (15) while the wash water was placed into a rented aboveground tank. A representative sample was taken of the material and the appropriate analyses were run to ensure proper disposition of the waste material. This analysis revealed that the solids and wash liquids were a non-hazardous waste with high TPH concentrations. Based on the analysis, a one-time approval was granted by the OCD to dispose of the solid waste (in drums) at the Envirotech facility near Farmington, while the liquid waste was disposed of at the SUNCO facility. Appendix A contains the waste profile worksheet, state approval forms, and the transportation/disposal manifests for the solids and tank wash water from the AWT. The analytical results for this waste are presented in Appendix E.

Since the FWT was deeper than expected, and to avoid double handling of waste materials, cleaning of this tank and disposal of the solids were postponed until after an analysis of the solids and OCD approval had been received. A representative sample was gathered after the tank had been uncovered and exposed. A full TCLP analysis was

performed on this sample to determine its hazard status and final disposition. It was determined from this analysis that the solid material in the FWT was non-hazardous but contained high concentrations of TPH. Based on this analysis OCD granted BJ approval to dispose of the material at the Envirotech facility. Freemyer Service Company was retained to remove the material from the tank and transport it to the Envirotech facility for disposal. Freemyer used a water jet and vacuum hose to remove the solids from the tank. With the approval of the OCD, the material was then transported to the Envirotech disposal facility. Appendix B contains the waste profile worksheet, state approval forms, and the transportation/disposal manifests for the solids and tank wash water from the FWT. The analytical results for this waste are presented in Appendix E.

2.2 Unit Removals and Field Observations

The waste tanks were removed by Constructive Solutions, Inc. (CSI). BJ Services corporate environmental personnel and/or CSI environmental personnel witnessed the entire removal and documented the field activities. Appendix C contains photo-documentation of the removal, while Appendix D contains the removal contractor report and the tank destruction certificates from CSI.

Acidic Waste Tank

The AWT consisted of a 6,000 gallon, horizontal steel tank and a drain line coming from the acid dock drain. Once sufficient soil from around the AWT was removed and the solids were removed from the tank, CSI used the trackhoe to maneuver the tank out of the excavation. Visual inspection of the tank revealed some holes in the top portion of the tank but none below the bottom two thirds of the tank. There was some soil staining around the piping juncture where the line from the acid dock drain entered the tank. The tank was then loaded onto a transport truck, and transported for disposal off-site. A diagram of the former AWT system is presented as Figure 3.

Field Waste Tank

The FWT consisted of a 18,000 gallon, horizontal steel tank and a drain line coming from a drain pad. Once sufficient soil from around the AWT was removed, the excavation was shored for safety, and the solids were removed from the tank, CSI used the trackhoe to maneuver the tank out of the excavation. Visual inspection of the tank indicated that portions of the ends of the tank had collapsed inward due to the overburden of the soil. Visual inspection also revealed that the bottom of the tank suffered from severe corrosion and had several holes. There was some soil staining below the tank and on the north wall of the excavation. The tank was then loaded onto a transport truck, and transported for disposal off-site. A diagram of the former FWT system is presented as Figure 4.

2.3 Excavation Observations, Overexcavation, and Soil Sampling

Acidic Waste Tank

Throughout the removal procedure, CSI and/or BJ Services environmental personnel observed the soil surrounding the AWT to detect any indication of release. Upon removal of the AWT, some of the backfill around the piping juncture and on the north wall showed slight visible staining. However, the majority of the soil from around the AWT did not appear to have been impacted by the operation of the AWT. A three foot by three foot valve box is located directly in the north wall of the AWT excavation making overexcavation in this direction impossible. A 20,000 gallon acid tank is also located approximately ten feet from the edge of the north wall. Accordingly, no overexcavation was performed in the AWT area. Five representative confirmation samples were collected from the AWT excavation. Discreet samples were collected on the short sides of the excavation while three point composites were collected from the long sidewalls and the floor of the excavation. These samples were sent to Quanterra Environmental Services (QES) for analysis of TPH DRO/GRO (EPA Method 8015M), volatile organic compounds (EPA Method 8020), semi-volatile organic compounds (EPA Method 8260), and the eight RCRA metals (EPA Method 6010/7000 Series). The results of this analysis are summarized in Table 1 and presented as Appendix E..

Field Waste Tank

The FWT removal effort consisted to two field efforts. Throughout the removal procedure, CSI and/or BJ Services environmental personnel observed the soil surrounding the FWT to detect any indication of release. Some difficulty was encountered when attempting to remove the FWT due to the instability of the soil surrounding the tank and the large amount of solids located in the tank. Massive cave-ins made the removal of the tank extremely difficult. During the first field effort, it was determined that the best course of action was to sample the solid material in the FWT and characterize it for disposal. Five confirmation samples were also collected from the FWT excavation. Five-point composite samples were collected from the long sides of the excavation (east and west), while three-point composites were collected from the short sides of the excavation (north and south). An attempt was made to gather a sample from the bottom of the FWT, even though the FWT was still in the ground. Using the excavation equipment, a three-point composite sample was gathered as close to the bottom as was possible under the given conditions. These samples were sent to QES for analysis of TPH DRO/GRO (EPA Method 8015M), volatile organic compounds (EPA Method 8020), semi-volatile organic compounds (EPA Method 8260), and the eight RCRA metals (EPA Method 6010/7000 Series). The results of this analysis are summarized in Table 2 and presented as Appendix E.

During the second field effort, three sides of the excavation were sloped to allow safe entry of the excavation, the solids were cleaned out of the tank by Freemyer, and the tank was removed from the excavation. Upon removal of the FWT, some of the backfill around the bottom of the tank and on the north and west wall showed slight visible staining. The visibly impacted soil from the bottom of the excavation was overexcavated until no visible staining was evident, approximately 28 feet; however, a slight odor was detected at this depth. Based on information gathered during the planning phase of this project, this depth would correspond closely with the capillary fringe in this area. Therefore, based on this information, and the instability of the soil associated with continued overexcavation in this area, a decision was made to collect a confirmation sample from the bottom of the excavation.

Based on previous analytical results and visual observations, a trench was advanced into the north wall of the excavation in an attempt to visually delineate any impact in this direction. A discrete sample was collected approximately five feet into the northern sidewall. Trenching or overexcavation was not possible on the west side of the excavation due to the location of a drying bed structure located less than five feet from the edge of the excavation. These samples were sent to QES for analysis. The north wall sample was analyzed for TPH DRO (EPA Method 8015M), while the bottom hole sample was analyzed for TPH DRO (EPA Method 8015M), volatile organic compounds (EPA Method 8020), semi-volatile organic compounds (EPA Method 8260), and the eight RCRA metals (EPA Method 6010/7000 Series). The detected constituent results for the second field effort are also summarized in Table 2 and presented in Appendix E.

2.4 Waste Soil Management

Acidic Waste Tank

Excavated soil from around the AWT (about 20 yards) was placed next to the excavation on the site. One representative, five-point composite sample of the soil removed from the AWT excavation was analyzed to determine the final disposition of the soil. Analytical results of this sample indicated that the soil was within guidelines of the NMOCD to be used as backfill. Verbal approval was granted by Mr. Mark Ashley to use this soil as backfill. This material, along with clean off-site backfill material, was used to backfill this excavation.

Field Waste Tank

Excavated soil from around the FWT (about 500 yards) was placed next to the excavation on the site. Excavated soil from above the tank (one to eight feet) was segregated from a second stockpile of material from around and under the tank. One representative, five-point composite sample of the second pile of soil was analyzed to determine the final disposition of the soil. Analytical results of this sample indicated that the soil was

impacted and required off-site disposal. The material from above the FWT, along with clean off-site backfill material, was used to backfill this excavation.

The waste soil was profiled and approval was obtained to load, haul, and dispose of the soil at the Envirotech facility located near Farmington. Soil disposal documentation including the analytical results, waste profile, state approval forms, and manifests/weigh tickets are presented in Appendix E and F.

3.0 DATA EVALUATION AND SCREENING

The purpose of this section is to evaluate and compare these data to QA standards, regional background values, and to the standards developed for this site in the closure plan for this facility. These standards were derived for the facility based on groundwater characteristics, proximity to surface water and wellhead protection areas, and soil/waste characteristics.

3.1 Presentation and Evaluation of Removal Data

The analytical results for detected compounds in the soil samples collected in the AWT area are presented in Table 1. The following constituents were detected in the soil samples from the AWT:

- Arsenic
- Barium
- Chromium
- Lead
- TPH-DRO
- TPH-GRO
- TRPH
- bis (2-ethylhexyl) phthalate
- Di-n-octyl phthalate
- Fluorene
- 1,2,4- Trimethylbenzene
- 1,3,5- Trimethylbenzene
- Phenanthrene
- o-Xylene
- m-Xylene
- p-Xylene

The analytical results for detected compounds in the soil samples collected in the FWT area are presented in Table 2. The following constituents were detected in the soil samples from the FWT:

- Arsenic
- Barium
- Chromium
- Lead
- TPH-DRO
- TPH-GRO
- TRPH
- bis (2-ethylhexyl) phthalate
- Di-n-octyl phthalate
- Fluorene
- Naphthalene
- 1,2,4- Trimethylbenzene
- 1,3,5- Trimethylbenzene
- 2-Methylnaphthalene
- Phenanthrene
- Ethylbenzene
- Isopropylbenzene
- n-Propylbenzene
- Toluene
- p-Isopropylbenzene
- sec-Butylbenzene
- o-Xylene
- m-Xylene
- p-Xylene

Both bis (2-ethylhexyl) phthalate and Di-n-octyl phthalate were detected in these samples; however, according to the EPA guidelines, phthalates are among common laboratory contaminants. These constituents were also detected in the method blanks as a part of

QES's QA/QC program (see laboratory reports and note on Tables 1 and 2). Therefore, given the low levels of detection and the fact that these are common laboratory contaminants, these two compounds were excluded from consideration as constituents of concern (COCs) in both areas. All other organic compounds were considered potential COCs and are addressed in the organic data screening in Section 3.4 of this report.

No statistical evaluations were performed on the removal data since there are too few samples to meet significance requirements. Therefore, for the purpose of screening comparisons, the maximum detected concentrations were used.

3.2 Background Data

Since no site-specific background data are available for this site, the body of scientific literature regarding the native soil concentrations of various inorganic elements was used to develop background criteria. Naturally occurring background concentrations for the detected inorganic constituents were referenced from the United States Geological Survey (USGS) Professional Paper 1270 by Shacklette and Boerngen entitled *Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States* (1984). This paper presents the observed mean, standard deviation, and estimated arithmetic mean for 50 inorganic elements in the entire United States (US), western US, and eastern US. For the purposes of the screening comparisons, the estimated arithmetic mean for the western US was used.

3.3 Inorganic Data Screening Comparisons

Table 3 presents the referenced USGS background concentrations for the inorganic constituents and compares these values to the maximum detected concentration from the soil data gathered during the removal project. Based on these comparisons, all of the detected inorganic constituents in the AWT and the FWT area were screened out of consideration as COCs.

3.4 Organic Data Screening Comparisons

Consistent with the workplan and the OCD guidance document, a comparison was made between the detected constituents and the soil remediation levels derived in the workplan. This comparison is presented as Table 4. This comparison eliminated total xylene from further consideration in the AWT area, while it eliminated ethylbenzene, toluene, and total xylene from further consideration in the FWT area.

3.5 Data Screening Results

As a result of the data screening presented above, certain compounds were eliminated as COCs for the two areas. The remaining COCs for each area are presented below:

Acidic Waste Tank

- TPH-DRO
- TPH-GRO
- TRPH
- Fluorene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 2-Methylnaphthalene
- Phenanthrene

Field Waste Tank

- TPH-DRO
- TPH-GRO
- TRPH
- Fluorene
- Naphthalene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 2-Methylnaphthalene
- Phenanthrene
- Isopropylbenzene
- n-Propylbenzene
- p-Isopropylbenzene
- sec-Butylbenzene

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The former AWT and FWT were removed and confirmation sampling and analyses were performed in accordance with OCD guidelines and the approved workplan. Chemical residues remain in the soil above detectable levels and some above OCD soil remediation levels developed in accordance with OCD guidance. The tank fluids, accumulated solids, tanks, and waste soil were all handled and disposed of properly. All visually impacted soils were excavated to the maximum extent practicable.

The data screening presented in Section 3.0 eliminated several chemicals from further consideration. The eliminated compounds were either laboratory artifacts, below naturally occurring levels, or below the OCD soil remediation levels developed for the site. The following sub-sections discuss area-specific conclusions.

Acidic Waste Tank

Only the north wall of this excavation exhibited any visual indication of impact from operation of the AWT. Analytical results confirm that the north wall of the excavation was impacted with TPH, low levels of PAHs, and low levels of a few volatiles. The bottom and other sidewalls of the excavation did not exhibit a significant impact.

Field Waste Tank

The north wall, west wall, and bottom of the excavation all exhibited visual indication of impact from operation of the FWT. Analytical results confirm that these areas were impacted with TPH, volatiles, and PAHs. Upon further excavation to a depth of approximately 28 feet in the bottom, and approximately 5 feet back into the north wall, impact was still observed and confirmed by analytical results. The east and south wall of the FWT excavation did not exhibit a significant impact.

4.2 Recommendations

Acidic Waste Tank

Overexcavation in the northern direction is not practical due to the proximity of the valve box and the acid tank to the north wall of the excavation. In consideration of this, and based on the field observations during the removal and the analytical data screening presented in Section 3.0 of this report, BJ Services requests that no further action be required to address the organic chemical residuals remaining in the soil in this area.

Field Waste Tank

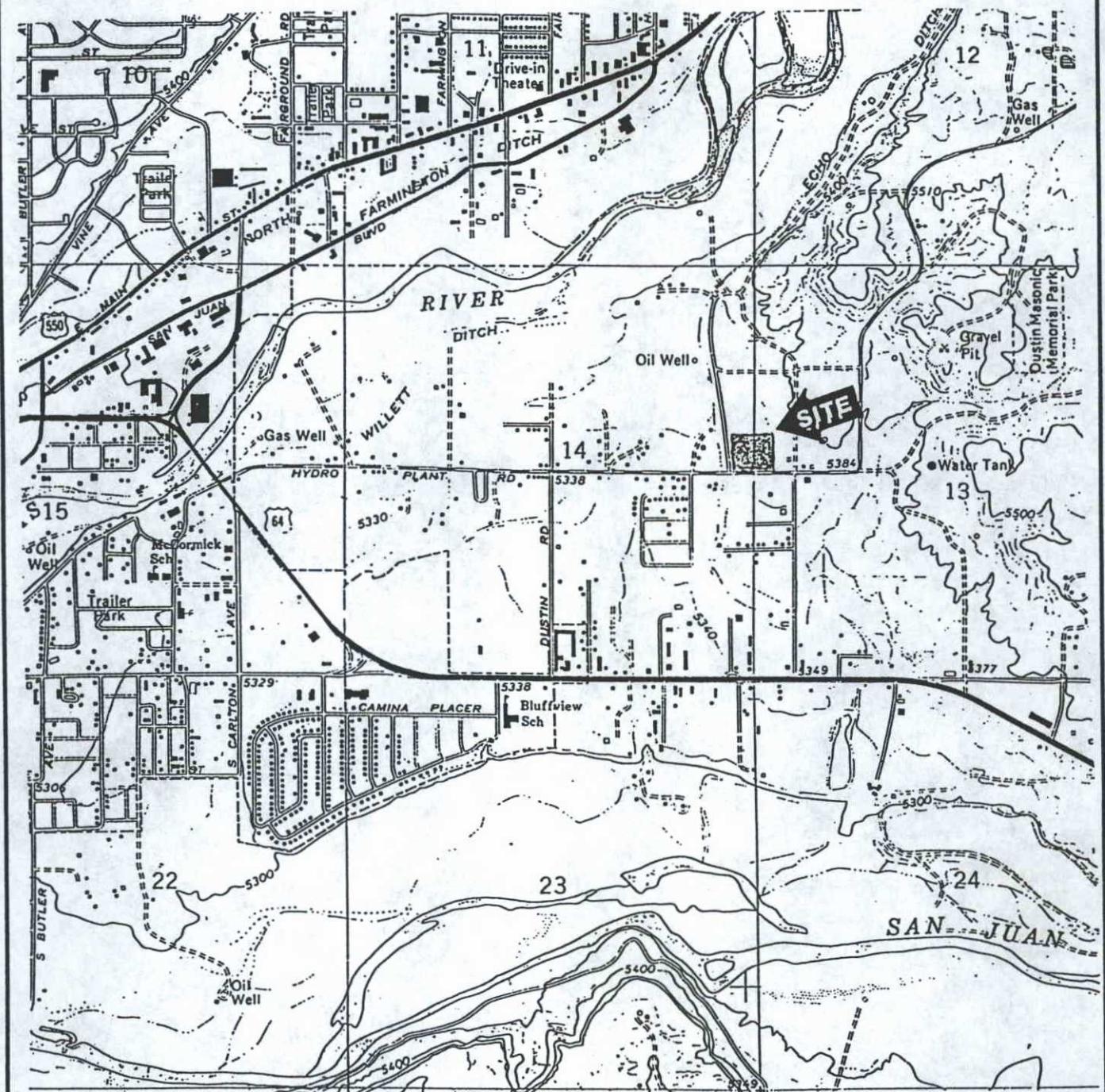
BJ Services recommends further investigation of this area with the focus on TPH impact. Investigation components would include:

- Vertical delineation of TPH impact in the middle of the FWT area;
- Horizontal delineation of TPH impact in the northern direction;
- A determination of whether groundwater has been impacted by TPH; and
- Determination of groundwater gradient and flow across the facility.

BJ Services could accomplish these goals with one soil boring directly north of the excavation and a soil boring in the middle of the FWT area. If the latter soil boring showed impact directly above groundwater, this boring could be converted to a permanent or temporary groundwater monitoring well. These two wells, in tandem with the monitoring wells toward the front of the facility, could then be used to establish gradient and groundwater flow.

If OCD agrees with this general course of action, BJ Services will retain a consultant to generate a more specific work plan and perform the investigation field activities in the FWT area.

FIGURES



Source: USGS Quadrangle Map, 7.5 Minute Series, Scale: 1"=2000'



BJ Services Company, U.S.A.
8701 New Trails Drive
The Woodlands, TX 77381

Figure 1: Site Location Map
Last Revised: 12/9/97

Facility Name: BJ Services Company, U.S.A.
Facility Address: 3250 Southside River Rd.
Farmington, NM

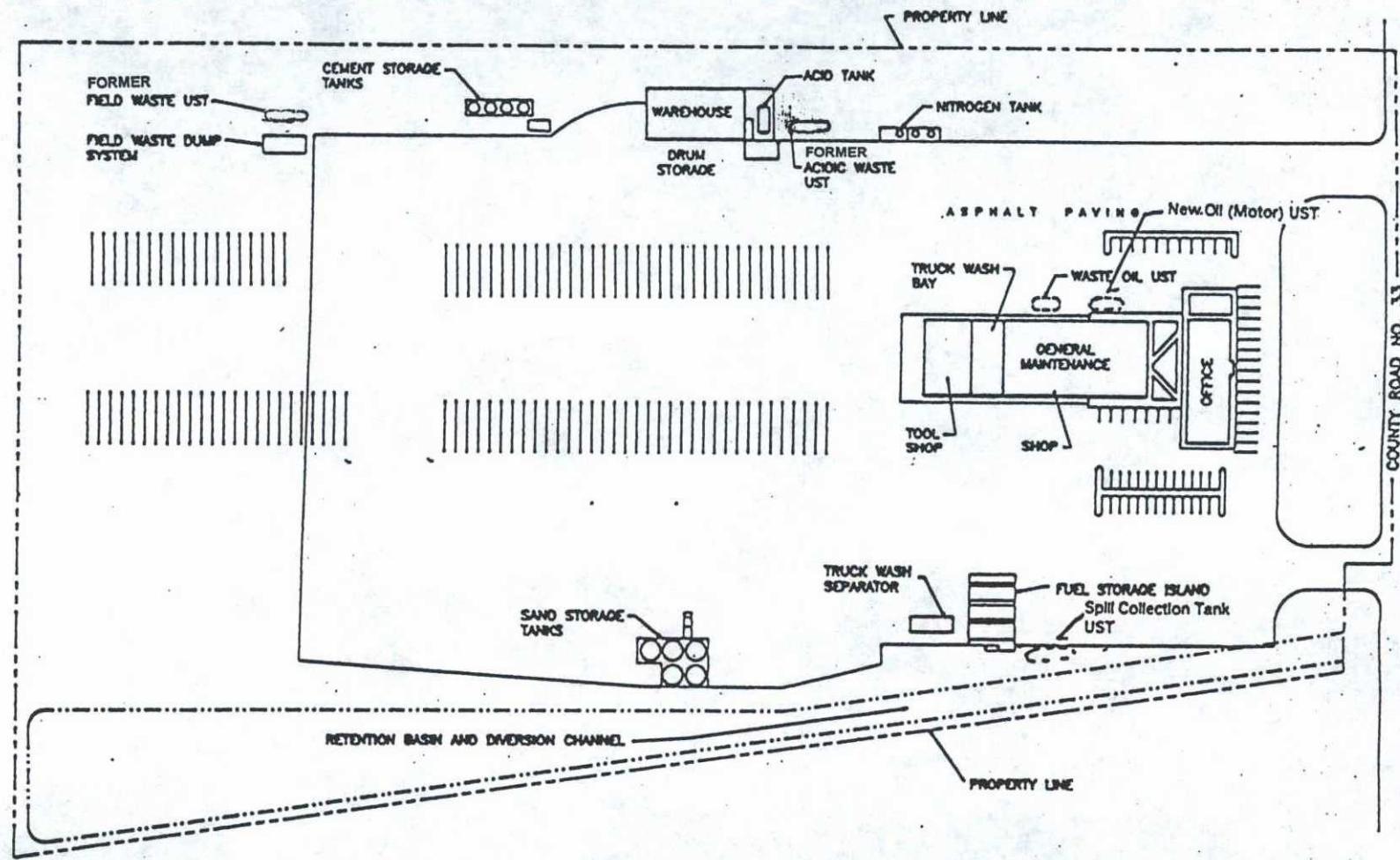


Figure 2: Site Layout Map



BJ Services Company, U.S.A.
8701 New Trails Drive
The Woodlands, Texas 77381

Facility Name: BJ Services Company, U.S.A.
Facility Address: 3250 Southside River Rd.
Farmington, NM

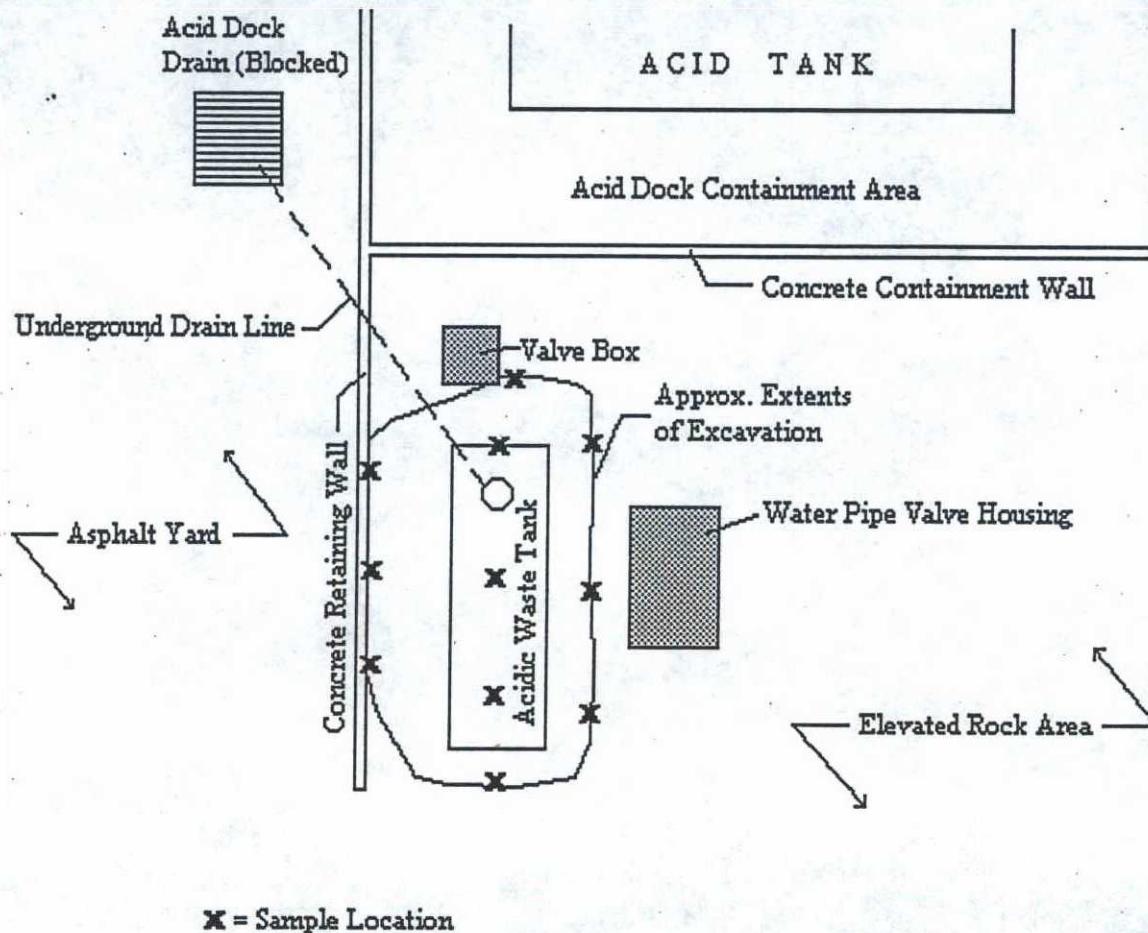


Figure 3: Acid Waste Tank System Layout
 Last Revised: 4/16/98 Not To Scale



BJ Services Company, U.S.A.
 8701 New Trails Drive
 The Woodlands, Texas 77381

Facility Name: BJ Services Company, U.S.A.
 Facility Address: 3250 Southside River Road
 Farmington, NM

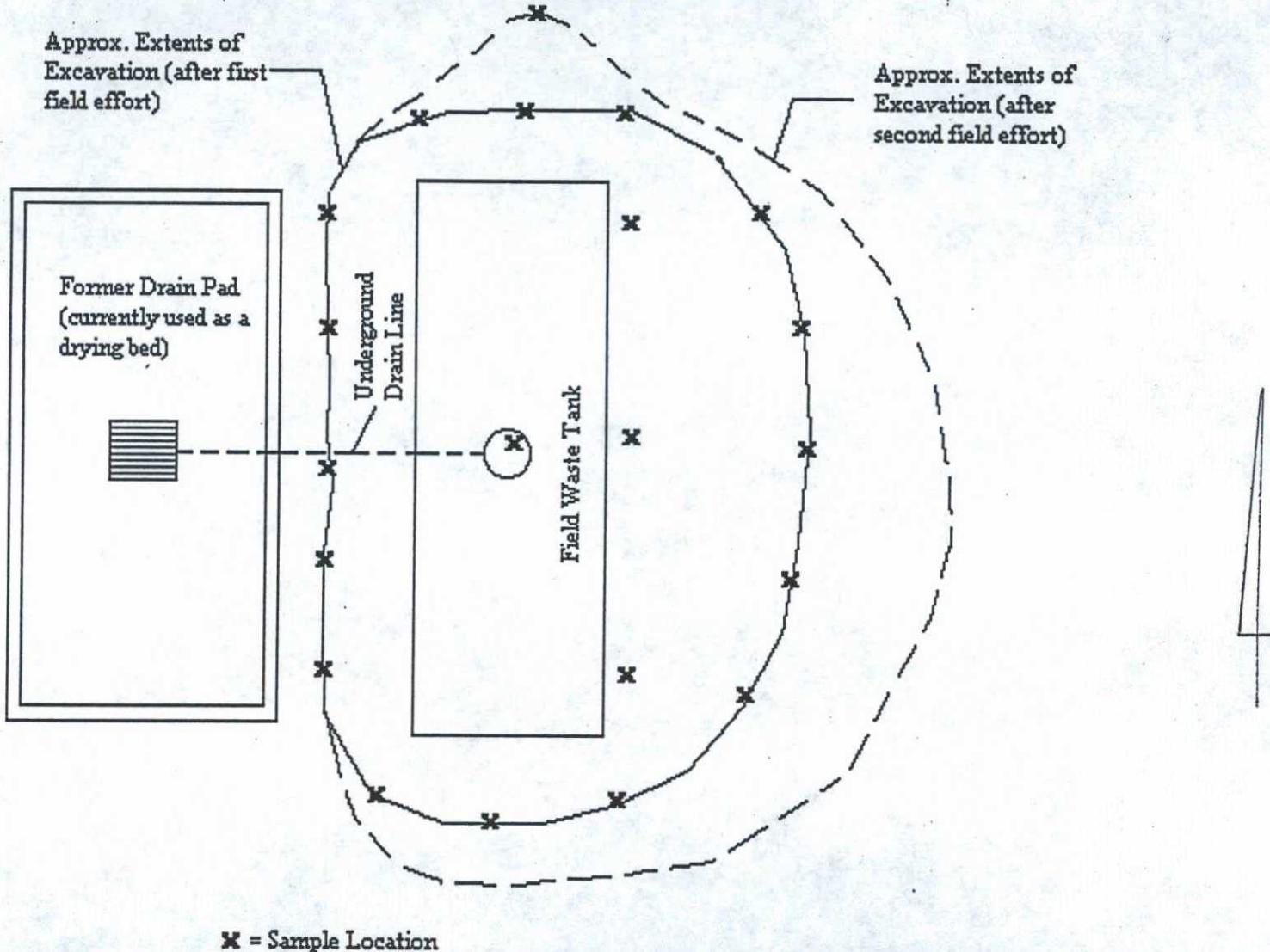


Figure 4: Field Waste Tank System Layout
Last Revised: 4/16/98 Not To Scale



BJ Services Company, U.S.A.
8701 New Trails Drive
The Woodlands, Texas 77381

Facility Name: BJ Services Company, U.S.A.
Facility Address: 3250 Southside River Road
Farmington, NM

TABLES

General Information				Soil Analytical Results (mg/kg)																
Sample ID	Sample Location	Depth (feet)	Sample Type	Inorganic Compounds				Total Petroleum Hydrocarbons			Organic Compounds									
				Arsenic	Lead	Barium	Chromium	TPH-DRO	TPH-GRO	TRPH	bis (2-Ethylhexyl) phthalate ¹	Di-n-octyl phthalate ¹	Fluorene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Methyl-naphthalene	Phenanthrene	o-Xylene	m-Xylene, p-Xylene	
#1	AWT-WW	8	Comp	2.9	6.3	171	6.7	2.2	<0.11	56	0.52	0.42	<0.36	<0.0055	<0.0055	<0.36	<0.36	<0.0028	<0.0028	
#2		8	Grab	2.9	8.3	84.7	3.9	5700	3.6	19000	3.5	<3.8	1.9	2.8	1.6	11.0	4.0	<0.72	<0.72	
#3		8	Comp	2.9	6.3	155	6.2	19.0	<0.11	89	5.1	<0.36	<0.36	<0.0055	<0.0055	<0.36	<0.36	<0.0027	<0.0027	
#4		10	Comp	2.2	4.4	122	6.0	19.0	<0.11	53	0.58	<0.36	<0.36	0.0082	<0.0055	<0.36	<0.36	0.0059	0.0083	
#5		8	Grab	2.7	6.5	148	5.6	4.1	<0.11	52	0.95	<0.36	<0.36	<0.0055	<0.0055	<0.36	<0.36	<0.0027	<0.0027	

Statistics

Number of Samples (n)	-	-	-	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detections	-	-	-	5	5	5	5	5	1	5	4	1	1	1	1	1	1	1	1
Maximum Concentration																			
Detected	-	-	-	2.9	8.3	171	6.7	5700	3.6	19000	5.1	0.42	1.9	2.8	1.6	11.0	4	0.0059	0.0083

1 - Method blank contamination was present for this compound. The associated method blank contains the target analyte at a reportable level.

General Information				Soil Analytical Results (mg/kg)																												
Sample ID	Sample Location	Depth (feet)	Sample Type	Inorganic Compounds				Total Petroleum Hydrocarbons					Organic Compounds																			
				Arsenic	Lead	Barium	Chromium	TPH-DRO	TPH-GRO	TRPH	Acenaphthalene	Anthracene	Fluoranthene	bis (2-Ethylhexyl) phthalate ¹	Di-n-octyl phthalate ¹	Fluorene	Naphthalene Mid 8260 (Mid 8270)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Methyl-naphthalene	Phenanthrene	Acetone	Ethylbenzene	Isopropylbenzene	n-Propylbenzene	Toluene	p-Isopropyltoluene	o-Xylene	m-Xylene, p-Xylene	Total Xylenes	sec-Butylbenzene	
#6	FWT-SW	14	Comp	2.6	7.1	178	6.5	87.0	<0.11	280	<0.36	<0.36	<0.36	1.1	<0.36	<0.36	0.02	<0.0054	<0.36	NR	<0.0054	<0.0054	<0.0054	0.0045	0.0074	0.0119	<0.0054					
#7	FWT-WW	14	Comp	2.8	4.6	134	5.7	190	160	7700	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	5.4	1.6	<0.055	20.0	4.2	NR	0.44	0.11	0.21	0.54	<0.055	0.88	2.6	3.48	0.1	
#8	FWT-NW	14	Comp	2.3	3.9	173	4.6	860	0.13	3400	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	0.045	<0.0091	4.6	<3.6	NR	<0.0091	<0.0091	<0.0091	0.023	0.055	<0.0091	<0.0091	<0.0091	<0.0054		
#9	FWT-EW	14	Comp	2.5	5.2	132	5.8	20	<0.11	150	<0.36	<0.36	<0.36	<0.36	1.5	0.38	<0.36	<0.0054	<0.0054	<0.36	<0.36	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	
#10	FWT-BOT	18	Comp	2.6	4.5	220	4.4	<190	170	99	<3.8	<3.8	<3.8	<3.8	<9.4	<9.4	4.1	11.0	11.0	4.6	44.0	8.3	NR	1.6	<0.71	1.3	0.92	3.0	4.0	10.0	14	0.86
BTM-TANK HOLE-FWT NORTHWALL-FWT	FWT-BOT	28	Grab	1.2	2.8	159	3.0	2,600	NA	NA	0.65	0.41	0.41	<0.36	<0.36	1.4	5.8	NA	NA	17.0	3.2	0.78	0.31	NA	NA	0.35	NA	NA	NA	5.8	NA	
FWT-NW	FWT-NW	14	Grab	NA	NA	NA	NA	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			

Statistics

Number of Samples (n)	-	-	-	5	5	5	5	5	5	6	6	6	5	5	5	5	5	5	5	1	5	5	5	5	5	5	6	5			
Number of Detections	-	-	-	5	5	5	5	4	3	5	1	1	1	2	1	1	2	4	1	3	2	1	2	1	2	2	1	4			
Maximum Concentration Detected	-	-	-	2.8	7.1	220	6.5	860	170	7700	0.65	0.41	0.41	1.5	0.38	4.1	11.0	11.0	4.6	44.0	8.3	0.78	1.6	0.11	1.3	0.92	3.0	4.0	10.0	14.0	0.86

NA = Not Analyzed

NR = Not Reported by the laboratory

1 - Method blank contamination was present for this compound. The associated method blank contains the target analyte at a reportable level.

Table 3
Farmington, New Mexico Acid Waste Tank And Field Waste Tank Removal
Inorganic Data Screening Comparison

Constituent	Estimated Arithmetic ¹ Mean Background Concentration in the Western U.S. (mg/kg)	Maximum Detected Concentration (mg/kg)	Pass/Fail (Max. Detected vs. Background)
<i>Acidic Waste Tank Area</i>			
Arsenic	7.0	2.9	Pass
Lead	20	8.3	Pass
Barium	670	171	Pass
Chromium	56	6.7	Pass
<i>Field Waste Tank Area</i>			
Arsenic	7.0	2.8	Pass
Lead	20	7.1	Pass
Barium	670	220	Pass
Chromium	56	6.5	Pass

Table 4
Farmington, New Mexico Acid Waste Tank and Field Waste Tank Removal
Organic Data Screening Comparison

Constituent	Soil Remediation Level (mg/kg)	Maximum Detected Concentration ^{1,2} (mg/kg)	Pass/Fail (Max. Detected vs. Background)
<i>Acidic Waste Tank Area</i>			
Benzene	10	ND	Pass
Total BTEX	50	0.0142	Pass
TPH	100	19,000	<i>Fail</i>
<i>Field Waste Tank Area</i>			
Benzene	10	ND	Pass
Total BTEX	50	17.38	Pass
TPH	100	7,700	<i>Fail</i>

1 - Total BTEX number was derived by summing the detected components of BTEX only.
 BTEX components that were not detected were not factored into this number.

2 - For the purposes of comparison, Total Recoverable Petroleum Hydrocarbons from the confirmation data was used.

APPENDICES

APPENDIX A

AWT SOLIDS/WASHWATER DISPOSAL DOCUMENTATION

CERTIFICATE OF WASTE STATUS

1. Generator (Name): BJ Services Co, USA Address: 8701 New Trails Drive The Woodlands, TX 77381	3. Location (Street Address &/or USTR): 3250 Southside River Road Farmington, NM
2. Originating Site (Name): BJ Services Co, USA	4. Destination Name: Envirotech, Inc.

5. Source and Description of Waste

sludge from field waste tank, sludge + solids from acid waste tank

I, Les Baugh
BJ Services Co, USA

representative for:
do hereby certify

that according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988 regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste

NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by production identification

For Non-exempt waste only the following documentation is attached (check appropriate items):

- MSDS Information
 RCRA TCLP Analysis
 Chain of Custody
 Other (Description)

Name (Signature): Les Baugh

Printed Name: Les Baugh

Title: Facilities Supervisor

Date: 3/10/98

Attach list of originating sites as appropriate.

CERTIFICATE OF WASTE STATUS

1. Generator (Name): BJ Services Co., USA Address: 8701 New Trails Drive The Woodlands, Tx 77381	3. Location (Street Address &/or ULSTR): 3250 Southside River Road Farmington, NM
2. Originating Site (Name): BJ Services Co., USA	4. Destination Name: SunCo Disposal Systems

5. Source and Description of Waste

liquid from acid waste tank.

I, Les Baugh, representative for:
BJ Services Co., USA do hereby certify

that according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988 regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste

NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by production identification

For Non-exempt waste only the following documentation is attached (check appropriate items):

- MSDS Information
 RCRA TCLP Analysis
 Chain of Custody
 Other (Description)

Name (Signature): Les Baugh

Printed Name: Les Baugh

Title: Facilities Supervisor

Date: 3/10/98

Attach list of originating sites as appropriate.

District I - (505) 393-6161
 P.O. Box 1260
 Hobbs, NM 88241-1260
 District II - (505) 748-1263
 811 S. First
 Aztec, NM 88210
 District III - (505) 334-6178
 7 Rio Branco Road
 NM 87410
 District IV - (505) 827-7131

New Mexico
 Energy Minerals and Natural Resources Department
 Oil Conservation Division
RECEIVED
 2040 South Pacheco Street
 Santa Fe, New Mexico 87505
 MAR 11 1998 (505) 827-7131

Form C-138
 Originated 8/89

Submit Original
 Plus 1 Copy
 to appropriate
 District Office

Environmental Bureau

Oil Conservation Division

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator: BJ SERVICES
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site: BJ YARD
2. Management Facility Destination: SWALCO DISPOSAL	6. Transporter: SWINCO
3. Address of Facility Operator: CR 3500 #345 AZTEC NM BJ SERVICES	7. State: NM
7. Location of Material (Street Address or ULTRA): 3250 Sandusine River Road, Farmington NM	
9. Circle One:	
<p>A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.</p> <p>B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.</p>	

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Liquid from Acid Waste tank

RECEIVED
 MAR - 9 1998
 OIL CON. DIV.
 DIST. 3

Estimated Volume: 1000 bbls cu Known Volume (to be entered by the operator at the end of the haul) _____ cu

SIGNATURE: MICHAEL TAICVICH TITLE: Manager DATE: 3-6-98
Waste Management Facility Authorized Agent
 TYPE OR PRINT NAME: MICHAEL TAICVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Henry D. Fantz TITLE: Geology Est DATE: 3/9/98

APPROVED BY: Martyn J. Kirby TITLE: Env Geologist DATE: 3/11/98

Santa Fe Atk-3-11-98

District I - (505) 293-6161
 P.O. Box 1980
 Hobbs, NM 82241-1980
 District II - (505) 748-1263
 211 S. Pine
 Artesia, NM 82310
 District III - (505) 394-6178
 7 Rio Grande Room 4
 P.O. Box 57410
 District IV - (505) 827-7131

New Mexico
 Energy Minerals and Natural Resources Department
RECEIVED Oil Conservation Division
 2010 South Padreco Street
 Santa Fe, New Mexico 87503
 MAR 11 1998 (505) 827-7131

Form C-1
 Original File
 Search Copy
 File No.
 Date 3/10/98

Environmental Bureau

Env JN: 95026-62

Oil Conservation Division

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt <input checked="" type="checkbox"/>	4. Generator: B.J. Services
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site: Hanford
2. Management Facility Destination: Envirotech Soil Remediation Facility Landfarm #2	6. Transporter: TBA
3. Address of Facility Operator: 5796 U.S. Highway 64 Farmington, NM 87401	7. State: New Mexico 3525 Sandia Pkwy., Suite 100 Albuquerque, NM 87106
7. Location of Material (Street Address or UL5TR)	
8. Circle One:	
A. All requests for approval to accept off-field exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analyses to PROVE the material is not hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.	
All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Solids generated during excavation of Acid Waste Tank (AWT) &
 Field Waste Tank (FWT).

TCLP ATTACHED AWT & FWT.

RECEIVED
 MAR - 9 1998
 OIL CON. DIV.
 DIST. 3

Estimated Volume: 50 cu Known Volume (to be entered by the operator at the end of the haul): _____ cu

SIGNATURE: Harlan M. Brown TITLE: Landfarm Manager DATE: 3-6-98
 TYPE OR PRINT NAME: Harlan M. Brown TELEPHONE NO. (505)632-0615

(This space for State Use)

APPROVED BY: Denny G. Bent TITLE: Geologist DATE: 3/9/98

APPROVED BY: Martine J. Kelly TITLE: Env Geologist DATE: 3/10/98

ENVIROTECH INC.

11003

Bill of Lading

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 - 3014 • FARMINGTON, NEW MEXICO 87401

MONTH OF March 98

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME SHAWN PARIS

COMPANY ENVIROTECH INC.

SIGNATURE

John Page 3-12-98
DATE

APPENDIX B

FWT SOLIDS/WASHWATER DISPOSAL DOCUMENTATION

CERTIFICATE OF WASTE STATUS

1. Generator (Name): BJ Services Co, USA Address: 8701 Nease Trials Drive The Woodlands, TX 77381	3. Location (Street Address &/or ULR): 3250 Southside River Road Farmington, NM
2. Originating Site (Name): BJ Services Co, USA	4. Destination Name: Envirotech, Inc.

5. Source and Description of Waste

sludge from field waste tank, sludge + solids from acid waste tank

I, Les Baugh
BJ Services Co, USA

representative for:
do hereby certify

that according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988 regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste

NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by production identification

For Non-exempt waste only the following documentation is attached (check appropriate items):

- MSDS Information
 RCRA TCLP Analysis
 Chain of Custody
 Other (Description)

Name (Signature): Les Baugh

Printed Name: Les Baugh

Title: Facilities Supervisor

Date: 3/10/98

Attach list of originating sites as appropriate.

District I - (505) 293-6161
 P.O. Box 1980
 Hobbs, NM 88241-1980
 District II - (505) 748-1263
 211 S. Pine
 Artesia, NM 88210
 P.O. Box 333 - (505) 234-6178
 Rio Bravo Road
 Artesia, NM 88210
 District IV - (505) 827-7131

New Mexico
 Energy Minerals and Natural Resources Department
RECEIVED
 Oil Conservation Division
 2040 South Padre Street
 Santa Fe, New Mexico 87505
 MAR 11 1998 (505) 827-7131

Form C-1
Original 82Submit One
Per LC
to Resource
Division

Environmental Bureau

Env JN: 95026-42

Oil Conservation Division

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator B.J. Services
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site Landfarm F2
2. Management Facility Destination Envirotech Soil RemediationFac Landfarm F2	6. Transporter TBA
3. Address of Facility Operator 5796 U.S. Highway 64 Farmington, NM 87401	7. State New Mexico 3620 Southwester Rd., Suite 100 Farmington, NM.
7. Location of Material (Street Address or ULSTR)	

8. Circle One:

- A. All requests for approval to accept off-field exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.
- B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analyses to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Solids generated during excavation of Acid Waste Tank (AWT) &
 Field Waste Tank (FWT).

TCLP ATTACHED AWT & FWT.

RECEIVED
 MAR - 9 1998
 OIL CON. DIV.
 DIST. 3

Estimated Volume 50 cu Known Volume (to be entered by the operator at the end of the haul) _____ cu

SIGNATURE: Harlan M. Brown TITLE: Landfarm Manager DATE: 3-6-98
 Waste Management Facility Authorized Agent
 TYPE OR PRINT NAME: Harlan M. Brown TELEPHONE NO. (505) 632-0615

(This space for State Use)

APPROVED BY: Denny G. Bent TITLE: Geologist DATE: 3/9/98

APPROVED BY: Merton D. Kelly TITLE: Env Geologist DATE: 3/18/98

ENVIROTECH INC.

Bill of Lading

10972

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 - 3014 • FARMINGTON, NEW MEXICO 87401

MONTH OF MARCH

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME John Doe

COMPANY Enviro-Ech

Hwy 104 ^{from} Farmington

SIGNATURE

Bee Cakes

DATE 3-12-98

CONTAINS HAZARDOUS MATERIALS

THIS MEMORANDUM

Is an acknowledgement that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

CARRIER: FREEMYER COMPANY, INC.

SCAC

Shipper's No. _____

Carrier's No. 052797760003F
Date 3-12-98

TO: ENVIROTECH LANDFARM

Consignee
Street Hwy 44 South, ANGELPEAK TURNOFF
Destination Zip

FROM:
Shipper Freemeyer Company, Inc.
Street 527 S. FM-1936
Origin Odessa, TX
Zip 79763

Route: Hwy 64 to Hwy 44 South Vehicle Number U.S. DOT Hazmat Reg. No.

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	Packing Group	WEIGHT (subject to correction)	RATE
	X	Hydrochloric Acid Solution	Corrosive 8	1789			
	X	Sulfuric Acid Solution	Corrosive 8	1830			
	X	Sodium Hydroxide Liquid	Corrosive 8	1824			
	X	Sodium Hydroxide Beads	Corrosive 8	1823			
	X	AR-30 Surfactant	Flammable 3	1993			
	X	Tekstim 8504 Inhibitor	Flammable 3	2924			
	X	Greenclean Alkaline Solid	Corrosive	1719			
	X	Anhib-66 Acid Inhibitor	Flammable 3	2924			
	X	Sodium Nitrite	Oxidizer	1500			
15 70YD	NON EXEMPT NEW HAZARDOUS HYDRO CARBON CONTAMINATED SOIL						2010.5

Remit C.O.D. to:

Address:

City:

State:

Zip:

C.O.D. Amt:

\$

C. O. D. FEE:

Prepaid
Collect

\$

NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consigner, the consigner shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consigner)

FREIGHT CHARGES

 PREPAID COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PLACARDS REQUIRED

PLACARDS SUPPLIED

Where the applicable tariff provisions specify a limitation of the carrier's liability NMFC Item 172, if there is no release or value declaration by the shipper, and the shipper does not declare a value or release the carrier's liability, that liability shall be limited to the extent provided by NMFC Item 172. California intrastate shipments must comply with NMFC Item 173.

SHIPPER: RHINO ENVIRONMENTAL SERVICES
PER: _____ DATE: _____

CARRIER: FREEMYER
PER: RHINO ENVIRONMENTAL DATE: 3-12-98

EMERGENCY RESPONSE
TELEPHONE NUMBER: (800) 424-9300

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (172.604).

YES NO - FURNISHED BY CARRIER
DRIVERS SIGNATURE: _____

CONTAINS HAZARDOUS MATERIALS

THIS SHIPPING ORDER must be legibly filled in, in Ink, in Indelible Pencil, or
in Carbon, and retained by the Agent.

Shipper's No. 7777381

CARRIER: FREEMYER COMPANY, INC.

SCAC

Carrier's No. 0527977600031Date 3-11-98

TO: ENVIROTECH LAND FARM
Consignee
Street Hwy 44 SOUTH ANGLE PEAK TURNOFF
Destination Zip

FROM:
Shipper Freemyer Company, Inc.
Street 527 S. FM-1936
Origin Odessa, TX
Zip 79763

Route: Hwy 64 to Hwy 44 southVehicle Number T-19

U.S. DOT Hazmat Reg. No.

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	Packing Group	WEIGHT (subject to correction)	RATE
	X	Hydrochloric Acid Solution	Corrosive 8	1789			
	X	Sulfuric Acid Solution	Corrosive 8	1830			
	X	Sodium Hydroxide Liquid	Corrosive 8	1824			
	X	Sodium Hydroxide Beads	Corrosive 8	1823			
	X	AR-30 Surfactant	Flammable 3	1993			
	X	Tekstim 8504 Inhibitor	Flammable 3	2924			
	X	Greenclean Alkaline Solid	Corrosive	1719			
	X	Anhib-66 Acid Inhibitor	Flammable 3	2924			
	X	Sodium Nitrite	Oxidizer	1500			
<i>NON EXEMPT, NOW HAZARDOUS Hydrocarbon contaminated soil samples</i>							
<i>NON EXEMPT, NON HAZ Hydrocarbon contaminated soil</i>							

Remit C.O.D. to:

Address:

City:

State:

Zip:

C.O.D. Amt:

\$

C. O. D. FEE:

Prepaid

Collect \$

NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consigner, the consigner shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consigner)

FREIGHT CHARGES

 PREPAID COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PLACARDS
REQUIRED

N/A

PLACARDS
SUPPLIED YES NO - FURNISHED BY CARRIER
DRIVERS SIGNATURE:

SHIPPER: B J SERVICES
PER: Stuart Rife (CS1) DATE: 3-11-98

CARRIER: Freemyer CO
PER: RHINO ENVIRONMENTAL DATE: 3-11-98

EMERGENCY RESPONSE
TELEPHONE NUMBER: (800) 424-9300

Monitored at all times the Hazardous Material is in transportation
including storage incidental to transportation (172.604).

CONTAINS HAZARDOUS MATERIALS

THIS MEMORANDUM

Is an acknowledgement that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

CARRIER: FREEMYER COMPANY, INC.

SCAC

Shipper's No. 7477384Carrier's No. 0527977600031 Date

TO: ENVIROTECH LAND FARM
 Consignee
 Street Hwy 44 SOUTH ANGLE PEAK TUNOFF
 Destination Zip

FROM:

Shipper
 Street
 Origin

Freemyer Company, Inc.
 527 S. FM-1936
 Odessa, TX

Zip 79763

Route: Hwy 64 to Hwy 44 South

Vehicle Number T-19

U.S. DOT Hazmat Reg. No.

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	Packing Group	WEIGHT (subject to correction)	RATE
	X	Hydrochloric Acid Solution	Corrosive 8	1789-			
	X	Sulfuric Acid Solution	Corrosive 8	1830			
	X	Sodium Hydroxide Liquid	Corrosive 8	1824			
	X	Sodium Hydroxide Beads	Corrosive 8	1823			
	X	AR-30 Surfactant	Flammable 3	1993			
	X	Tekstim 8504 Inhibitor	Flammable 3	2924			
	X	Greenclean Alkaline Solid	Corrosive	1719-			
	X	Anhib-66 Acid Inhibitor	Flammable 3	2924			
	X	Sodium Nitrite	Oxidizer	1500-			
<i>10/10 3-11-98</i> <i>NOW EXEMPT, NOW HAZARDOUS Hydrocarbon contaminated soil</i>							

Remit C.O.D. to:

Address:

City:

State:

Zip:

C.O.D. Amt:

\$

C. O. D. FEE:

 Prepaid Collect \$

NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consigner, the consigner shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consigner)

FREIGHT CHARGES

 PREPAID COLLECT

RECEIVED, subject to the classifications and lawfully filed tariff in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Per _____

PLACARDS
REQUIRED

N/A

PLACARDS
SUPPLIED
 YES NO - FURNISHED BY CARRIER
 DRIVERS SIGNATURE: _____

SHIPPER: B J SERVICES
 PER: Stewart Blue (CS) DATE: 7-11-98

CARRIER: FREEMYER CO
 PER: RHINO ENVIRONMENTAL DATE: 3-11-98

EMERGENCY RESPONSE
 TELEPHONE NUMBER: (800) 424-9300

Monitored at all times the Hazardous Material is in transportation
 including storage incidental to transportation (172.604).

CONTAINS HAZARDOUS MATERIALS

CONTAINS HAZARDOUS MATERIALS

APPENDIX C
PHOTOGRAPHS OF REMOVAL



Photograph #1
Uncovering the AWT



Photograph #2
Cleaning out the AWT Solids



Photograph #3
Cleaning out the AWT



Photograph #4
Transporting the AWT for Recycling



Photograph #5
AWT Area After Removal



Photograph #6
Starting to Dig on the FWT



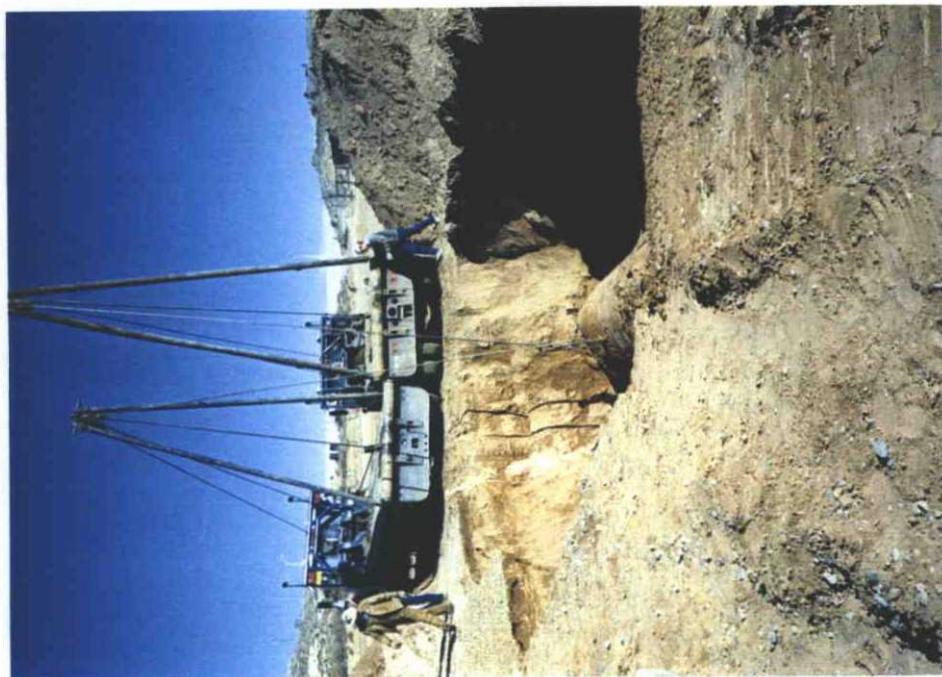
Photograph #7
West Wall of FWT Excavation Showing Excavation Instability



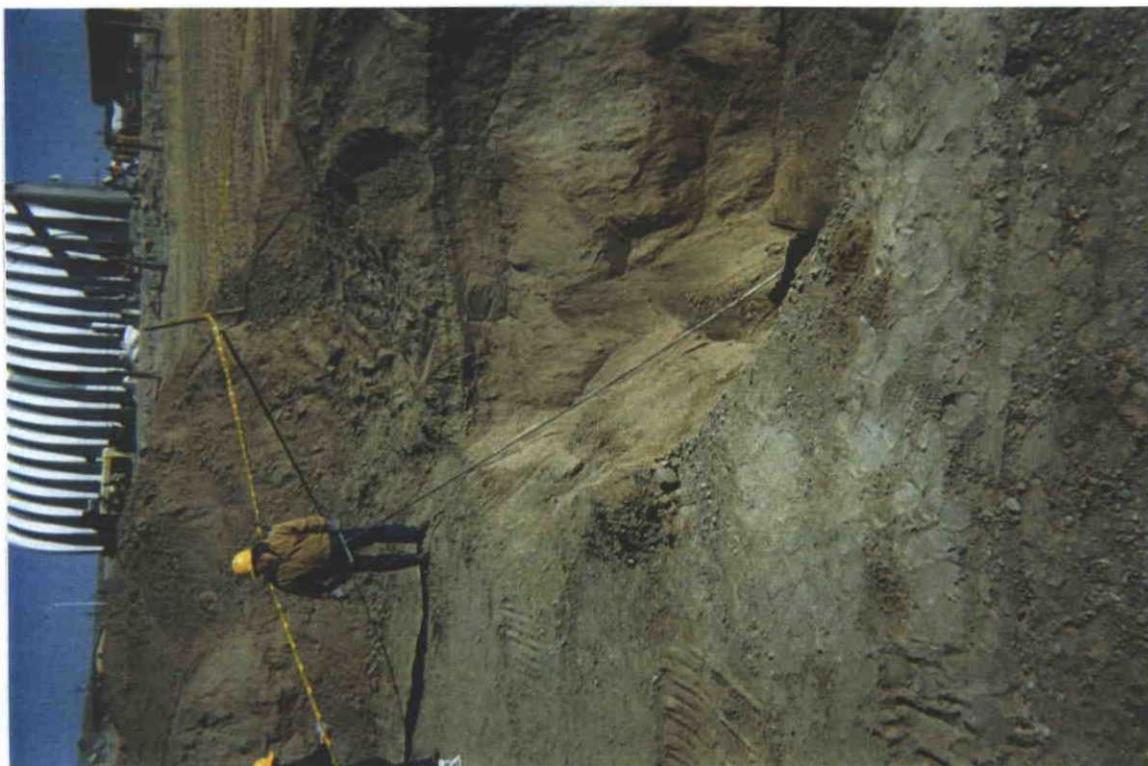
Photograph #8
Hole in the FWT



Photograph #9
Digging Beside the FWT; North End of Tank Showing (Collapsed inward)



Photograph #10
Attempt to Remove the FWT (First Field Effort)



Photograph #11
Sampling Technique For FWT Sludge



Photograph #12
Cleaning Sludge out of FWT



Photograph #13
FWT Removed (Second Field Effort) Showing Soil Discoloration



Photograph #14
FWT Removed and Partially Crushed



Photograph #15
FWT Loaded for Recycling

APPENDIX D

**REMOVAL CONTRACTOR REPORT AND TANK DESTRUCTION
CERTIFICATES**





Engineering and
Construction
Services

MAY 18, 1998

RECEIVED

Constructive Solutions, Inc.

Building a Better Environment
5/12/98

Mr. Rick Johnson
BJ Services Company, Inc.
8701 New Trails Dr.
The Woodlands, TX 77381

RE: LETTER REPORT FOR UST REMOVALS AT FARMINGTON, NM

Dear Rick,

Constructive Solutions, Inc., (CSI), was hired by BJ Services Co. USA in January 1998 to remove two underground storage tanks with associated piping and equipment at the BJ Services Farmington District, 3250 Southside River Rd., Farmington, NM. as per our cost estimate dated January 22, 1998. These tank removal activities were executed in three phases:

Phase 1 2/9/98-2/12/98

CSI operators exposed both the field waste tank and the acid waste tank. Both tanks were found to be steel construction and the field waste tank was set exceptionally deep, requiring the use of a track-hoe to reach. You arranged for tank contents removal. CSI engaged winch trucks locally to facilitate pulling of the acid waste tank. Tom Gray of NMED was on-site Wednesday, 2/11/98 to inspect and o.k. the pull of the acid waste tank, which CSI temporarily staged on plastic.

Field waste tank contaminated soils were staged and covered, clean stockpiles were staged, and both excavations were safety barricaded.

Phase 2 3/9/98-3/12/98

As you requested, the field waste tank site was extensively re-excavated by CSI due to cave-in of surrounding unstable soils. Denny Faust of OCD was on-site 3/10/98 to review and approve new removal plan. CSI operators sloped the sides of the excavation, ramped down into the hole, and repositioned stockpiles. With the excavation now made safe to enter, Freemeyer removed tank contents and transports to Envirotech. On Thursday, 3/12/98, CSI pulls field waste tank, excavates, stages, and covers more contaminated soils and secures sites. Samples were collected by Danielle Berardelli and sent for analysis.

Phase 3 4/27/98-4/29/9

Constructive Solutions, Inc.

Monday morning a liquid application of Miracle-gro fertilizer, as requested by OCD inspector Denny Faust, was completed in both the field waste tank and acid waste tank excavations. Denny Faust was on-site at 2 PM, 4/27/98. Envirotech was engaged directly by BJ Services to haul contaminated soil to their facility and to back-haul necessary clean fill and stone.

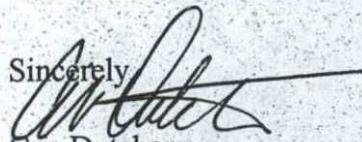
The backfilling, grading, and stone spreading was completed on Wednesday, 4/29/98. I spoke with Les Baugh at approximately 2:00 PM and we did some further dressing off of the stone cover on the slope behind the acid waste tank area at his request. CSI personnel finished final site clean-up and left the site at approximately 5:00PM, Wednesday, 4/29/98.

Accompanying documentation includes:

tanks destruction certificate from Valley Scrap Metal of Kirtland, NM
trip tickets from Freemeyer hauling FWT solids to Envirotech
bill of lading from Envirotech for FWT solids
bill of lading from Envirotech for AWT drummed solids
chain of custody record for soil samples sent to Quanterra

CSI appreciates the opportunity to provide these services. If you have any questions or need further information, please call me at (505) 242-6464.

Sincerely,


Cris Dutcher

4346 HWY 64
KIRTLAND, NM 87417

RECEIVED

MAY 04 1998

Constructive Solutions, Inc.

Scrap Processing
Demolition

VALLEY SCRAP METAL, INC.



505-598-5288
FAX: 505-598-9711

THOMAS LINK
President

04/27/98

Construtive Soulitions
P.O. Box 27328
Albuquerque, NM 87125

Attn: Chris Dutcher

To Whom It May Concern:

This is a death certificate for two tanks removaed from B.J. yard to Valley Scrap Metal, Inc..

30 x 5 Acid Waste Tank
30 x12 Field Waste Tank

If you have any quations please call.

Best Regards,

A handwritten signature in cursive ink that appears to read "Dawn Smouse".

Dawn Smouse

APPENDIX E

**SOIL ANALYTICAL LABORATORY REPORTS FOR CONFIRMATION,
WASTE SOLIDS, AND WASTE SOIL SAMPLES**

**Certificate of
Analysis**

Quanterra Incorporated
5307 Industrial Oaks Boulevard, Suite 160
Austin, Texas 78735

512 892-6684 Direct
512 892-6652 Fax



Environmental
Services

ANALYTICAL REPORT

PROJECT NO. RCRA

Farmington, NM

Lot #: I8B140114

Rick Johnson

B.J. Services Company

QUANTERRA INCORPORATED

A handwritten signature in black ink, appearing to read "Sandra L. Green".

Sandra L. Green
Project Manager

March 2, 1998

EXECUTIVE SUMMARY - Detection Highlights

I8B140114

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
#1 02/12/98 07:30 001				
Diesel Range Organics	2200	1900	ug/kg	SW846 8015 MOD
Barium	.171	22.0	mg/kg	SW846 6010A
Chromium	6.7 L	1.1	mg/kg	SW846 6010A
Arsenic	2.9	1.1	mg/kg	SW846 6010A
Lead	6.3	0.33	mg/kg	SW846 6010A
bis(2-Ethylhexyl) phthalate	520 B	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	420 B	360	ug/kg	SW846 8270B
Total Recoverable Petroleum Hydrocarbons	56	11	mg/kg	MCAWW 418.1
Percent Moisture	9.1	0.50	%	OCLP OLM03.1
#2 02/12/98 07:40 002				
Diesel Range Organics	5700000	97000	ug/kg	SW846 8015 MOD
Gasoline Range Organics	3600	230	ug/kg	SW846 8020/GRO
Barium	84.7	22.9	mg/kg	SW846 6010A
Chromium	3.9	1.1	mg/kg	SW846 6010A
Arsenic	2.9	1.1	mg/kg	SW846 6010A
Lead	8.3	0.34	mg/kg	SW846 6010A
bis(2-Ethylhexyl) phthalate	3500	1900	ug/kg	SW846 8270B
Fluorene	1900	1900	ug/kg	SW846 8270B
2-Methylnaphthalene	11000	1900	ug/kg	SW846 8270B
Phenanthrene	4000	1900	ug/kg	SW846 8270B
1,2,4-Trimethylbenzene	2800	1400	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	1600	1400	ug/kg	SW846 8260A
Total Recoverable Petroleum Hydrocarbons	19000	2300	mg/kg	MCAWW 418.1
Percent Moisture	12.7	0.50	%	OCLP OLM03.1
#3 02/12/98 07:50 003				
Diesel Range Organics	19000	1900	ug/kg	SW846 8015 MOD
Barium	155	21.9	mg/kg	SW846 6010A
Chromium	6.2	1.1	mg/kg	SW846 6010A
Arsenic	2.9	1.1	mg/kg	SW846 6010A
Lead	6.3	0.33	mg/kg	SW846 6010A
bis(2-Ethylhexyl) phthalate	5100 B	360	ug/kg	SW846 8270B
Total Recoverable Petroleum Hydrocarbons	89	11	mg/kg	MCAWW 418.1
Percent Moisture	8.8	0.50	%	OCLP OLM03.1

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights
I8B140114

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
#4 02/12/98 08:00 004				
Diesel Range Organics	19000	1900	ug/kg	SW846 8015 MOD
Barium	122	22.0	mg/kg	SW846 6010A
Chromium	6.0	1.1	mg/kg	SW846 6010A
Arsenic	2.2	1.1	mg/kg	SW846 6010A
Lead	4.4	0.33	mg/kg	SW846 6010A
bis(2-Ethylhexyl) phthalate	580 B	360	ug/kg	SW846 8270B
1,2,4-Trimethylbenzene	8.2	5.5	ug/kg	SW846 8260A
o-Xylene	5.9	2.7	ug/kg	SW846 8260A
m-Xylene & p-Xylene	8.3	2.7	ug/kg	SW846 8260A
Total Recoverable Petroleum Hydrocarbons	53	11	mg/kg	MCAWW 418.1
Percent Moisture	9.0	0.50	%	OCLP OLM03.1
#5 02/12/98 08:05 005				
Diesel Range Organics	4100	1900	ug/kg	SW846 8015 MOD
Barium	148	21.9	mg/kg	SW846 6010A
Chromium	5.6	1.1	mg/kg	SW846 6010A
Arsenic	2.7	1.1	mg/kg	SW846 6010A
Lead	6.5	0.33	mg/kg	SW846 6010A
bis(2-Ethylhexyl) phthalate	950 B	360	ug/kg	SW846 8270B
Total Recoverable Petroleum Hydrocarbons	52	11	mg/kg	MCAWW 418.1
Percent Moisture	8.6	0.50	%	OCLP OLM03.1
#6 02/12/98 08:15 006				
Diesel Range Organics	87000	1800	ug/kg	SW846 8015 MOD
Barium	178	21.6	mg/kg	SW846 6010A
Chromium	6.5	1.1	mg/kg	SW846 6010A
Arsenic	2.6	1.1	mg/kg	SW846 6010A
Lead	7.1	0.32	mg/kg	SW846 6010A
bis(2-Ethylhexyl) phthalate	1100 B	360	ug/kg	SW846 8270B
1,2,4-Trimethylbenzene	20	5.4	ug/kg	SW846 8260A
o-Xylene	4.5	2.7	ug/kg	SW846 8260A
m-Xylene & p-Xylene	7.4	2.7	ug/kg	SW846 8260A
Total Recoverable Petroleum Hydrocarbons	280	11	mg/kg	MCAWW 418.1
Percent Moisture	7.4	0.50	%	OCLP OLM03.1

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights
I8B140114

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
#7 02/12/98 08:30 007				
Diesel Range Organics	190000	94000	ug/kg	SW846 8015 MOD
Gasoline Range Organics	160000	22000	ug/kg	SW846 8020/GRO
Barium	134	22.0	mg/kg	SW846 6010A
Chromium	5.7	1.1	mg/kg	SW846 6010A
Arsenic	2.8	1.1	mg/kg	SW846 6010A
Lead	4.6	0.33	mg/kg	SW846 6010A
2-Methylnaphthalene	20000	3600	ug/kg	SW846 8270B
Naphthalene	5400	3600	ug/kg	SW846 8270B
Phenanthrene	4200	3600	ug/kg	SW846 8270B
sec-Butylbenzene	100	55	ug/kg	SW846 8260A
Ethylbenzene	440	55	ug/kg	SW846 8260A
Isopropylbenzene	110	55	ug/kg	SW846 8260A
n-Propylbenzene	210	55	ug/kg	SW846 8260A
Toluene	540	55	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	1600	55	ug/kg	SW846 8260A
o-Xylene	880	28	ug/kg	SW846 8260A
m-Xylene & p-Xylene	2600	28	ug/kg	SW846 8260A
Total Recoverable	7700	2200	mg/kg	MCAWW 418.1
Petroleum Hydrocarbons				
Percent Moisture	9.2	0.50	%	OCLP OLM03.1
#8 02/12/98 08:40 008				
Diesel Range Organics	860000	47000	ug/kg	SW846 8015 MOD
Gasoline Range Organics	130	110	ug/kg	SW846 8020/GRO
Barium	173	21.9	mg/kg	SW846 6010A
Chromium	4.6	1.1	mg/kg	SW846 6010A
Arsenic	2.3	1.1	mg/kg	SW846 6010A
Lead	3.9	0.33	mg/kg	SW846 6010A
2-Methylnaphthalene	4600	3600	ug/kg	SW846 8270B
1,2,4-Trimethylbenzene	45	9.1	ug/kg	SW846 8260A
o-Xylene	32	4.5	ug/kg	SW846 8260A
m-Xylene & p-Xylene	23	4.5	ug/kg	SW846 8260A
Total Recoverable	3400	2200	mg/kg	MCAWW 418.1
Petroleum Hydrocarbons				
Percent Moisture	8.8	0.50	%	OCLP OLM03.1
#9 02/12/98 08:50 009				
Diesel Range Organics	20000	1800	ug/kg	SW846 8015 MOD
Barium	132	21.6	mg/kg	SW846 6010A
Chromium	5.8	1.1	mg/kg	SW846 6010A
Arsenic	2.5	1.1	mg/kg	SW846 6010A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights
I8B140114

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
#9 02/12/98 08:50 009				
Lead	5.2	0.32	mg/kg	SW846 6010A
bis(2-Ethylhexyl) phthalate	1500 B	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	380 B	360	ug/kg	SW846 8270B
Total Recoverable	150	11	mg/kg	MCAWW 418.1
Petroleum Hydrocarbons				
Percent Moisture	7.4	0.50	%	OCLP OLM03.1
#10 02/12/98 09:00 010				
Gasoline Range Organics	170000	23000	ug/kg	SW846 8020/GRO
Barium	220	22.7	mg/kg	SW846 6010A
Chromium	4.4	1.1	mg/kg	SW846 6010A
Arsenic	2.6	1.1	mg/kg	SW846 6010A
Lead	4.5	0.34	mg/kg	SW846 6010A
Fluorene	4100	3800	ug/kg	SW846 8270B
2-Methylnaphthalene	44000	3800	ug/kg	SW846 8270B
Naphthalene	11000	3800	ug/kg	SW846 8270B
Phenanthrene	8300	3800	ug/kg	SW846 8270B
sec-Butylbenzene	860	710	ug/kg	SW846 8260A
Ethylbenzene	1600	710	ug/kg	SW846 8260A
p-Isopropyltoluene	3000	710	ug/kg	SW846 8260A
n-Propylbenzene	1300	710	ug/kg	SW846 8260A
Toluene	920	710	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	11000	710	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	4600	710	ug/kg	SW846 8260A
o-Xylene	4000	360	ug/kg	SW846 8260A
m-Xylene & p-Xylene	10000	360	ug/kg	SW846 8260A
Total Recoverable	99	11	mg/kg	MCAWW 418.1
Petroleum Hydrocarbons				
Percent Moisture	12.0	0.50	%	OCLP OLM03.1

ANALYTICAL METHODS SUMMARY

I8B140114

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
% Moisture, Decanted-CLP	OCLP OLM03.1
Extractable Petroleum Hydrocarbons	SW846 8015 MOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Semivolatile Organic Compounds by GC/MS	SW846 8270B
Total Recoverable Petroleum Hydrocarbons	MCAWW 418.1
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Volatile and Gasoline Range Organics (PID/FID)	SW846 8020/GRO
Volatile Organics by GC/MS	SW846 8260A

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
 EPA-600/4-79-020, March 1983 and subsequent revisions.
- OCLP USEPA Contract Laboratory Program Statement of Work for
 Organics Analysis, Multi-Media, Multi-Concentration.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
 Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I8B140114

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
CFD4E	001	#1	02/12/98	07:30
CFD4K	002	#2	02/12/98	07:40
CFD4L	003	#3	02/12/98	07:50
CFD4M	004	#4	02/12/98	08:00
CFD4N	005	#5	02/12/98	08:05
CFD4Q	006	#6	02/12/98	08:15
CFD4T	007	#7	02/12/98	08:30
CFD4V	008	#8	02/12/98	08:40
CFD4W	009	#9	02/12/98	08:50
CFD4X	010	#10	02/12/98	09:00

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.

B.J. SERVICES COMPANY

Client Sample ID: #1

GC Semivolatiles

Lot-Sample #....: I8B140114-001 Work Order #....: CFD4E104 Matrix.....: SOLID
Date Sampled...: 02/12/98 07:30 Date Received...: 02/14/98
Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
Prep Batch #...: 8047155 Analysis Time...: 15:19
Dilution Factor: 1
% Moisture.....: 9.1

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Diesel Range Organics	2200	1900	ug/kg	SW846 8015 MÖD
SURROGATE	PERCENT	RECOVERY	LIMITS	
o-Terphenyl	98	(40 - 144)		
Dotriacontane	99	(42 - 159)		

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #1

GC Volatiles

Lot-Sample #....: I8B140114-001 Work Order #....: CFD4E105 Matrix.....: SOLID
Date Sampled....: 02/12/98 07:30 Date Received...: 02/14/98
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #....: 8049166 Analysis Time...: 12:38
Dilution Factor: 1
% Moisture.....: 9.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	110	ug/kg	SW846 8020/GRO
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
a,a,a-Trifluorotoluene (TFT)	91	(75 - 125)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: #1
GC/MS Semivolatiles

Lot-Sample #....: I8B140114-001 Work Order #....: CFD4E107 Matrix.....: SOLID
 Date Sampled...: 02/12/98 07:30 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8047201 Analysis Time...: 12:08
 Dilution Factor: 1
 % Moisture.....: 9.1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Acenaphthene	ND	360	ug/kg	SW846 8270B
Acenaphthylene	ND	360	ug/kg	SW846 8270B
Anthracene	ND	360	ug/kg	SW846 8270B
Benz(a)anthracene	ND	360	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	360	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	520 B	360	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	360	ug/kg	SW846 8270B
4-Chloroaniline	ND	360	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	360	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	360	ug/kg	SW846 8270B
2-Chlorophenol	ND	360	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Chrysene	ND	360	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	360	ug/kg	SW846 8270B
Dibenzofuran	ND	360	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	360	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1800	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	360	ug/kg	SW846 8270B
Diethyl phthalate	ND	360	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	360	ug/kg	SW846 8270B
Dimethyl phthalate	ND	360	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1800	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY
Client Sample ID: #1
GC/MS Semivolatiles
Lot-Sample #....: I8B140114-001 Work Order #....: CFD4E107 Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,4-Dinitrophenol	ND	1800	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	420 B	360	ug/kg	SW846 8270B
Fluoranthene	ND	360	ug/kg	SW846 8270B
Fluorene	ND	360	ug/kg	SW846 8270B
Hexachlorobenzene	ND	360	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	360	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1800	ug/kg	SW846 8270B
Hexachloroethane	ND	360	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg	SW846 8270B
Isophorone	ND	360	ug/kg	SW846 8270B
2-Methylnaphthalene	ND	360	ug/kg	SW846 8270B
2-Methylphenol	ND	360	ug/kg	SW846 8270B
4-Methylphenol	ND	360	ug/kg	SW846 8270B
Naphthalene	ND	360	ug/kg	SW846 8270B
2-Nitroaniline	ND	1800	ug/kg	SW846 8270B
3-Nitroaniline	ND	1800	ug/kg	SW846 8270B
4-Nitroaniline	ND	1800	ug/kg	SW846 8270B
Nitrobenzene	ND	360	ug/kg	SW846 8270B
2-Nitrophenol	ND	360	ug/kg	SW846 8270B
4-Nitrophenol	ND	1800	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	360	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	360	ug/kg	SW846 8270B
Pentachlorophenol	ND	1800	ug/kg	SW846 8270B
Phenanthrene	ND	360	ug/kg	SW846 8270B
Phenol	ND	360	ug/kg	SW846 8270B
Pyrene	ND	360	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	360	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	360	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	360	ug/kg	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	66	(25 - 121)
Phenol-d5	81	(24 - 113)
Nitrobenzene-d5	69	(23 - 120)
2-Fluorobiphenyl	71	(30 - 115)
2,4,6-Tribromophenol	55	(19 - 122)
Terphenyl-d14	94	(18 - 137)

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.

B.J. SERVICES COMPANY
Client Sample ID: #1
GC/MS Volatiles

Lot-Sample #....: I8B140114-001 Work Order #....: CFD4E10H Matrix.....: SOLID
 Date Sampled....: 02/12/98 07:30 Date Received...: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8051183 Analysis Time...: 15:27
 Dilution Factor: 1
 % Moisture.....: 9.1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	5.5	ug/kg	SW846 8260A
Bromobenzene	ND	5.5	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.5	ug/kg	SW846 8260A
Bromoform	ND	5.5	ug/kg	SW846 8260A
Bromomethane	ND	11	ug/kg	SW846 8260A
n-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
sec-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
tert-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.5	ug/kg	SW846 8260A
Chlorobenzene	ND	5.5	ug/kg	SW846 8260A
Chlorodibromomethane	ND	5.5	ug/kg	SW846 8260A
Chloroethane	ND	11	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	55	ug/kg	SW846 8260A
Chloroform	ND	5.5	ug/kg	SW846 8260A
Chloromethane	ND	11	ug/kg	SW846 8260A
2-Chlorotoluene	ND	5.5	ug/kg	SW846 8260A
4-Chlorotoluene	ND	5.5	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	11	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	5.5	ug/kg	SW846 8260A
Dibromomethane	ND	5.5	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	11	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.5	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.5	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.5	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	2.8	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	2.8	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	5.5	ug/kg	SW846 8260A
Ethylbenzene	ND	5.5	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	5.5	ug/kg	SW846 8260A
Isopropylbenzene	ND	5.5	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	5.5	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY
Client Sample ID: #1
GC/MS Volatiles
Lot-Sample #....: I8B140114-001 Work Order #....: CFD4E10H Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Methylene chloride	ND	5.5	ug/kg	SW846 8260A
n-Propylbenzene	ND	5.5	ug/kg	SW846 8260A
Styrene	ND	5.5	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	5.5	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.5	ug/kg	SW846 8260A
Toluene	ND	5.5	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.5	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.5	ug/kg	SW846 8260A
Trichloroethene	ND	5.5	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	11	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	5.5	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	ND	5.5	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	5.5	ug/kg	SW846 8260A
Vinyl chloride	ND	11	ug/kg	SW846 8260A
o-Xylene	ND	2.8	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	2.8	ug/kg	SW846 8260A
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
1,2-Dichloroethane-d4	97	(61 - 115)		
Toluene-d8	105	(82 - 129)		
Bromofluorobenzene	98	(64 - 112)		

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY**Client Sample ID: #2****GC Semivolatiles**

Lot-Sample #....: I8B140114-002 Work Order #....: CFD4K104 Matrix.....: SOLID
Date Sampled...: 02/12/98 07:40 Date Received...: 02/14/98
Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
Prep Batch #....: 8047155 Analysis Time...: 10:18
Dilution Factor: 50
% Moisture.....: 13

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	5700000	97000	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT	RECOVERY		
o-Terphenyl	RECOVERY	LIMITS		
Dotriacontane	NC, DIL	(40 - 144)		
	NC, DIL	(42 - 159)		

NOTE(S) :

NC The recovery and RPD were not calculated.

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.

B.J. SERVICES COMPANY

Client Sample ID: #2

GC Volatiles

Lot-Sample #....:	I8B140114-002	Work Order #....:	CFD4K105	Matrix.....:	SOLID
Date Sampled....:	02/12/98 07:40	Date Received..:	02/14/98		
Prep Date.....:	02/17/98	Analysis Date..:	02/17/98		
Prep Batch #....:	8049166	Analysis Time...:	13:18		
Dilution Factor:	2				
% Moisture.....:	13				

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Gasoline Range Organics	3600	230	ug/kg	SW846 8020/GRO
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
a,a,a-Trifluorotoluene (TFT)	RECOVERY 95	LIMITS (75 - 125)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY**Client Sample ID: #2****GC/MS Semivolatiles**

Lot-Sample #....: I8B140114-002 **Work Order #....:** CFD4K107 **Matrix.....:** SOLID
Date Sampled....: 02/12/98 07:40 **Date Received...:** 02/14/98
Prep Date.....: 02/16/98 **Analysis Date...:** 02/25/98
Prep Batch #....: 8047201 **Analysis Time...:** 19:23
Dilution Factor: 5
% Moisture.....: 13

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	1900	ug/kg	SW846 8270B
Acenaphthylene	ND	1900	ug/kg	SW846 8270B
Anthracene	ND	1900	ug/kg	SW846 8270B
Benz(a)anthracene	ND	1900	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	1900	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	1900	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	1900	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	1900	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	1900	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	1900	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	1900	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	3500	1900	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	1900	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	1900	ug/kg	SW846 8270B
4-Chloroaniline	ND	1900	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	1900	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	1900	ug/kg	SW846 8270B
2-Chlorophenol	ND	1900	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	1900	ug/kg	SW846 8270B
Chrysene	ND	1900	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	1900	ug/kg	SW846 8270B
Dibenzofuran	ND	1900	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	1900	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	1900	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	1900	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	1900	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	9200	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	1900	ug/kg	SW846 8270B
Diethyl phthalate	ND	1900	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	1900	ug/kg	SW846 8270B
Dimethyl phthalate	ND	1900	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	9200	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #2

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-002 Work Order #....: CFD4K107 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrophenol	ND	9200	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	1900	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	1900	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	1900	ug/kg	SW846 8270B
Fluoranthene	ND	1900	ug/kg	SW846 8270B
Fluorene	1900	1900	ug/kg	SW846 8270B
Hexachlorobenzene	ND	1900	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	1900	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	9200	ug/kg	SW846 8270B
Hexachloroethane	ND	1900	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	1900	ug/kg	SW846 8270B
Isophorone	ND	1900	ug/kg	SW846 8270B
2-Methylnaphthalene	11000	1900	ug/kg	SW846 8270B
2-Methylphenol	ND	1900	ug/kg	SW846 8270B
4-Methylphenol	ND	1900	ug/kg	SW846 8270B
Naphthalene	ND	1900	ug/kg	SW846 8270B
2-Nitroaniline	ND	9200	ug/kg	SW846 8270B
3-Nitroaniline	ND	9200	ug/kg	SW846 8270B
4-Nitroaniline	ND	9200	ug/kg	SW846 8270B
Nitrobenzene	ND	1900	ug/kg	SW846 8270B
2-Nitrophenol	ND	1900	ug/kg	SW846 8270B
4-Nitrophenol	ND	9200	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	1900	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	1900	ug/kg	SW846 8270B
Pentachlorophenol	ND	9200	ug/kg	SW846 8270B
Phenanthrene	4000	1900	ug/kg	SW846 8270B
Phenol	ND	1900	ug/kg	SW846 8270B
Pyrene	ND	1900	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	1900	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	1900	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	1900	ug/kg	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	71 DIL	(25 - 121)
Phenol-d5	87 DIL	(24 - 113)
Nitrobenzene-d5	60 DIL	(23 - 120)
2-Fluorobiphenyl	50 DIL	(30 - 115)
2,4,6-Tribromophenol	65 DIL	(19 - 122)
Terphenyl-d14	96 DIL	(18 - 137)

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.

Elevated reporting limits due to matrix interference.

B.J. SERVICES COMPANY
Client Sample ID: #2
GC/MS Volatiles

Lot-Sample #....: I8B140114-002 Work Order #....: CFD4K10H Matrix.....: SOLID
 Date Sampled....: 02/12/98 07:40 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/23/98
 Prep Batch #....: 8049165 Analysis Time...: 16:21
 Dilution Factor: 2
 % Moisture.....: 13

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1400	ug/kg	SW846 8260A
Bromobenzene	ND	1400	ug/kg	SW846 8260A
Bromodichloromethane	ND	1400	ug/kg	SW846 8260A
Bromoform	ND	1400	ug/kg	SW846 8260A
Bromomethane	ND	2900	ug/kg	SW846 8260A
n-Butylbenzene	ND	1400	ug/kg	SW846 8260A
sec-Butylbenzene	ND	1400	ug/kg	SW846 8260A
tert-Butylbenzene	ND	1400	ug/kg	SW846 8260A
Carbon tetrachloride	ND	1400	ug/kg	SW846 8260A
Chlorobenzene	ND	1400	ug/kg	SW846 8260A
Chlorodibromomethane	ND	1400	ug/kg	SW846 8260A
Chloroethane	ND	2900	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	14000	ug/kg	SW846 8260A
Chloroform	ND	1400	ug/kg	SW846 8260A
Chloromethane	ND	2900	ug/kg	SW846 8260A
2-Chlorotoluene	ND	1400	ug/kg	SW846 8260A
4-Chlorotoluene	ND	1400	ug/kg	SW846 8260A
1,2-Dibromo-3-chloropropane	ND	2900	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	1400	ug/kg	SW846 8260A
Dibromomethane	ND	1400	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	1400	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	1400	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	1400	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	2900	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	1400	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	1400	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	1400	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	720	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	720	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	1400	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	1400	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	1400	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	1400	ug/kg	SW846 8260A
Ethylbenzene	ND	1400	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	1400	ug/kg	SW846 8260A
Isopropylbenzene	ND	1400	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	1400	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY
Client Sample ID: #2
GC/MS Volatiles
Lot-Sample #....: I8B140114-002 Work Order #....: CFD4K10H Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Methylene chloride	ND	1400	ug/kg	SW846 8260A
n-Propylbenzene	ND	1400	ug/kg	SW846 8260A
Styrene	ND	1400	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	1400	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	1400	ug/kg	SW846 8260A
Tetrachloroethene	ND	1400	ug/kg	SW846 8260A
Toluene	ND	1400	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	1400	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	1400	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	1400	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	1400	ug/kg	SW846 8260A
Trichloroethene	ND	1400	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	2900	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	1400	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	2800	1400	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	1600	1400	ug/kg	SW846 8260A
Vinyl chloride	ND	2900	ug/kg	SW846 8260A
o-Xylene	ND	720	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	720	ug/kg	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	96 DIL	(61 - 115)
Toluene-d8	94 DIL	(82 - 129)
Bromofluorobenzene	97 DIL	(64 - 112)

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.

B.J. SERVICES COMPANY

Client Sample ID: #3

GC Semivolatiles

Lot-Sample #....: I8B140114-003 Work Order #....: CFD4L104 Matrix.....: SOLID
Date Sampled...: 02/12/98 07:50 Date Received...: 02/14/98
Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
Prep Batch #....: 8047155 Analysis Time...: 11:22
Dilution Factor: 1
% Moisture.....: 8.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	19000	1900	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT	RECOVERY	LIMITS	
o-Terphenyl	89	(40 - 144)		
Dotriacontane	88	(42 - 159)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #3

GC Volatiles

Lot-Sample #....: I8B140114-003 Work Order #....: CFD4L105 Matrix.....: SOLID
Date Sampled...: 02/12/98 07:50 Date Received...: 02/14/98
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #....: 8049166 Analysis Time...: 13:59
Dilution Factor: 1
% Moisture.....: 8.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	110	ug/kg	SW846 8020/GRO
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
a,a,a-Trifluorotoluene (TFT)	86	(75 - 125)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #3

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-003 Work Order #....: CFD4L107 Matrix.....: SOLID
 Date Sampled....: 02/12/98 07:50 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/24/98
 Prep Batch #....: 8047201 Analysis Time...: 14:10
 Dilution Factor: 1
 % Moisture.....: 8.8

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Acenaphthene	ND	360	ug/kg	SW846 8270B
Acenaphthylene	ND	360	ug/kg	SW846 8270B
Anthracene	ND	360	ug/kg	SW846 8270B
Benz(a)anthracene	ND	360	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	360	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	5100 B	360	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	360	ug/kg	SW846 8270B
4-Chloroaniline	ND	360	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	360	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	360	ug/kg	SW846 8270B
2-Chlorophenol	ND	360	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Chrysene	ND	360	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	360	ug/kg	SW846 8270B
Dibenzofuran	ND	360	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	360	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1800	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	360	ug/kg	SW846 8270B
Diethyl phthalate	ND	360	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	360	ug/kg	SW846 8270B
Dimethyl phthalate	ND	360	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1800	ug/kg	SW846 8270B

(Continued on next page)



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #3

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-003 Work Order #....: CFD4L107 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrophenol	ND	1800	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	360	ug/kg	SW846 8270B
Fluoranthene	ND	360	ug/kg	SW846 8270B
Fluorene	ND	360	ug/kg	SW846 8270B
Hexachlorobenzene	ND	360	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	360	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1800	ug/kg	SW846 8270B
Hexachloroethane	ND	360	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg	SW846 8270B
Isophorone	ND	360	ug/kg	SW846 8270B
2-Methylnaphthalene	ND	360	ug/kg	SW846 8270B
2-Methylphenol	ND	360	ug/kg	SW846 8270B
4-Methylphenol	ND	360	ug/kg	SW846 8270B
Naphthalene	ND	360	ug/kg	SW846 8270B
2-Nitroaniline	ND	1800	ug/kg	SW846 8270B
3-Nitroaniline	ND	1800	ug/kg	SW846 8270B
4-Nitroaniline	ND	1800	ug/kg	SW846 8270B
Nitrobenzene	ND	360	ug/kg	SW846 8270B
2-Nitrophenol	ND	360	ug/kg	SW846 8270B
4-Nitrophenol	ND	1800	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	360	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	360	ug/kg	SW846 8270B
Pentachlorophenol	ND	1800	ug/kg	SW846 8270B
Phenanthrene	ND	360	ug/kg	SW846 8270B
Phenol	ND	360	ug/kg	SW846 8270B
Pyrene	ND	360	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	360	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	360	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	360	ug/kg	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	27	(25 - 121)
Phenol-d5	55	(24 - 113)
Nitrobenzene-d5	76	(23 - 120)
2-Fluorobiphenyl	71	(30 - 115)
2,4,6-Tribromophenol	20	(19 - 122)
Terphenyl-d14	114	(18 - 137)

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.

B.J. SERVICES COMPANY

Client Sample ID: #3

GC/MS Volatiles

Lot-Sample #....: I8B140114-003 Work Order #....: CFD4L10H Matrix.....: SOLID
 Date Sampled...: 02/12/98 07:50 Date Received...: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8051183 Analysis Time...: 12:50
 Dilution Factor: 1
 % Moisture.....: 8.8

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	5.5	ug/kg	SW846 8260A
Bromobenzene	ND	5.5	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.5	ug/kg	SW846 8260A
Bromoform	ND	5.5	ug/kg	SW846 8260A
Bromomethane	ND	11	ug/kg	SW846 8260A
n-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
sec-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
tert-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.5	ug/kg	SW846 8260A
Chlorobenzene	ND	5.5	ug/kg	SW846 8260A
Chlorodibromomethane	ND	5.5	ug/kg	SW846 8260A
Chloroethane	ND	11	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	55	ug/kg	SW846 8260A
Chloroform	ND	5.5	ug/kg	SW846 8260A
Chloromethane	ND	11	ug/kg	SW846 8260A
2-Chlorotoluene	ND	5.5	ug/kg	SW846 8260A
4-Chlorotoluene	ND	5.5	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	11	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	5.5	ug/kg	SW846 8260A
Dibromomethane	ND	5.5	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	11	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.5	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.5	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.5	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	5.5	ug/kg	SW846 8260A
Ethylbenzene	ND	5.5	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	5.5	ug/kg	SW846 8260A
Isopropylbenzene	ND	5.5	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	5.5	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY
Client Sample ID: #3
GC/MS Volatiles
Lot-Sample #....: I8B140114-003 Work Order #....: CFD4L10H Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Methylene chloride	ND	5.5	ug/kg	SW846 8260A
n-Propylbenzene	ND	5.5	ug/kg	SW846 8260A
Styrene	ND	5.5	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	5.5	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.5	ug/kg	SW846 8260A
Toluene	ND	5.5	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.5	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.5	ug/kg	SW846 8260A
Trichloroethene	ND	5.5	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	11	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	5.5	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	ND	5.5	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	5.5	ug/kg	SW846 8260A
Vinyl chloride	ND	11	ug/kg	SW846 8260A
o-Xylene	ND	2.7	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	2.7	ug/kg	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	97	(61 - 115)
Toluene-d8	104	(82 - 129)
Bromofluorobenzene	98	(64 - 112)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY**Client Sample ID: #4****GC Semivolatiles**

Lot-Sample #....: I8B140114-004 Work Order #....: CFD4M104 Matrix.....: SOLID
Date Sampled...: 02/12/98 08:00 Date Received...: 02/14/98
Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
Prep Batch #....: 8047155 Analysis Time...: 17:55
Dilution Factor: 1
% Moisture.....: 9.0

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
Diesel Range Organics	19000	1900	ug/kg	SW846 8015 MOD
SURROGATE		PERCENT	RECOVERY	
o-Terphenyl	114		(40 - 144)	
Dotriacontane	107		(42 - 159)	

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: #4
GC Volatiles

Lot-Sample #....: I8B140114-004 Work Order #....: CFD4M105 Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:00 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date..: 02/17/98
 Prep Batch #....: 8049166 Analysis Time...: 14:40
 Dilution Factor: 1
 % Moisture.....: 9.0

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Gasoline Range Organics	ND	110	ug/kg	SW846 8020/GRO
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
a,a,a-Trifluorotoluene (TFT)	RECOVERY 90	LIMITS (75 - 125)		

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: #4
GC/MS Semivolatiles

Lot-Sample #....: I8B140114-004 Work Order #....: CFD4M107 Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:00 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/24/98
 Prep Batch #....: 8047201 Analysis Time...: 14:40
 Dilution Factor: 1
 % Moisture.....: 9.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	360	ug/kg	SW846 8270B
Acenaphthylene	ND	360	ug/kg	SW846 8270B
Anthracene	ND	360	ug/kg	SW846 8270B
Benz(a)anthracene	ND	360	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	360	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	580 B	360	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	360	ug/kg	SW846 8270B
4-Chloroaniline	ND	360	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	360	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	360	ug/kg	SW846 8270B
2-Chlorophenol	ND	360	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Chrysene	ND	360	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	360	ug/kg	SW846 8270B
Dibenzofuran	ND	360	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	360	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1800	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	360	ug/kg	SW846 8270B
Diethyl phthalate	ND	360	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	360	ug/kg	SW846 8270B
Dimethyl phthalate	ND	360	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1800	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #4

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-004 Work Order #....: CFD4M107 Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,4-Dinitrophenol	ND	1800	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	360	ug/kg	SW846 8270B
Fluoranthene	ND	360	ug/kg	SW846 8270B
Fluorene	ND	360	ug/kg	SW846 8270B
Hexachlorobenzene	ND	360	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	360	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1800	ug/kg	SW846 8270B
Hexachloroethane	ND	360	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg	SW846 8270B
Isophorone	ND	360	ug/kg	SW846 8270B
2-Methylnaphthalene	ND	360	ug/kg	SW846 8270B
2-Methylphenol	ND	360	ug/kg	SW846 8270B
4-Methylphenol	ND	360	ug/kg	SW846 8270B
Naphthalene	ND	360	ug/kg	SW846 8270B
2-Nitroaniline	ND	1800	ug/kg	SW846 8270B
3-Nitroaniline	ND	1800	ug/kg	SW846 8270B
4-Nitroaniline	ND	1800	ug/kg	SW846 8270B
Nitrobenzene	ND	360	ug/kg	SW846 8270B
2-Nitrophenol	ND	360	ug/kg	SW846 8270B
4-Nitrophenol	ND	1800	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	360	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	360	ug/kg	SW846 8270B
Pentachlorophenol	ND	1800	ug/kg	SW846 8270B
Phenanthrene	ND	360	ug/kg	SW846 8270B
Phenol	ND	360	ug/kg	SW846 8270B
Pyrene	ND	360	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	360	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	360	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	360	ug/kg	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	52	(25 - 121)
Phenol-d5	72	(24 - 113)
Nitrobenzene-d5	83	(23 - 120)
2-Fluorobiphenyl	76	(30 - 115)
2,4,6-Tribromophenol	65	(19 - 122)
Terphenyl-d14	116	(18 - 137)

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.

B.J. SERVICES COMPANY
Client Sample ID: #4
GC/MS Volatiles

Lot-Sample #....: I8B140114-004 Work Order #....: CFD4M10H
 Date Sampled....: 02/12/98 08:00 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #....: 8048180 Analysis Time...: 18:00
 Dilution Factor: 1
 % Moisture.....: 9.0

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	5.5	ug/kg	SW846 8260A
Bromobenzene	ND	5.5	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.5	ug/kg	SW846 8260A
Bromoform	ND	5.5	ug/kg	SW846 8260A
Bromomethane	ND	11	ug/kg	SW846 8260A
n-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
sec-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
tert-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.5	ug/kg	SW846 8260A
Chlorobenzene	ND	5.5	ug/kg	SW846 8260A
Chlorodibromomethane	ND	5.5	ug/kg	SW846 8260A
Chloroethane	ND	11	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	55	ug/kg	SW846 8260A
Chloroform	ND	5.5	ug/kg	SW846 8260A
Chloromethane	ND	11	ug/kg	SW846 8260A
2-Chlorotoluene	ND	5.5	ug/kg	SW846 8260A
4-Chlorotoluene	ND	5.5	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	11	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	5.5	ug/kg	SW846 8260A
Dibromomethane	ND	5.5	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	11	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.5	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.5	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.5	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	5.5	ug/kg	SW846 8260A
Ethylbenzene	ND	5.5	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	5.5	ug/kg	SW846 8260A
Isopropylbenzene	ND	5.5	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	5.5	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY
Client Sample ID: #4
GC/MS Volatiles
Lot-Sample #....: I8B140114-004 Work Order #....: CFD4M10H Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Methylene chloride	ND	5.5	ug/kg	SW846 8260A
n-Propylbenzene	ND	5.5	ug/kg	SW846 8260A
Styrene	ND	5.5	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	5.5	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.5	ug/kg	SW846 8260A
Toluene	ND	5.5	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.5	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.5	ug/kg	SW846 8260A
Trichloroethene	ND	5.5	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	11	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	5.5	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	8.2	5.5	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	5.5	ug/kg	SW846 8260A
Vinyl chloride	ND	11	ug/kg	SW846 8260A
o-Xylene	5.9	2.7	ug/kg	SW846 8260A
m-Xylene & p-Xylene	8.3	2.7	ug/kg	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	92	(61 - 115)
Toluene-d8	102	(82 - 129)
Bromofluorobenzene	96	(64 - 112)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY**Client Sample ID: #5****GC Semivolatiles**

Lot-Sample #....: I8B140114-005 Work Order #....: CFD4N104 Matrix.....: SOLID
Date Sampled...: 02/12/98 08:05 Date Received..: 02/14/98
Prep Date.....: 02/16/98 Analysis Date..: 02/17/98
Prep Batch #....: 8047155 Analysis Time...: 18:35
Dilution Factor: 1
% Moisture.....: 8.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	4100	1900	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
o-Terphenyl	101	(40 - 144)		
Dotriacontane	100	(42 - 159)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #5

GC Volatiles

Lot-Sample #....: I8B140114-005 Work Order #....: CFD4N105 Matrix.....: SOLID
Date Sampled...: 02/12/98 08:05 Date Received...: 02/14/98
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #....: 8049166 Analysis Time...: 15:20
Dilution Factor: 1
% Moisture.....: 8.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	110	ug/kg	SW846 8020/GRO
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
a,a,a-Trifluorotoluene (TFT)	90	(75 - 125)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #5

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-005 Work Order #....: CFD4N107 Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:05 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/24/98
 Prep Batch #....: 8047201 Analysis Time...: 15:11
 Dilution Factor: 1
 % Moisture.....: 8.6

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Acenaphthene	ND	360	ug/kg	SW846 8270B
Acenaphthylene	ND	360	ug/kg	SW846 8270B
Anthracene	ND	360	ug/kg	SW846 8270B
Benz (a)anthracene	ND	360	ug/kg	SW846 8270B
Benzo (b)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo (k)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	360	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	950 B	360	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	360	ug/kg	SW846 8270B
4-Chloroaniline	ND	360	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	360	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	360	ug/kg	SW846 8270B
2-Chlorophenol	ND	360	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Chrysene	ND	360	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	360	ug/kg	SW846 8270B
Dibenzofuran	ND	360	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	360	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1800	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	360	ug/kg	SW846 8270B
Diethyl phthalate	ND	360	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	360	ug/kg	SW846 8270B
Dimethyl phthalate	ND	360	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1800	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY
Client Sample ID: #5
GC/MS Semivolatiles
Lot-Sample #....: I8B140114-005 Work Order #....: CFD4N107 Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,4-Dinitrophenol	ND	1800	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	360	ug/kg	SW846 8270B
Fluoranthene	ND	360	ug/kg	SW846 8270B
Fluorene	ND	360	ug/kg	SW846 8270B
Hexachlorobenzene	ND	360	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	360	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1800	ug/kg	SW846 8270B
Hexachloroethane	ND	360	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg	SW846 8270B
Isophorone	ND	360	ug/kg	SW846 8270B
2-Methylnaphthalene	ND	360	ug/kg	SW846 8270B
2-Methylphenol	ND	360	ug/kg	SW846 8270B
4-Methylphenol	ND	360	ug/kg	SW846 8270B
Naphthalene	ND	360	ug/kg	SW846 8270B
2-Nitroaniline	ND	1800	ug/kg	SW846 8270B
3-Nitroaniline	ND	1800	ug/kg	SW846 8270B
4-Nitroaniline	ND	1800	ug/kg	SW846 8270B
Nitrobenzene	ND	360	ug/kg	SW846 8270B
2-Nitrophenol	ND	360	ug/kg	SW846 8270B
4-Nitrophenol	ND	1800	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	360	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	360	ug/kg	SW846 8270B
Pentachlorophenol	ND	1800	ug/kg	SW846 8270B
Phenanthere	ND	360	ug/kg	SW846 8270B
Phenol	ND	360	ug/kg	SW846 8270B
Pyrene	ND	360	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	360	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	360	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	360	ug/kg	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	42	(25 - 121)
Phenol-d5	69	(24 - 113)
Nitrobenzene-d5	74	(23 - 120)
2-Fluorobiphenyl	72	(30 - 115)
2,4,6-Tribromophenol	48	(19 - 122)
Terphenyl-d14	121	(18 - 137)

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.

B.J. SERVICES COMPANY

Client Sample ID: #5

GC/MS Volatiles

Lot-Sample #....: I8B140114-005 Work Order #....: CFD4N10H Matrix.....: SOLID
 Date Sampled...: 02/12/98 08:05 Date Received..: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date..: 02/17/98
 Prep Batch #....: 8048180 Analysis Time..: 18:32
 Dilution Factor: 1
 % Moisture.....: 8.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.5	ug/kg	SW846 8260A
Bromobenzene	ND	5.5	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.5	ug/kg	SW846 8260A
Bromoform	ND	5.5	ug/kg	SW846 8260A
Bromomethane	ND	11	ug/kg	SW846 8260A
n-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
sec-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
tert-Butylbenzene	ND	5.5	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.5	ug/kg	SW846 8260A
Chlorobenzene	ND	5.5	ug/kg	SW846 8260A
Chlorodibromomethane	ND	5.5	ug/kg	SW846 8260A
Chloroethane	ND	11	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	55	ug/kg	SW846 8260A
Chloroform	ND	5.5	ug/kg	SW846 8260A
Chloromethane	ND	11	ug/kg	SW846 8260A
2-Chlorotoluene	ND	5.5	ug/kg	SW846 8260A
4-Chlorotoluene	ND	5.5	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	11	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	5.5	ug/kg	SW846 8260A
Dibromomethane	ND	5.5	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	5.5	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	11	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.5	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.5	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.5	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	5.5	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	5.5	ug/kg	SW846 8260A
Ethylbenzene	ND	5.5	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	5.5	ug/kg	SW846 8260A
Isopropylbenzene	ND	5.5	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	5.5	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #5

GC/MS Volatiles

Lot-Sample #....: I8B140114-005 Work Order #....: CFD4N10H Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Methylene chloride	ND	5.5	ug/kg	SW846 8260A
n-Propylbenzene	ND	5.5	ug/kg	SW846 8260A
Styrene	ND	5.5	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	5.5	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.5	ug/kg	SW846 8260A
Toluene	ND	5.5	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	5.5	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.5	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.5	ug/kg	SW846 8260A
Trichloroethene	ND	5.5	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	11	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	5.5	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	ND	5.5	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	5.5	ug/kg	SW846 8260A
Vinyl chloride	ND	11	ug/kg	SW846 8260A
o-Xylene	ND	2.7	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	2.7	ug/kg	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
1,2-Dichloroethane-d4	99	(61 - 115)	
Toluene-d8	105	(82 - 129)	
Bromofluorobenzene	97	(64 - 112)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY**Client Sample ID: #6****GC Semivolatiles**

Lot-Sample #....: I8B140114-006 Work Order #....: CFD4Q104 Matrix.....: SOLID
Date Sampled...: 02/12/98 08:15 Date Received..: 02/14/98
Prep Date.....: 02/16/98 Analysis Date..: 02/17/98
Prep Batch #....: 8047155 Analysis Time..: 19:14
Dilution Factor: 1
% Moisture.....: 7.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	87000	1800	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
o-Terphenyl	111	(40 - 144)		
Dotriacontane	111	(42 - 159)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #6

GC Volatiles

Lot-Sample #...: I8B140114-006 Work Order #...: CFD4Q105 Matrix.....: SOLID
Date Sampled...: 02/12/98 08:15 Date Received..: 02/14/98
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #...: 8049166 Analysis Time...: 16:01
Dilution Factor: 1
% Moisture.....: 7.4

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Gasoline Range Organics	ND	110	ug/kg	SW846 8020/GRO
SURROGATE	PERCENT	RECOVERY	LIMITS	
a,a,a-Trifluorotoluene (TFT)	RECOVERY 89	(75 - 125)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: #6
GC/MS Semivolatiles

Lot-Sample #....: I8B140114-006 Work Order #....: CFD4Q107 Matrix.....: SOLID
 Date Sampled...: 02/12/98 08:15 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8047201 Analysis Time...: 15:43
 Dilution Factor: 1
 % Moisture.....: 7.4

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Acenaphthene	ND	360	ug/kg	SW846 8270B
Acenaphthylene	ND	360	ug/kg	SW846 8270B
Anthracene	ND	360	ug/kg	SW846 8270B
Benz(a)anthracene	ND	360	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	360	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	1100 B	360	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	360	ug/kg	SW846 8270B
4-Chloroaniline	ND	360	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	360	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	360	ug/kg	SW846 8270B
2-Chlorophenol	ND	360	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Chrysene	ND	360	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	360	ug/kg	SW846 8270B
Dibenzofuran	ND	360	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	360	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1700	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	360	ug/kg	SW846 8270B
Diethyl phthalate	ND	360	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	360	ug/kg	SW846 8270B
Dimethyl phthalate	ND	360	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1700	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #6

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-006 Work Order #....: CFD4Q107 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrophenol	ND	1700	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	360	ug/kg	SW846 8270B
Fluoranthene	ND	360	ug/kg	SW846 8270B
Fluorene	ND	360	ug/kg	SW846 8270B
Hexachlorobenzene	ND	360	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	360	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1700	ug/kg	SW846 8270B
Hexachloroethane	ND	360	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg	SW846 8270B
Isophorone	ND	360	ug/kg	SW846 8270B
2-Methylnaphthalene	ND	360	ug/kg	SW846 8270B
2-Methylphenol	ND	360	ug/kg	SW846 8270B
4-Methylphenol	ND	360	ug/kg	SW846 8270B
Naphthalene	ND	360	ug/kg	SW846 8270B
2-Nitroaniline	ND	1700	ug/kg	SW846 8270B
3-Nitroaniline	ND	1700	ug/kg	SW846 8270B
4-Nitroaniline	ND	1700	ug/kg	SW846 8270B
Nitrobenzene	ND	360	ug/kg	SW846 8270B
2-Nitrophenol	ND	360	ug/kg	SW846 8270B
4-Nitrophenol	ND	1700	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	360	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	360	ug/kg	SW846 8270B
Pentachlorophenol	ND	1700	ug/kg	SW846 8270B
Phenanthere	ND	360	ug/kg	SW846 8270B
Phenol	ND	360	ug/kg	SW846 8270B
Pyrene	ND	360	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	360	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	360	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	360	ug/kg	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	70	(25 - 121)
Phenol-d5	84	(24 - 113)
Nitrobenzene-d5	68	(23 - 120)
2-Fluorobiphenyl	77	(30 - 115)
2,4,6-Tribromophenol	57	(19 - 122)
Terphenyl-d14	91	(18 - 137)

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.

B.J. SERVICES COMPANY
Client Sample ID: #6
GC/MS Volatiles

Lot-Sample #....: I8B140114-006 Work Order #....: CFD4Q10H Matrix.....: SOLID
 Date Sampled...: 02/12/98 08:15 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #....: 8048180 Analysis Time...: 19:03
 Dilution Factor: 1
 % Moisture.....: 7.4

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	5.4	ug/kg	SW846 8260A
Bromobenzene	ND	5.4	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.4	ug/kg	SW846 8260A
Bromoform	ND	5.4	ug/kg	SW846 8260A
Bromomethane	ND	11	ug/kg	SW846 8260A
n-Butylbenzene	ND	5.4	ug/kg	SW846 8260A
sec-Butylbenzene	ND	5.4	ug/kg	SW846 8260A
tert-Butylbenzene	ND	5.4	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.4	ug/kg	SW846 8260A
Chlorobenzene	ND	5.4	ug/kg	SW846 8260A
Chlorodibromomethane	ND	5.4	ug/kg	SW846 8260A
Chloroethane	ND	11	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	54	ug/kg	SW846 8260A
Chloroform	ND	5.4	ug/kg	SW846 8260A
Chloromethane	ND	11	ug/kg	SW846 8260A
2-Chlorotoluene	ND	5.4	ug/kg	SW846 8260A
4-Chlorotoluene	ND	5.4	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	11	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	5.4	ug/kg	SW846 8260A
Dibromomethane	ND	5.4	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	5.4	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	5.4	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	5.4	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	11	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.4	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.4	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.4	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.4	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	5.4	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	5.4	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	5.4	ug/kg	SW846 8260A
Ethylbenzene	ND	5.4	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	5.4	ug/kg	SW846 8260A
Isopropylbenzene	ND	5.4	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	5.4	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #6

GC/MS Volatiles

Lot-Sample #: I8B140114-006 Work Order #: CFD4Q10H Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Methylene chloride	ND	5.4	ug/kg	SW846 8260A
n-Propylbenzene	ND	5.4	ug/kg	SW846 8260A
Styrene	ND	5.4	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	5.4	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.4	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.4	ug/kg	SW846 8260A
Toluene	ND	5.4	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	5.4	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	5.4	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.4	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.4	ug/kg	SW846 8260A
Trichloroethene	ND	5.4	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	11	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	5.4	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	20	5.4	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	5.4	ug/kg	SW846 8260A
Vinyl chloride	ND	11	ug/kg	SW846 8260A
o-Xylene	4.5	2.7	ug/kg	SW846 8260A
m-Xylene & p-Xylene	7.4	2.7	ug/kg	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	96	(61 - 115)
Toluene-d8	104	(82 - 129)
Bromofluorobenzene	96	(64 - 112)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #7

GC Semivolatiles

Lot-Sample #....: I8B140114-007 Work Order #....: CFD4T104 Matrix.....: SOLID
Date Sampled....: 02/12/98 08:30 Date Received...: 02/14/98
Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
Prep Batch #....: 8047155 Analysis Time...: 12:03
Dilution Factor: 50
% Moisture.....: 9.2

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Diesel Range Organics	190000	94000	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT	RECOVERY	LIMITS	
o-Terphenyl	NC,DIL	(40 - 144)		
Dotriacontane	NC,DIL	(42 - 159)		

NOTE(S) :

NC The recovery and RPD were not calculated.

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.

B.J. SERVICES COMPANY
Client Sample ID: #7
GC Volatiles

Lot-Sample #....: I8B140114-007 Work Order #....: CFD4T105 Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:30 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/18/98
 Prep Batch #....: 8049193 Analysis Time...: 08:52
 Dilution Factor: 200
 % Moisture.....: 9.2

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Gasoline Range Organics	160000	22000	ug/kg	SW846 8020/GRO
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
Bromofluorobenzene	RECOVERY NC	LIMITS (75 - 125)		

NOTE (S) :

NC The recovery and RPD were not calculated.

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: #7
GC/MS Semivolatiles

Lot-Sample #....: I8B140114-007 Work Order #....: CFD4T107 Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:30 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8047201 Analysis Time...: 16:14
 Dilution Factor: 10
 % Moisture.....: 9.2

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Acenaphthene	ND	3600	ug/kg	SW846 8270B
Acenaphthylene	ND	3600	ug/kg	SW846 8270B
Anthracene	ND	3600	ug/kg	SW846 8270B
Benz(a)anthracene	ND	3600	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	3600	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	3600	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	3600	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	3600	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	3600	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	3600	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	3600	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	ND	3600	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	3600	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	3600	ug/kg	SW846 8270B
4-Chloroaniline	ND	3600	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	3600	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	3600	ug/kg	SW846 8270B
2-Chlorophenol	ND	3600	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	3600	ug/kg	SW846 8270B
Chrysene	ND	3600	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	3600	ug/kg	SW846 8270B
Dibenzofuran	ND	3600	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	3600	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	3600	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	3600	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	3600	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	18000	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	3600	ug/kg	SW846 8270B
Diethyl phthalate	ND	3600	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	3600	ug/kg	SW846 8270B
Dimethyl phthalate	ND	3600	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	18000	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #7

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-007 Work Order #....: CFD4T107 Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,4-Dinitrophenol	ND	18000	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	3600	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	3600	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	3600	ug/kg	SW846 8270B
Fluoranthene	ND	3600	ug/kg	SW846 8270B
Fluorene	ND	3600	ug/kg	SW846 8270B
Hexachlorobenzene	ND	3600	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	3600	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	18000	ug/kg	SW846 8270B
Hexachloroethane	ND	3600	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	3600	ug/kg	SW846 8270B
Isophorone	ND	3600	ug/kg	SW846 8270B
2-Methylnaphthalene	20000	3600	ug/kg	SW846 8270B
2-Methylphenol	ND	3600	ug/kg	SW846 8270B
4-Methylphenol	ND	3600	ug/kg	SW846 8270B
Naphthalene	5400	3600	ug/kg	SW846 8270B
2-Nitroaniline	ND	18000	ug/kg	SW846 8270B
3-Nitroaniline	ND	18000	ug/kg	SW846 8270B
4-Nitroaniline	ND	18000	ug/kg	SW846 8270B
Nitrobenzene	ND	3600	ug/kg	SW846 8270B
2-Nitrophenol	ND	3600	ug/kg	SW846 8270B
4-Nitrophenol	ND	18000	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	3600	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	3600	ug/kg	SW846 8270B
Pentachlorophenol	ND	18000	ug/kg	SW846 8270B
Phenanthrene	4200	3600	ug/kg	SW846 8270B
Phenol	ND	3600	ug/kg	SW846 8270B
Pyrene	ND	3600	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	3600	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	3600	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	3600	ug/kg	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	67 DIL	(25 - 121)
Phenol-d5	79 DIL	(24 - 113)
Nitrobenzene-d5	66 DIL	(23 - 120)
2-Fluorobiphenyl	74 DIL	(30 - 115)
2,4,6-Tribromophenol	89 DIL	(19 - 122)
Terphenyl-d14	77 DIL	(18 - 137)

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.

Elevated reporting limits due to matrix interference.

B.J. SERVICES COMPANY
Client Sample ID: #7
GC/MS Volatiles

Lot-Sample #....: I8B140114-007 Work Order #....: CFD4T10H Matrix.....: SOLID
 Date Sampled...: 02/12/98 08:30 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #....: 8048180 Analysis Time...: 20:37
 Dilution Factor: 10
 % Moisture.....: 9.2

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	55	ug/kg	SW846 8260A
Bromobenzene	ND	55	ug/kg	SW846 8260A
Bromodichloromethane	ND	55	ug/kg	SW846 8260A
Bromoform	ND	55	ug/kg	SW846 8260A
Bromomethane	ND	110	ug/kg	SW846 8260A
n-Butylbenzene	ND	55	ug/kg	SW846 8260A
sec-Butylbenzene	100	55	ug/kg	SW846 8260A
tert-Butylbenzene	ND	55	ug/kg	SW846 8260A
Carbon tetrachloride	ND	55	ug/kg	SW846 8260A
Chlorobenzene	ND	55	ug/kg	SW846 8260A
Chlorodibromomethane	ND	55	ug/kg	SW846 8260A
Chloroethane	ND	110	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	550	ug/kg	SW846 8260A
Chloroform	ND	55	ug/kg	SW846 8260A
Chloromethane	ND	110	ug/kg	SW846 8260A
2-Chlorotoluene	ND	55	ug/kg	SW846 8260A
4-Chlorotoluene	ND	55	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	110	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	55	ug/kg	SW846 8260A
Dibromomethane	ND	55	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	55	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	55	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	55	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	110	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	55	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	55	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	55	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	28	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	28	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	55	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	55	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	55	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	55	ug/kg	SW846 8260A
Ethylbenzene	440	55	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	55	ug/kg	SW846 8260A
Isopropylbenzene	110	55	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	55	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #7

GC/MS Volatiles

Lot-Sample #....: I8B140114-007 Work Order #....: CFD4T10W Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methylene chloride	ND	55	ug/kg	SW846 8260A
n-Propylbenzene	210	55	ug/kg	SW846 8260A
Styrene	ND	55	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	55	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	55	ug/kg	SW846 8260A
Tetrachloroethene	ND	55	ug/kg	SW846 8260A
Toluene	540	55	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	55	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	55	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	55	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	55	ug/kg	SW846 8260A
Trichloroethene	ND	55	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	110	ug/kg	SW846 8260A
1,2,3-Trichloroproppane	ND	55	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	1600	55	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	55	ug/kg	SW846 8260A
Vinyl chloride	ND	110	ug/kg	SW846 8260A
o-Xylene	880	28	ug/kg	SW846 8260A
m-Xylene & p-Xylene	2600	28	ug/kg	SW846 8260A
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
1,2-Dichloroethane-d4	93	(61 - 115)		
Toluene-d8	112	(82 - 129)		
Bromofluorobenzene	98	(64 - 112)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #8

GC Semivolatiles

Lot-Sample #....: I8B140114-008 Work Order #....: CFD4V104 Matrix.....: SOLID
Date Sampled....: 02/12/98 08:40 Date Received...: 02/14/98
Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
Prep Batch #....: 8047155 Analysis Time...: 12:45
Dilution Factor: 25
% Moisture.....: 8.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	860000	47000	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
o-Terphenyl	NC, DIL	(40 - 144)		
Dotriacontane	NC, DIL	(42 - 159)		

NOTE(S) :

NC The recovery and RPD were not calculated.

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.

B.J. SERVICES COMPANY

Client Sample ID: #8

GC Volatiles

Lot-Sample #....: I8B140114-008	Work Order #....: CFD4V105	Matrix.....: SOLID
Date Sampled....: 02/12/98 08:40	Date Received...: 02/14/98	
Prep Date.....: 02/17/98	Analysis Date...: 02/17/98	
Prep Batch #....: 8049166	Analysis Time...: 16:41	
Dilution Factor: 1		
% Moisture.....: 8.8		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	130	110	ug/kg	SW846 8020/GRO
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
a,a,a-Trifluorotoluene (TFT)	81	(75 - 125)		

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #8

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-008 Work Order #....: CFD4V107 Matrix.....: SOLID
Date Sampled...: 02/12/98 08:40 Date Received..: 02/14/98
Prep Date.....: 02/16/98 Analysis Date..: 02/19/98
Prep Batch #....: 8047201 Analysis Time..: 16:45
Dilution Factor: 10
% Moisture.....: 8.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	3600	ug/kg	SW846 8270B
Acenaphthylene	ND	3600	ug/kg	SW846 8270B
Anthracene	ND	3600	ug/kg	SW846 8270B
Benz(a)anthracene	ND	3600	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	3600	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	3600	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	3600	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	3600	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	3600	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	3600	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	3600	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	ND	3600	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	3600	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	3600	ug/kg	SW846 8270B
4-Chloroaniline	ND	3600	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	3600	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	3600	ug/kg	SW846 8270B
2-Chlorophenol	ND	3600	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	3600	ug/kg	SW846 8270B
Chrysene	ND	3600	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	3600	ug/kg	SW846 8270B
Dibenzofuran	ND	3600	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	3600	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	3600	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	3600	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	3600	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	18000	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	3600	ug/kg	SW846 8270B
Diethyl phthalate	ND	3600	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	3600	ug/kg	SW846 8270B
Dimethyl phthalate	ND	3600	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	18000	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY
Client Sample ID: #8
GC/MS Semivolatiles
Lot-Sample #....: I8B140114-008 Work Order #....: CFD4V107 Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,4-Dinitrophenol	ND	18000	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	3600	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	3600	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	3600	ug/kg	SW846 8270B
Fluoranthene	ND	3600	ug/kg	SW846 8270B
Fluorene	ND	3600	ug/kg	SW846 8270B
Hexachlorobenzene	ND	3600	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	3600	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	18000	ug/kg	SW846 8270B
Hexachloroethane	ND	3600	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	3600	ug/kg	SW846 8270B
Isophorone	ND	3600	ug/kg	SW846 8270B
2-Methylnaphthalene	4600	3600	ug/kg	SW846 8270B
2-Methylphenol	ND	3600	ug/kg	SW846 8270B
4-Methylphenol	ND	3600	ug/kg	SW846 8270B
Naphthalene	ND	3600	ug/kg	SW846 8270B
2-Nitroaniline	ND	18000	ug/kg	SW846 8270B
3-Nitroaniline	ND	18000	ug/kg	SW846 8270B
4-Nitroaniline	ND	18000	ug/kg	SW846 8270B
Nitrobenzene	ND	3600	ug/kg	SW846 8270B
2-Nitrophenol	ND	3600	ug/kg	SW846 8270B
4-Nitrophenol	ND	18000	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	3600	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	3600	ug/kg	SW846 8270B
Pentachlorophenol	ND	18000	ug/kg	SW846 8270B
Phenanthrene	ND	3600	ug/kg	SW846 8270B
Phenol	ND	3600	ug/kg	SW846 8270B
Pyrene	ND	3600	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	3600	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	3600	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	3600	ug/kg	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	71	(25 - 121)
Phenol-d5	80	(24 - 113)
Nitrobenzene-d5	62	(23 - 120)
2-Fluorobiphenyl	73	(30 - 115)
2,4,6-Tribromophenol	86	(19 - 122)
Terphenyl-d14	67	(18 - 137)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Elevated reporting limits due to matrix interference.

B.J. SERVICES COMPANY
Client Sample ID: #8
GC/MS Volatiles

Lot-Sample #....: I8B140114-008 Work Order #....: CFD4V10H Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:40 Date Received...: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8051183 Analysis Time...: 13:53
 Dilution Factor: 1.66
 % Moisture.....: 8.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	9.1	ug/kg	SW846 8260A
Bromobenzene	ND	9.1	ug/kg	SW846 8260A
Bromodichloromethane	ND	9.1	ug/kg	SW846 8260A
Bromoform	ND	9.1	ug/kg	SW846 8260A
Bromomethane	ND	18	ug/kg	SW846 8260A
n-Butylbenzene	ND	9.1	ug/kg	SW846 8260A
sec-Butylbenzene	ND	9.1	ug/kg	SW846 8260A
tert-Butylbenzene	ND	9.1	ug/kg	SW846 8260A
Carbon tetrachloride	ND	9.1	ug/kg	SW846 8260A
Chlorobenzene	ND	9.1	ug/kg	SW846 8260A
Chlorodibromomethane	ND	9.1	ug/kg	SW846 8260A
Chloroethane	ND	18	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	91	ug/kg	SW846 8260A
Chloroform	ND	9.1	ug/kg	SW846 8260A
Chloromethane	ND	18	ug/kg	SW846 8260A
2-Chlorotoluene	ND	9.1	ug/kg	SW846 8260A
4-Chlorotoluene	ND	9.1	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	18	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	9.1	ug/kg	SW846 8260A
Dibromomethane	ND	9.1	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	9.1	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	9.1	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	9.1	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	18	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	9.1	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	9.1	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	9.1	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	4.5	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	4.5	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	9.1	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	9.1	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	9.1	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	9.1	ug/kg	SW846 8260A
Ethylbenzene	ND	9.1	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	9.1	ug/kg	SW846 8260A
Isopropylbenzene	ND	9.1	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	9.1	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #8

GC/MS Volatiles

Lot-Sample #....: I8B140114-008 Work Order #....: CFD4V10H Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
Methylene chloride	ND	9.1	ug/kg	SW846 8260A
n-Propylbenzene	ND	9.1	ug/kg	SW846 8260A
Styrene	ND	9.1	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	9.1	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	9.1	ug/kg	SW846 8260A
Tetrachloroethene	ND	9.1	ug/kg	SW846 8260A
Toluene	ND	9.1	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	9.1	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	9.1	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	9.1	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	9.1	ug/kg	SW846 8260A
Trichloroethene	ND	9.1	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	18	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	9.1	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	45	9.1	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	9.1	ug/kg	SW846 8260A
Vinyl chloride	ND	18	ug/kg	SW846 8260A
o-Xylene	32	4.5	ug/kg	SW846 8260A
m-Xylene & p-Xylene	23	4.5	ug/kg	SW846 8260A
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>		
		<u>LIMITS</u>		
1,2-Dichloroethane-d4	80	(61 - 115)		
Toluene-d8	99	(82 - 129)		
Bromofluorobenzene	89	(64 - 112)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: #9
GC Semivolatiles

Lot-Sample #....: I8B140114-009 Work Order #....: CFD4W104 Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:50 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
 Prep Batch #...: 8047155 Analysis Time...: 19:51
 Dilution Factor: 1
 % Moisture.....: 7.4

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Diesel Range Organics	20000	1800	ug/kg	SW846 8015 MOD
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
o-Terphenyl	100	(40 - 144)		
Dotriacontane	96	(42 - 159)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #9

GC Volatiles

Lot-Sample #....: I8B140114-009 Work Order #....: CFD4W105 Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:50 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #....: 8049166 Analysis Time...: 17:22
 Dilution Factor: 1
 % Moisture.....: 7.4

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Gasoline Range Organics	ND	110	ug/kg	SW846 8020/GRO
SURROGATE	PERCENT	RECOVERY	LIMITS	
a,a,a-Trifluorotoluene (TFT)	80		(75 - 125)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #9

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-009 Work Order #....: CFD4W107 Matrix.....: SOLID
 Date Sampled...: 02/12/98 08:50 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/24/98
 Prep Batch #....: 8047201 Analysis Time...: 16:43
 Dilution Factor: 1
 % Moisture.....: 7.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	360	ug/kg	SW846 8270B
Acenaphthylene	ND	360	ug/kg	SW846 8270B
Anthracene	ND	360	ug/kg	SW846 8270B
Benz(a)anthracene	ND	360	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	360	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	1500 B	360	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	360	ug/kg	SW846 8270B
4-Chloroaniline	ND	360	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	360	ug/kg	SW846 8270B
2-Choronaphthalene	ND	360	ug/kg	SW846 8270B
2-Chlorophenol	ND	360	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Chrysene	ND	360	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	360	ug/kg	SW846 8270B
Dibenzofuran	ND	360	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	360	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1700	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	360	ug/kg	SW846 8270B
Diethyl phthalate	ND	360	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	360	ug/kg	SW846 8270B
Dimethyl phthalate	ND	360	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1700	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #9

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-009 Work Order #....: CFD4W107 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrophenol	ND	1700	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	380 B	360	ug/kg	SW846 8270B
Fluoranthene	ND	360	ug/kg	SW846 8270B
Fluorene	ND	360	ug/kg	SW846 8270B
Hexachlorobenzene	ND	360	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	360	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1700	ug/kg	SW846 8270B
Hexachloroethane	ND	360	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg	SW846 8270B
Isophorone	ND	360	ug/kg	SW846 8270B
2-Methylnaphthalene	ND	360	ug/kg	SW846 8270B
2-Methylphenol	ND	360	ug/kg	SW846 8270B
4-Methylphenol	ND	360	ug/kg	SW846 8270B
Naphthalene	ND	360	ug/kg	SW846 8270B
2-Nitroaniline	ND	1700	ug/kg	SW846 8270B
3-Nitroaniline	ND	1700	ug/kg	SW846 8270B
4-Nitroaniline	ND	1700	ug/kg	SW846 8270B
Nitrobenzene	ND	360	ug/kg	SW846 8270B
2-Nitrophenol	ND	360	ug/kg	SW846 8270B
4-Nitrophenol	ND	1700	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	360	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	360	ug/kg	SW846 8270B
Pentachlorophenol	ND	1700	ug/kg	SW846 8270B
Phenanthrene	ND	360	ug/kg	SW846 8270B
Phenol	ND	360	ug/kg	SW846 8270B
Pyrene	ND	360	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	360	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	360	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	360	ug/kg	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	48	(25 - 121)
Phenol-d5	68	(24 - 113)
Nitrobenzene-d5	74	(23 - 120)
2-Fluorobiphenyl	74	(30 - 115)
2,4,6-Tribromophenol	68	(19 - 122)
Terphenyl-d14	123	(18 - 137)

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.

B.J. SERVICES COMPANY
Client Sample ID: #9
GC/MS Volatiles

Lot-Sample #....: I8B140114-009 Work Order #....: CFD4W10H Matrix.....: SOLID
 Date Sampled...: 02/12/98 08:50 Date Received...: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8051183 Analysis Time...: 10:45
 Dilution Factor: 1
 % Moisture.....: 7.4

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	5.4	ug/kg	SW846 8260A
Bromobenzene	ND	5.4	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.4	ug/kg	SW846 8260A
Bromoform	ND	5.4	ug/kg	SW846 8260A
Bromomethane	ND	11	ug/kg	SW846 8260A
n-Butylbenzene	ND	5.4	ug/kg	SW846 8260A
sec-Butylbenzene	ND	5.4	ug/kg	SW846 8260A
tert-Butylbenzene	ND	5.4	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.4	ug/kg	SW846 8260A
Chlorobenzene	ND	5.4	ug/kg	SW846 8260A
Chlorodibromomethane	ND	5.4	ug/kg	SW846 8260A
Chloroethane	ND	11	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	54	ug/kg	SW846 8260A
Chloroform	ND	5.4	ug/kg	SW846 8260A
Chloromethane	ND	11	ug/kg	SW846 8260A
2-Chlorotoluene	ND	5.4	ug/kg	SW846 8260A
4-Chlorotoluene	ND	5.4	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro- propane	ND	11	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	5.4	ug/kg	SW846 8260A
Dibromomethane	ND	5.4	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	5.4	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	5.4	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	5.4	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	11	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.4	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.4	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.4	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	2.7	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.4	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	5.4	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	5.4	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	5.4	ug/kg	SW846 8260A
Ethylbenzene	ND	5.4	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	5.4	ug/kg	SW846 8260A
Isopropylbenzene	ND	5.4	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	5.4	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #9

GC/MS Volatiles

Lot-Sample #....: I8B140114-009 Work Order #....: CFD4W10H Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Methylene chloride	ND	5.4	ug/kg	SW846 8260A
n-Propylbenzene	ND	5.4	ug/kg	SW846 8260A
Styrene	ND	5.4	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	5.4	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.4	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.4	ug/kg	SW846 8260A
Toluene	ND	5.4	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	5.4	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	5.4	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.4	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.4	ug/kg	SW846 8260A
Trichloroethene	ND	5.4	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	11	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	5.4	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	ND	5.4	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	5.4	ug/kg	SW846 8260A
Vinyl chloride	ND	11	ug/kg	SW846 8260A
o-Xylene	ND	2.7	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	2.7	ug/kg	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
1,2-Dichloroethane-d4	90	(61 - 115)	
Toluene-d8	103	(82 - 129)	
Bromofluorobenzene	97	(64 - 112)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #10

GC Semivolatiles

Lot-Sample #....: I8B140114-010 Work Order #....: CFD4X104 Matrix.....: SOLID
Date Sampled...: 02/12/98 09:00 Date Received..: 02/14/98
Prep Date.....: 02/16/98 Analysis Date..: 02/17/98
Prep Batch #....: 8047155 Analysis Time..: 13:23
Dilution Factor: 100
% Moisture.....: 12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	ND	190000	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
o-Terphenyl	NC,DIL	(40 - 144)		
Dotriacontane	NC,DIL	(42 - 159)		

NOTE(S) :

NC The recovery and RPD were not calculated.

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.

B.J. SERVICES COMPANY

Client Sample ID: #10

GC Volatiles

Lot-Sample #....: I8B140114-010 Work Order #....: CFD4X105 Matrix.....: SOLID
 Date Sampled...: 02/12/98 09:00 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/18/98
 Prep Batch #....: 8049193 Analysis Time...: 09:35
 Dilution Factor: 200
 % Moisture.....: 12

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Gasoline Range Organics	170000	23000	ug/kg	SW846 8020/GRO
SURROGATE	PERCENT	RECOVERY		
Bromofluorobenzene	RECOVERY	LIMITS		
	84	(75 - 125)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #10

GC/MS Semivolatiles

Lot-Sample #....: I8B140114-010 Work Order #....: CFD4X107 Matrix.....: SOLID
 Date Sampled....: 02/12/98 09:00 Date Received...: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/24/98
 Prep Batch #....: 8047201 Analysis Time...: 17:14
 Dilution Factor: 10
 % Moisture.....: 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Acenaphthene	ND	3800	ug/kg	SW846 8270B
Acenaphthylene	ND	3800	ug/kg	SW846 8270B
Anthracene	ND	3800	ug/kg	SW846 8270B
Benz(a)anthracene	ND	3800	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	3800	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	3800	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	3800	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	3800	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	3800	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	3800	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	3800	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	ND	3800	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	3800	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	3800	ug/kg	SW846 8270B
4-Chloroaniline	ND	3800	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	3800	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	3800	ug/kg	SW846 8270B
2-Chlorophenol	ND	3800	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	3800	ug/kg	SW846 8270B
Chrysene	ND	3800	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	3800	ug/kg	SW846 8270B
Dibenzofuran	ND	3800	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	3800	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	3800	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	3800	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	3800	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	18000	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	3800	ug/kg	SW846 8270B
Diethyl phthalate	ND	3800	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	3800	ug/kg	SW846 8270B
Dimethyl phthalate	ND	3800	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	18000	ug/kg	SW846 8270B

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #10

GC/MS Semivolatiles

Lot-Sample #...: I8B140114-010 Work Order #...: CFD4X107 Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,4-Dinitrophenol	ND	18000	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	3800	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	3800	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	3800	ug/kg	SW846 8270B
Fluoranthene	ND	3800	ug/kg	SW846 8270B
Fluorene	4100	3800	ug/kg	SW846 8270B
Hexachlorobenzene	ND	3800	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	3800	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	18000	ug/kg	SW846 8270B
Hexachloroethane	ND	3800	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	3800	ug/kg	SW846 8270B
Isophorone	ND	3800	ug/kg	SW846 8270B
2-Methylnaphthalene	44000	3800	ug/kg	SW846 8270B
2-Methylphenol	ND	3800	ug/kg	SW846 8270B
4-Methylphenol	ND	3800	ug/kg	SW846 8270B
Naphthalene	11000	3800	ug/kg	SW846 8270B
2-Nitroaniline	ND	18000	ug/kg	SW846 8270B
3-Nitroaniline	ND	18000	ug/kg	SW846 8270B
4-Nitroaniline	ND	18000	ug/kg	SW846 8270B
Nitrobenzene	ND	3800	ug/kg	SW846 8270B
2-Nitrophenol	ND	3800	ug/kg	SW846 8270B
4-Nitrophenol	ND	18000	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	3800	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	3800	ug/kg	SW846 8270B
Pentachlorophenol	ND	18000	ug/kg	SW846 8270B
Phenanthrene	8300	3800	ug/kg	SW846 8270B
Phenol	ND	3800	ug/kg	SW846 8270B
Pyrene	ND	3800	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	3800	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	3800	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	3800	ug/kg	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	59 DIL	(25 - 121)
Phenol-d5	73 DIL	(24 - 113)
Nitrobenzene-d5	26 DIL	(23 - 120)
2-Fluorobiphenyl	67 DIL	(30 - 115)
2,4,6-Tribromophenol	101 DIL	(19 - 122)
Terphenyl-d14	63 DIL	(18 - 137)

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.

B.J. SERVICES COMPANY
Client Sample ID: #10
GC/MS Volatiles

Lot-Sample #....: I8B140114-010 Work Order #....: CFD4X10H Matrix.....: SOLID
 Date Sampled...: 02/12/98 09:00 Date Received...: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date...: 02/23/98
 Prep Batch #....: 8051177 Analysis Time...: 16:51
 Dilution Factor: 1
 % Moisture.....: 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND		710	ug/kg	SW846 8260A
Bromobenzene	ND		710	ug/kg	SW846 8260A
Bromodichloromethane	ND		710	ug/kg	SW846 8260A
Bromoform	ND		710	ug/kg	SW846 8260A
Bromomethane	ND		1400	ug/kg	SW846 8260A
n-Butylbenzene	ND		710	ug/kg	SW846 8260A
sec-Butylbenzene	860		710	ug/kg	SW846 8260A
tert-Butylbenzene	ND		710	ug/kg	SW846 8260A
Carbon tetrachloride	ND		710	ug/kg	SW846 8260A
Chlorobenzene	ND		710	ug/kg	SW846 8260A
Chlorodibromomethane	ND		710	ug/kg	SW846 8260A
Chloroethane	ND		1400	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND		7100	ug/kg	SW846 8260A
Chloroform	ND		710	ug/kg	SW846 8260A
Chloromethane	ND		1400	ug/kg	SW846 8260A
2-Chlorotoluene	ND		710	ug/kg	SW846 8260A
4-Chlorotoluene	ND		710	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND		1400	ug/kg	SW846 8260A
1,2-Dibromoethane	ND		710	ug/kg	SW846 8260A
Dibromomethane	ND		710	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND		710	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND		710	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND		710	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND		1400	ug/kg	SW846 8260A
1,1-Dichloroethane	ND		710	ug/kg	SW846 8260A
1,2-Dichloroethane	ND		710	ug/kg	SW846 8260A
1,1-Dichloroethene	ND		710	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND		360	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND		360	ug/kg	SW846 8260A
1,2-Dichloropropane	ND		710	ug/kg	SW846 8260A
1,3-Dichloropropane	ND		710	ug/kg	SW846 8260A
2,2-Dichloropropane	ND		710	ug/kg	SW846 8260A
1,1-Dichloropropene	ND		710	ug/kg	SW846 8260A
Ethylbenzene	1600		710	ug/kg	SW846 8260A
Hexachlorobutadiene	ND		710	ug/kg	SW846 8260A
Isopropylbenzene	ND		710	ug/kg	SW846 8260A
p-Isopropyltoluene	3000		710	ug/kg	SW846 8260A

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: #10

GC/MS Volatiles

Lot-Sample #....: I8B140114-010 Work Order #....: CFD4X10H Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methylene chloride	ND	710	ug/kg	SW846 8260A
n-Propylbenzene	1300	710	ug/kg	SW846 8260A
Styrene	ND	710	ug/kg	SW846 8260A
1,1,1,2-Tetrachloroethane	ND	710	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	710	ug/kg	SW846 8260A
Tetrachloroethene	ND	710	ug/kg	SW846 8260A
Toluene	920	710	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	710	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	710	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	710	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	710	ug/kg	SW846 8260A
Trichloroethene	ND	710	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	1400	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	710	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	11000	710	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	4600	710	ug/kg	SW846 8260A
Vinyl chloride	ND	1400	ug/kg	SW846 8260A
o-Xylene	4000	360	ug/kg	SW846 8260A
m-Xylene & p-Xylene	10000	360	ug/kg	SW846 8260A
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
1,2-Dichloroethane-d4	94	(61 - 115)		
Toluene-d8	94	(82 - 129)		
Bromofluorobenzene	94	(64 - 112)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #1

General Chemistry

Lot-Sample #....: I8B140114-001 Work Order #....: CFD4E Matrix.....: SOLID
Date Sampled....: 02/12/98 07:30 Date Received...: 02/14/98
% Moisture.....: 9.1

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%		<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Moisture	9.1	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time...: 00:00				
Total Recoverable Petroleum Hydrocarbons	56	11	mg/kg	MCANW 418.1	02/18-02/19/98	8049214
		Dilution Factor: 1				
		Analysis Time...: 15:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: #2
General Chemistry

Lot-Sample #....: I8B140114-002 Work Order #....: CFD4K Matrix.....: SOLID
 Date Sampled....: 02/12/98 07:40 Date Received...: 02/14/98
 % Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Moisture	12.7	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor:	1			
		Analysis Time..:	10:00			
Total Recoverable Petroleum Hydrocarbons	19000	2300	mg/kg	MCAWW 418.1	02/18-02/19/98	8049214
		Dilution Factor:	200			
		Analysis Time..:	15:00			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #3

General Chemistry

Lot-Sample #....: I8B140114-003 Work Order #....: CFD4L Matrix.....: SOLID
Date Sampled...: 02/12/98 07:50 Date Received..: 02/14/98
% Moisture.....: 8.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	8.8	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time..: 10:00				
Total Recoverable Petroleum Hydrocarbons	89	11	mg/kg	MCAWW 418.1	02/18-02/19/98	8049214
		Dilution Factor: 1				
		Analysis Time..: 15:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #4

General Chemistry

Lot-Sample #....: I8B140114-004 Work Order #....: CFD4M Matrix.....: SOLID
 Date Sampled...: 02/12/98 08:00 Date Received...: 02/14/98
 % Moisture.....: 9.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	9.0	0.50	%	OCLP OLM03.1 Dilution Factor: 1 Analysis Time...: 10:00	02/17-02/18/98	8048212
Total Recoverable Petroleum Hydrocarbons	53	11	mg/kg	MCAWW 418.1 Dilution Factor: 1 Analysis Time...: 15:00	02/18-02/19/98	8049214

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #5

General Chemistry

Lot-Sample #....: I8B140114-005 Work Order #....: CFD4N Matrix.....: SOLID
Date Sampled...: 02/12/98 08:05 Date Received..: 02/14/98
% Moisture.....: 8.6

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Moisture	8.6	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time..: 10:00				
Total Recoverable Petroleum Hydrocarbons	52	11	mg/kg	MCAWW 418.1	02/18-02/19/98	8049214
		Dilution Factor: 1				
		Analysis Time..: 15:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #6

General Chemistry

Lot-Sample #....: I8B140114-006 Work Order #....: CFD4Q Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:15 Date Received..: 02/14/98
 % Moisture.....: 7.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	7.4	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time..: 10:00				
Total Recoverable Petroleum Hydrocarbons	280	11	mg/kg	MCAWW 418.1	02/18-02/19/98	8049214
		Dilution Factor: 1				
		Analysis Time..: 15:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #7

General Chemistry

Lot-Sample #....: I8B140114-007 Work Order #....: CFD4T Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:30 Date Received...: 02/14/98
 % Moisture.....: 9.2

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	9.2	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor:	1			
		Analysis Time...:	10:00			
Total Recoverable Petroleum Hydrocarbons	7700	2200	mg/kg	MCAWW 418.1	02/18-02/19/98	8049214
		Dilution Factor:	200			
		Analysis Time...:	15:00			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #8

General Chemistry

Lot-Sample #....: I8B140114-008 Work Order #....: CFD4V Matrix.....: SOLID
 Date Sampled....: 02/12/98 08:40 Date Received...: 02/14/98
 % Moisture.....: 8.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	8.8	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time...: 10:00				
Total Recoverable Petroleum Hydrocarbons	3400	2200	mg/kg	MCAWW 418.1	02/18-02/19/98	8049214
		Dilution Factor: 200				
		Analysis Time...: 15:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #9

General Chemistry

Lot-Sample #....: I8B140114-009 Work Order #....: CFD4W Matrix.....: SOLID
Date Sampled....: 02/12/98 08:50 Date Received..: 02/14/98
% Moisture.....: 7.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	7.4	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time..: 10:00				
Total Recoverable Petroleum Hydrocarbons	150	11	mg/kg	MCAWW 418.1	02/18-02/19/98	8049214
		Dilution Factor: 1				
		Analysis Time..: 15:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #10

General Chemistry

Lot-Sample #....: I8B140114-010 Work Order #....: CFD4X Matrix.....: SOLID
 Date Sampled...: 02/12/98 09:00 Date Received...: 02/14/98
 % Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	12.0	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time...: 10:00				
Total Recoverable Petroleum Hydrocarbons	99	11	mg/kg	MCAWW 418.1	02/18-02/19/98	8049214
		Dilution Factor: 1				
		Analysis Time...: 15:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #1

TOTAL Metals

Lot-Sample #....: I8B140114-001

Matrix.....: SOLID

Date Sampled...: 02/12/98 07:30 Date Received...: 02/14/98

% Moisture.....: 9.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 8048225						
Arsenic	2.9	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4E10D
		Dilution Factor: 1				
		Analysis Time...: 10:40				
Barium	171	22.0	mg/kg	SW846 6010A	02/17-02/19/98	CFD4E108
		Dilution Factor: 1				
		Analysis Time...: 10:40				
Cadmium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4E109
		Dilution Factor: 1				
		Analysis Time...: 10:40				
Lead	6.3	0.33	mg/kg	SW846 6010A	02/17-02/19/98	CFD4E10E
		Dilution Factor: 1				
		Analysis Time...: 10:40				
Chromium	6.7 L	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4E10A
		Dilution Factor: 1				
		Analysis Time...: 10:40				
Selenium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4E10F
		Dilution Factor: 1				
		Analysis Time...: 10:40				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4E10C
		Dilution Factor: 1				
		Analysis Time...: 10:40				
Prep Batch #....: 8049174						
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4E10G
		Dilution Factor: 1				
		Analysis Time...: 13:52				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

L Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.

B.J. SERVICES COMPANY

Client Sample ID: #2

TOTAL Metals

Lot-Sample #....: I8B140114-002 Matrix.....: SOLID
 Date Sampled...: 02/12/98 07:40 Date Received...: 02/14/98
 % Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....:	8048225					
Arsenic	2.9	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4K10I
		Dilution Factor: 1				
		Analysis Time...: 11:11				
Barium	84.7	22.9	mg/kg	SW846 6010A	02/17-02/19/98	CFD4K108
		Dilution Factor: 1				
		Analysis Time...: 11:11				
Cadmium	ND	0.57	mg/kg	SW846 6010A	02/17-02/19/98	CFD4K109
		Dilution Factor: 1				
		Analysis Time...: 11:11				
Lead	8.3	0.34	mg/kg	SW846 6010A	02/17-02/19/98	CFD4K10E
		Dilution Factor: 1				
		Analysis Time...: 11:11				
Chromium	3.9	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4K10A
		Dilution Factor: 1				
		Analysis Time...: 11:11				
Selenium	ND	0.57	mg/kg	SW846 6010A	02/17-02/19/98	CFD4K10F
		Dilution Factor: 1				
		Analysis Time...: 11:11				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4K10C
		Dilution Factor: 1				
		Analysis Time...: 11:11				
Prep Batch #....:	8049174					
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4K10G
		Dilution Factor: 1				
		Analysis Time...: 13:54				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #3

TOTAL Metals

Lot-Sample #....: I8B140114-003

Matrix.....: SOLID

Date Sampled...: 02/12/98 07:50 Date Received...: 02/14/98

% Moisture.....: 8.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	8048225					
Arsenic	2.9	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4L10D
		Dilution Factor: 1				
		Analysis Time...: 11:16				
Barium	155	21.9	mg/kg	SW846 6010A	02/17-02/19/98	CFD4L108
		Dilution Factor: 1				
		Analysis Time...: 11:16				
Cadmium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4L109
		Dilution Factor: 1				
		Analysis Time...: 11:16				
Lead	6.3	0.33	mg/kg	SW846 6010A	02/17-02/19/98	CFD4L10E
		Dilution Factor: 1				
		Analysis Time...: 11:16				
Chromium	6.2	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4L10A
		Dilution Factor: 1				
		Analysis Time...: 11:16				
Selenium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4L10F
		Dilution Factor: 1				
		Analysis Time...: 11:16				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4L10C
		Dilution Factor: 1				
		Analysis Time...: 11:16				
Prep Batch #....:	8049174					
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4L10G
		Dilution Factor: 1				
		Analysis Time...: 13:56				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #4

TOTAL Metals

Lot-Sample #....: I8B140114-004

Matrix.....: SOLID

Date Sampled...: 02/12/98 08:00 Date Received...: 02/14/98

% Moisture.....: 9.0

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 8048225						
Arsenic	2.2	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4M10D
		Dilution Factor: 1				
		Analysis Time...: 11:21				
Barium	122	22.0	mg/kg	SW846 6010A	02/17-02/19/98	CFD4M108
		Dilution Factor: 1				
		Analysis Time...: 11:21				
Cadmium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4M109
		Dilution Factor: 1				
		Analysis Time...: 11:21				
Lead	4.4	0.33	mg/kg	SW846 6010A	02/17-02/19/98	CFD4M10E
		Dilution Factor: 1				
		Analysis Time...: 11:21				
Chromium	6.0	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4M10A
		Dilution Factor: 1				
		Analysis Time...: 11:21				
Selenium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4M10F
		Dilution Factor: 1				
		Analysis Time...: 11:21				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4M10C
		Dilution Factor: 1				
		Analysis Time...: 11:21				
Prep Batch #....: 8049174						
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4M10G
		Dilution Factor: 1				
		Analysis Time...: 13:58				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #5

TOTAL Metals

Lot-Sample #...: I8B140114-005

Matrix.....: SOLID

Date Sampled...: 02/12/98 08:05 Date Received...: 02/14/98

% Moisture.....: 8.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8048225						
Arsenic	2.7	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4N10D
		Dilution Factor: 1				
		Analysis Time...: 11:26				
Barium	148	21.9	mg/kg	SW846 6010A	02/17-02/19/98	CFD4N108
		Dilution Factor: 1				
		Analysis Time...: 11:26				
Cadmium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4N109
		Dilution Factor: 1				
		Analysis Time...: 11:26				
Lead	6.5	0.33	mg/kg	SW846 6010A	02/17-02/19/98	CFD4N10E
		Dilution Factor: 1				
		Analysis Time...: 11:26				
Chromium	5.6	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4N10A
		Dilution Factor: 1				
		Analysis Time...: 11:26				
Selenium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4N10F
		Dilution Factor: 1				
		Analysis Time...: 11:26				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4N10C
		Dilution Factor: 1				
		Analysis Time...: 11:26				
Prep Batch #...: 8049174						
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4N10G
		Dilution Factor: 1				
		Analysis Time...: 14:00				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #6

TOTAL Metals

Lot-Sample #....: I8B140114-006

Matrix.....: SOLID

Date Sampled...: 02/12/98 08:15 Date Received...: 02/14/98

% Moisture.....: 7.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 8048225						
Arsenic	2.6	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4Q10D
		Dilution Factor: 1				
		Analysis Time...: 11:31				
Barium	178	21.6	mg/kg	SW846 6010A	02/17-02/19/98	CFD4Q108
		Dilution Factor: 1				
		Analysis Time...: 11:31				
Cadmium	ND	0.54	mg/kg	SW846 6010A	02/17-02/19/98	CFD4Q109
		Dilution Factor: 1				
		Analysis Time...: 11:31				
Lead	7.1	0.32	mg/kg	SW846 6010A	02/17-02/19/98	CFD4Q10E
		Dilution Factor: 1				
		Analysis Time...: 11:31				
Chromium	6.5	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4Q10A
		Dilution Factor: 1				
		Analysis Time...: 11:31				
Selenium	ND	0.54	mg/kg	SW846 6010A	02/17-02/19/98	CFD4Q10F
		Dilution Factor: 1				
		Analysis Time...: 11:31				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4Q10C
		Dilution Factor: 1				
		Analysis Time...: 11:31				
Prep Batch #....: 8049174						
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4Q10G
		Dilution Factor: 1				
		Analysis Time...: 14:01				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #7

TOTAL Metals

Lot-Sample #....: I8B140114-007

Matrix.....: SOLID

Date Sampled...: 02/12/98 08:30 Date Received...: 02/14/98

% Moisture.....: 9.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	8048225					
Arsenic	2.8	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4T10D
		Dilution Factor: 1				
		Analysis Time...: 11:36				
Barium	134	22.0	mg/kg	SW846 6010A	02/17-02/19/98	CFD4T108
		Dilution Factor: 1				
		Analysis Time...: 11:36				
Cadmium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4T109
		Dilution Factor: 1				
		Analysis Time...: 11:36				
Lead	4.6	0.33	mg/kg	SW846 6010A	02/17-02/19/98	CFD4T10E
		Dilution Factor: 1				
		Analysis Time...: 11:36				
Chromium	5.7	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4T10A
		Dilution Factor: 1				
		Analysis Time...: 11:36				
Selenium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4T10F
		Dilution Factor: 1				
		Analysis Time...: 11:36				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4T10C
		Dilution Factor: 1				
		Analysis Time...: 11:36				
Prep Batch #....:	8049174					
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4T10G
		Dilution Factor: 1				
		Analysis Time...: 14:03				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: #8
TOTAL Metals
Lot-Sample #....: I8B140114-008
Matrix.....: SOLID
Date Sampled...: 02/12/98 08:40 Date Received...: 02/14/98
% Moisture.....: 8.8

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 8048225						
Arsenic	2.3	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4V10D
		Dilution Factor: 1				
		Analysis Time...: 11:41				
Barium	173	21.9	mg/kg	SW846 6010A	02/17-02/19/98	CFD4V108
		Dilution Factor: 1				
		Analysis Time...: 11:41				
Cadmium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4V109
		Dilution Factor: 1				
		Analysis Time...: 11:41				
Lead	3.9	0.33	mg/kg	SW846 6010A	02/17-02/19/98	CFD4V10E
		Dilution Factor: 1				
		Analysis Time...: 11:41				
Chromium	4.6	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4V10A
		Dilution Factor: 1				
		Analysis Time...: 11:41				
Selenium	ND	0.55	mg/kg	SW846 6010A	02/17-02/19/98	CFD4V10F
		Dilution Factor: 1				
		Analysis Time...: 11:41				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4V10C
		Dilution Factor: 1				
		Analysis Time...: 11:41				
Prep Batch #....: 8049174						
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4V10G
		Dilution Factor: 1				
		Analysis Time...: 14:05				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: #9

TOTAL Metals

Lot-Sample #....: I8B140114-009

Matrix.....: SOLID

Date Sampled...: 02/12/98 08:50 Date Received...: 02/14/98

% Moisture.....: 7.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 8048225						
Arsenic	2.5	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4W10D
		Dilution Factor: 1				
		Analysis Time...: 11:46				
Barium	132	21.6	mg/kg	SW846 6010A	02/17-02/19/98	CFD4W108
		Dilution Factor: 1				
		Analysis Time...: 11:46				
Cadmium	ND	0.54	mg/kg	SW846 6010A	02/17-02/19/98	CFD4W109
		Dilution Factor: 1				
		Analysis Time...: 11:46				
Lead	5.2	0.32	mg/kg	SW846 6010A	02/17-02/19/98	CFD4W10E
		Dilution Factor: 1				
		Analysis Time...: 11:46				
Chromium	5.8	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4W10A
		Dilution Factor: 1				
		Analysis Time...: 11:46				
Selenium	ND	0.54	mg/kg	SW846 6010A	02/17-02/19/98	CFD4W10F
		Dilution Factor: 1				
		Analysis Time...: 11:46				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4W10C
		Dilution Factor: 1				
		Analysis Time...: 11:46				
Prep Batch #....: 8049174						
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4W10G
		Dilution Factor: 1				
		Analysis Time...: 14:18				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: #10

TOTAL Metals

Lot-Sample #....: I8B140114-010

Matrix.....: SOLID

Date Sampled...: 02/12/98 09:00 Date Received...: 02/14/98

% Moisture.....: 12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	8048225					
Arsenic	2.6	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4X10D
		Dilution Factor: 1				
		Analysis Time...: 12:12				
Barium	220	22.7	mg/kg	SW846 6010A	02/17-02/19/98	CFD4X108
		Dilution Factor: 1				
		Analysis Time...: 12:12				
Cadmium	ND	0.57	mg/kg	SW846 6010A	02/17-02/19/98	CFD4X109
		Dilution Factor: 1				
		Analysis Time...: 12:12				
Lead	4.5	0.34	mg/kg	SW846 6010A	02/17-02/19/98	CFD4X10E
		Dilution Factor: 1				
		Analysis Time...: 12:12				
Chromium	4.4	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4X10A
		Dilution Factor: 1				
		Analysis Time...: 12:12				
Selenium	ND	0.57	mg/kg	SW846 6010A	02/17-02/19/98	CFD4X10F
		Dilution Factor: 1				
		Analysis Time...: 12:12				
Silver	ND	1.1	mg/kg	SW846 6010A	02/17-02/19/98	CFD4X10C
		Dilution Factor: 1				
		Analysis Time...: 12:12				
Prep Batch #....:	8049174					
Mercury	ND	0.11	mg/kg	SW846 7471A	02/18/98	CFD4X10G
		Dilution Factor: 1				
		Analysis Time...: 14:20				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

QC DATA ASSOCIATION SUMMARY

I8B140114

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049166	8049043
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8051183	8051057
	SOLID	SW846 7471A		8049174	8049048
002	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049166	8049043
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8049165	8049042
	SOLID	SW846 7471A		8049174	8049048
003	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049166	8049043
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8051183	8051057
	SOLID	SW846 7471A		8049174	8049048
004	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049166	8049043
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8048180	8049032
	SOLID	SW846 7471A		8049174	8049048
005	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049166	8049043
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8048180	8049032
	SOLID	SW846 7471A		8049174	8049048

QC DATA ASSOCIATION SUMMARY**I8B140114****Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
006	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049166	8049043
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8048180	8049032
	SOLID	SW846 7471A		8049174	8049048
007	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049193	8049063
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8048180	8049032
	SOLID	SW846 7471A		8049174	8049048
008	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049166	8049043
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8051183	8051057
	SOLID	SW846 7471A		8049174	8049048
009	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049166	8049043
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8051183	8051057
	SOLID	SW846 7471A		8049174	8049048
010	SOLID	MCAWW 418.1		8049214	8049080
	SOLID	SW846 6010A		8048225	8048093
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 8015 MOD		8047155	8047051
	SOLID	SW846 8020/GRO		8049193	8049063
	SOLID	SW846 8270B		8047201	8047089
	SOLID	SW846 8260A		8051177	8051053
	SOLID	SW846 7471A		8049174	8049048

METHOD BLANK REPORT**GC Semivolatiles****Client Lot #....:** I8B140114**Work Order #....:** CFDGF101**Matrix.....:** SOLID**MB Lot-Sample #:** I8B160000-155**Prep Date.....:** 02/16/98**Analysis Time..:** 22:29**Analysis Date...:** 02/17/98**Prep Batch #....:** 8047155**Dilution Factor:** 1

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Diesel Range Organics	ND	1700	ug/kg	SW846 8015 MOD
SURROGATE		PERCENT	RECOVERY	
		RECOVERY	LIMITS	
o-Terphenyl	92		(40 - 144)	
Dotriacontane	93		(42 - 159)	

NOTE(S) :

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

METHOD BLANK REPORT
GC/MS Semivolatiles

Client Lot #...: I8B140114
 MB Lot-Sample #: I8B160000-201

Analysis Date...: 02/19/98
 Dilution Factor: 1

Work Order #...: CFDMX101
 Prep Date.....: 02/16/98
 Prep Batch #...: 8047201

Matrix.....: SOLID
 Analysis Time..: 11:06

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270B
Acenaphthylene	ND	330	ug/kg	SW846 8270B
Anthracene	ND	330	ug/kg	SW846 8270B
Benz(a)anthracene	ND	330	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	330	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270B
4-Chloroaniline	ND	330	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270B
2-Choronaphthalene	ND	330	ug/kg	SW846 8270B
2-Chlorophenol	ND	330	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270B
Chrysene	ND	330	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270B
Dibenzofuran	ND	330	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270B
Diethyl phthalate	ND	330	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270B
Dimethyl phthalate	ND	330	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	SW846 8270B
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270B

(Continued on next page)

METHOD BLANK REPORT
GC/MS Semivolatiles
Client Lot #....: I8B140114
Work Order #....: CFDMX101
Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Di-n-octyl phthalate	430	330	ug/kg	SW846 8270B
Fluoranthene	ND	330	ug/kg	SW846 8270B
Fluorene	ND	330	ug/kg	SW846 8270B
Hexachlorobenzene	ND	330	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1600	ug/kg	SW846 8270B
Hexachloroethane	ND	330	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270B
Isophorone	ND	330	ug/kg	SW846 8270B
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270B
2-Methylphenol	ND	330	ug/kg	SW846 8270B
4-Methylphenol	ND	330	ug/kg	SW846 8270B
Naphthalene	ND	330	ug/kg	SW846 8270B
2-Nitroaniline	ND	1600	ug/kg	SW846 8270B
3-Nitroaniline	ND	1600	ug/kg	SW846 8270B
4-Nitroaniline	ND	1600	ug/kg	SW846 8270B
Nitrobenzene	ND	330	ug/kg	SW846 8270B
2-Nitrophenol	ND	330	ug/kg	SW846 8270B
4-Nitrophenol	ND	1600	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	330	ug/kg	SW846 8270B
Pentachlorophenol	ND	1600	ug/kg	SW846 8270B
Phenanthrene	ND	330	ug/kg	SW846 8270B
Phenol	ND	330	ug/kg	SW846 8270B
Pyrene	ND	330	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	330	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	330	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	330	ug/kg	SW846 8270B
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
2-Fluorophenol	93	(25 - 121)		
Phenol-d5	93	(24 - 113)		
Nitrobenzene-d5	72	(23 - 120)		
2-Fluorobiphenyl	74	(30 - 115)		
2,4,6-Tribromophenol	81	(19 - 122)		
Terphenyl-d14	96	(18 - 137)		

NOTE(S) :

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: I8B140114	Work Order #....: CFEA8101	Matrix.....: SOLID
MB Lot-Sample #: I8B180000-166		
Analysis Date...: 02/17/98	Prep Date.....: 02/17/98	Analysis Time...: 11:58
Dilution Factor: 1	Prep Batch #....: 8049166	

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
Gasoline Range Organics	ND	100	ug/kg	SW846 8020/GRO
<u>SURROGATE</u>				
a,a,a-Trifluorotoluene (TFT)	PERCENT RECOVERY 95	RECOVERY LIMITS (75 - 125)		

NOTE (S) :

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: I8B140114
MB Lot-Sample #: I8B180000-193

Work Order #....: CFEPA101

Matrix.....: SOLID

Analysis Date...: 02/17/98
Dilution Factor: 1

Prep Date.....: 02/17/98
Prep Batch #....: 8049193

Analysis Time..: 16:58

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	100	ug/kg	SW846 8020/GRO
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Bromofluorobenzene	100	(75 - 125)		

NOTE(S) :

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

METHOD BLANK REPORT
GC/MS Volatiles

Client Lot #....: I8B140114
MB Lot-Sample #: A8B170000-180
Analysis Date...: 02/17/98
Dilution Factor: 1

Work Order #....: CFE03101
Prep Date.....: 02/17/98
Prep Batch #....: 8048180

Matrix.....: SOLID
Analysis Time..: 11:02

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	5.0	ug/kg	SW846 8260A
Bromobenzene	ND	5.0	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260A
Bromoform	ND	5.0	ug/kg	SW846 8260A
Bromomethane	ND	10	ug/kg	SW846 8260A
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260A
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260A
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260A
Chlorobenzene	ND	5.0	ug/kg	SW846 8260A
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260A
Chloroethane	ND	10	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	50	ug/kg	SW846 8260A
Chloroform	ND	5.0	ug/kg	SW846 8260A
Chloromethane	ND	10	ug/kg	SW846 8260A
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260A
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260A
Dibromomethane	ND	5.0	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260A
Ethylbenzene	ND	5.0	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260A
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260A
Methylene chloride	ND	5.0	ug/kg	SW846 8260A
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260A
Styrene	ND	5.0	ug/kg	SW846 8260A

(Continued on next page)

METHOD BLANK REPORT
GC/MS Volatiles
Client Lot #....: I8B140114
Work Order #....: CFE03101
Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260A
Toluene	ND	5.0	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260A
Trichloroethene	ND	5.0	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260A
Vinyl chloride	ND	10	ug/kg	SW846 8260A
o-Xylene	ND	2.5	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	RECOVERY	
		<u>LIMITS</u>	
1,2-Dichloroethane-d4	95	(61 - 115)	
Toluene-d8	102	(82 - 129)	
Bromofluorobenzene	96	(64 - 112)	

NOTE(S) :

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

METHOD BLANK REPORT**GC/MS Volatiles**

Client Lot #....: I8B140114
 MB Lot-Sample #: A8B180000-165
 Analysis Date...: 02/17/98
 Dilution Factor: 1

Work Order #....: CFE8V101
 Prep Date.....: 02/17/98
 Prep Batch #....: 8049165

Matrix.....: SOLID
 Analysis Time..: 17:16

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	620	ug/kg	SW846 8260A
Bromobenzene	ND	620	ug/kg	SW846 8260A
Bromodichloromethane	ND	620	ug/kg	SW846 8260A
Bromoform	ND	620	ug/kg	SW846 8260A
Bromomethane	ND	1200	ug/kg	SW846 8260A
n-Butylbenzene	ND	620	ug/kg	SW846 8260A
sec-Butylbenzene	ND	620	ug/kg	SW846 8260A
tert-Butylbenzene	ND	620	ug/kg	SW846 8260A
Carbon tetrachloride	ND	620	ug/kg	SW846 8260A
Chlorobenzene	ND	620	ug/kg	SW846 8260A
Chlorodibromomethane	ND	620	ug/kg	SW846 8260A
Chloroethane	ND	1200	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	6200	ug/kg	SW846 8260A
Chloroform	ND	620	ug/kg	SW846 8260A
Chloromethane	ND	1200	ug/kg	SW846 8260A
2-Chlorotoluene	ND	620	ug/kg	SW846 8260A
4-Chlorotoluene	ND	620	ug/kg	SW846 8260A
1,2-Dibromo-3-chloropropane	ND	1200	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	620	ug/kg	SW846 8260A
Dibromomethane	ND	620	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	620	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	620	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	620	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	1200	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	620	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	620	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	620	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	310	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	310	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	620	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	620	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	620	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	620	ug/kg	SW846 8260A
Ethylbenzene	ND	620	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	620	ug/kg	SW846 8260A
Isopropylbenzene	ND	620	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	620	ug/kg	SW846 8260A
Methylene chloride	ND	620	ug/kg	SW846 8260A
n-Propylbenzene	ND	620	ug/kg	SW846 8260A
Styrene	ND	620	ug/kg	SW846 8260A

(Continued on next page)

METHOD BLANK REPORT
GC/MS Volatiles
Client Lot #....: I8B140114
Work Order #....: CFE8V101
Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
1,1,1,2-Tetrachloroethane	ND	620	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	620	ug/kg	SW846 8260A
Tetrachloroethene	ND	620	ug/kg	SW846 8260A
Toluene	ND	620	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	620	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	620	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	620	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	620	ug/kg	SW846 8260A
Trichloroethene	ND	620	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	1200	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	620	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	ND	620	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	620	ug/kg	SW846 8260A
Vinyl chloride	ND	1200	ug/kg	SW846 8260A
o-Xylene	ND	310	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	310	ug/kg	SW846 8260A
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
1,2-Dichloroethane-d4	88	(61 - 115)		
Toluene-d8	101	(82 - 129)		
Bromofluorobenzene	90	(64 - 112)		

NOTE(S) :

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: I8B140114
 MB Lot-Sample #: A8B200000-177
 Analysis Date...: 02/23/98
 Dilution Factor: 1

Work Order #...: CFFVX101
 Prep Date.....: 02/19/98
 Prep Batch #: 8051177

Matrix.....: SOLID
 Analysis Time..: 20:27

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Benzene	ND	620	ug/kg	SW846 8260A
Bromobenzene	ND	620	ug/kg	SW846 8260A
Bromodichloromethane	ND	620	ug/kg	SW846 8260A
Bromoform	ND	620	ug/kg	SW846 8260A
Bromomethane	ND	1200	ug/kg	SW846 8260A
n-Butylbenzene	ND	620	ug/kg	SW846 8260A
sec-Butylbenzene	ND	620	ug/kg	SW846 8260A
tert-Butylbenzene	ND	620	ug/kg	SW846 8260A
Carbon tetrachloride	ND	620	ug/kg	SW846 8260A
Chlorobenzene	ND	620	ug/kg	SW846 8260A
Chlorodibromomethane	ND	620	ug/kg	SW846 8260A
Chloroethane	ND	1200	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	6200	ug/kg	SW846 8260A
Chloroform	ND	620	ug/kg	SW846 8260A
Chloromethane	ND	1200	ug/kg	SW846 8260A
2-Chlorotoluene	ND	620	ug/kg	SW846 8260A
4-Chlorotoluene	ND	620	ug/kg	SW846 8260A
1,2-Dibromo-3-chloro-propane	ND	1200	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	620	ug/kg	SW846 8260A
Dibromomethane	ND	620	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	620	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	620	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	620	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	1200	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	620	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	620	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	620	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	310	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	310	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	620	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	620	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	620	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	620	ug/kg	SW846 8260A
Ethylbenzene	ND	620	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	620	ug/kg	SW846 8260A
Isopropylbenzene	ND	620	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	620	ug/kg	SW846 8260A
Methylene chloride	ND	620	ug/kg	SW846 8260A
n-Propylbenzene	ND	620	ug/kg	SW846 8260A
Styrene	ND	620	ug/kg	SW846 8260A

(Continued on next page)

METHOD BLANK REPORT
GC/MS Volatiles
Client Lot #....: I8B140114
Work Order #....: CFFVX101
Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
1,1,1,2-Tetrachloroethane	ND	620	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	620	ug/kg	SW846 8260A
Tetrachloroethene	ND	620	ug/kg	SW846 8260A
Toluene	ND	620	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	620	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	620	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	620	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	620	ug/kg	SW846 8260A
Trichloroethene	ND	620	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	1200	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	620	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	ND	620	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	620	ug/kg	SW846 8260A
Vinyl chloride	ND	1200	ug/kg	SW846 8260A
o-Xylene	ND	310	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	310	ug/kg	SW846 8260A
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
		(61 - 115)	(82 - 129)	(64 - 112)
1,2-Dichloroethane-d4	102			
Toluene-d8	98			
Bromofluorobenzene	95			

NOTE(S) :

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

METHOD BLANK REPORT
GC/MS Volatiles
Client Lot #...: I8B140114

MB Lot-Sample #: A8B200000-183

Work Order #...: CFFXX101

Matrix.....: SOLID

Analysis Date...: 02/19/98

Prep Date.....: 02/19/98

Analysis Time..: 10:14

Dilution Factor: 1

Prep Batch #...: 8051183

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	5.0	ug/kg	SW846 8260A
Bromobenzene	ND	5.0	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260A
Bromoform	ND	5.0	ug/kg	SW846 8260A
Bromomethane	ND	10	ug/kg	SW846 8260A
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260A
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260A
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260A
Chlorobenzene	ND	5.0	ug/kg	SW846 8260A
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260A
Chloroethane	ND	10	ug/kg	SW846 8260A
2-Chloroethyl vinyl ether	ND	50	ug/kg	SW846 8260A
Chloroform	ND	5.0	ug/kg	SW846 8260A
Chloromethane	ND	10	ug/kg	SW846 8260A
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260A
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260A
1,2-Dibromo-3-chloropropane	ND	10	ug/kg	SW846 8260A
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260A
Dibromomethane	ND	5.0	ug/kg	SW846 8260A
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260A
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260A
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260A
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260A
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260A
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260A
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260A
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260A
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260A
Ethylbenzene	ND	5.0	ug/kg	SW846 8260A
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260A
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260A
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260A
Methylene chloride	ND	5.0	ug/kg	SW846 8260A
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260A
Styrene	ND	5.0	ug/kg	SW846 8260A

(Continued on next page)

METHOD BLANK REPORT**GC/MS Volatiles**

Client Lot #....: I8B140114

Work Order #....: CFFXX101

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260A
Toluene	ND	5.0	ug/kg	SW846 8260A
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260A
1,2,4-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260A
Trichloroethene	ND	5.0	ug/kg	SW846 8260A
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260A
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260A
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260A
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260A
Vinyl chloride	ND	10	ug/kg	SW846 8260A
o-Xylene	ND	2.5	ug/kg	SW846 8260A
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260A
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
1,2-Dichloroethane-d4	94	(61 - 115)		
Toluene-d8	104	(82 - 129)		
Bromofluorobenzene	100	(64 - 112)		

NOTE(S) :

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: I8B140114

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: I8B180000-174 Prep Batch #....: 8049174						
Mercury	ND	0.10	mg/kg	SW846 7471A	02/18/98	CFEJK101
Dilution Factor: 1						
Analysis Time...: 13:23						
MB Lot-Sample #: I8B170000-225 Prep Batch #....: 8048225						
Arsenic	ND	1.0	mg/kg	SW846 6010A	02/17-02/19/98	CFE32103
Dilution Factor: 1						
Analysis Time...: 10:30						
Barium	ND	20.0	mg/kg	SW846 6010A	02/17-02/19/98	CFE32106
Dilution Factor: 1						
Analysis Time...: 10:30						
Cadmium	ND	0.50	mg/kg	SW846 6010A	02/17-02/19/98	CFE32107
Dilution Factor: 1						
Analysis Time...: 10:30						
Lead	ND	0.30	mg/kg	SW846 6010A	02/17-02/19/98	CFE32104
Dilution Factor: 1						
Analysis Time...: 10:30						
Chromium	ND	1.0	mg/kg	SW846 6010A	02/17-02/19/98	CFE32101
Dilution Factor: 1						
Analysis Time...: 10:30						
Selenium	ND	0.50	mg/kg	SW846 6010A	02/17-02/19/98	CFE32105
Dilution Factor: 1						
Analysis Time...: 10:30						
Silver	ND	1.0	mg/kg	SW846 6010A	02/17-02/19/98	CFE32102
Dilution Factor: 1						
Analysis Time...: 10:30						

NOTE(S) :

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

METHOD BLANK REPORT

General Chemistry

Client Lot #....: I8B140114

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	PREP
		LIMIT	UNITS	ANALYSIS DATE			
Total Recoverable Petroleum Hydrocarbons	ND	10	mg/kg	CFEQL101	MB Lot-Sample #:	I8B180000-214	02/18-02/19/98 8049214
		Dilution Factor: 1					
		Analysis Time...: 15:00					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: I8B140114 Work Order #....: CFDGF102 Matrix.....: SOLID
 LCS Lot-Sample#: I8B160000-155
 Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
 Prep Batch #....: 8047155 Analysis Time...: 23:07
 Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	PERCENT <u>RECOVERY</u>	METHOD
Diesel Range Organics	33000	33000	ug/kg	98
<hr/>				
SURROGATE		PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	
o-Terphenyl		110	(40 - 144)	
Dotriacontane		110	(42 - 159)	

NOTE(S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: I8B140114 **Work Order #....:** CFDMX102 **Matrix.....:** SOLID
LCS Lot-Sample#: I8B160000-201
Prep Date.....: 02/16/98 **Analysis Date...:** 02/19/98
Prep Batch #....: 8047201 **Analysis Time...:** 11:37
Dilution Factor: 1

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT RECOVERY	METHOD
Phenol	5000	4200	ug/kg	84	SW846 8270B
2-Chlorophenol	5000	4600	ug/kg	92	SW846 8270B
1,4-Dichlorobenzene	3300	2400	ug/kg	73	SW846 8270B
N-Nitrosodi-n-propylamine	3300	2500	ug/kg	76	SW846 8270B
1,2,4-Trichlorobenzene	3300	2400	ug/kg	72	SW846 8270B
4-Chloro-3-methylphenol	5000	3800	ug/kg	76	SW846 8270B
Acenaphthene	3300	2600	ug/kg	78	SW846 8270B
4-Nitrophenol	5000	3400	ug/kg	68	SW846 8270B
2,4-Dinitrotoluene	3300	2500	ug/kg	75	SW846 8270B
Pentachlorophenol	5000	3800	ug/kg	75	SW846 8270B
Pyrene	3300	3100	ug/kg	92	SW846 8270B

<u>SURROGATE</u>	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	78	(25 - 121)
Phenol-d5	87	(24 - 113)
Nitrobenzene-d5	64	(23 - 120)
2-Fluorobiphenyl	68	(30 - 115)
2,4,6-Tribromophenol	74	(19 - 122)
Terphenyl-d14	84	(18 - 137)

NOTE(S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: I8B140114 Work Order #....: CFEA8102 Matrix.....: SOLID
 LCS Lot-Sample#: I8B180000-166
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #....: 8049166 Analysis Time...: 11:13
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u> <u>ug/kg</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
Gasoline Range Organics	400	410	ug/kg	102	SW846 8020/GR
<u>SURROGATE</u>		<u>PERCENT</u> <u>RECOVERY</u>		<u>RECOVERY</u> <u>LIMITS</u>	
a,a,a-Trifluorotoluene (TFT)		89		(75 - 125)	

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: I8B140114 Work Order #....: CFEPA102 Matrix.....: SOLID
LCS Lot-Sample#: I8B180000-193
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #:....: 8049193 Analysis Time...: 19:49
Dilution Factor: 1

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
Gasoline Range Organics	20000	19000	ug/kg	96	SW846 8020/GR
Toluene	3000	3000	ug/kg	99	SW846 8020/GR
Xylenes (total)	6000	6000	ug/kg	98	SW846 8020/GR
<u>SURROGATE</u>		PERCENT <u>RECOVERY</u>		RECOVERY <u>LIMITS</u>	
Bromofluorobenzene		103		(75 - 125)	

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFE03102 Matrix.....: SOLID
LCS Lot-Sample#: A8B170000-180
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #....: 8048180 Analysis Time..: 10:30
Dilution Factor: 1

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	20	23	ug/kg	115	SW846 8260A
Trichloroethene	20	19	ug/kg	95	SW846 8260A
Chlorobenzene	20	20	ug/kg	101	SW846 8260A
Toluene	20	21	ug/kg	105	SW846 8260A
Benzene	20	22	ug/kg	110	SW846 8260A

<u>SURROGATE</u>	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	93	(61 - 115)
Toluene-d8	102	(82 - 129)
Bromofluorobenzene	96	(64 - 112)

NOTE (S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFE8V102 Matrix.....: SOLID
LCS Lot-Sample#: A8B180000-165
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #....: 8049165 Analysis Time...: 16:45
Dilution Factor: 1

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
1,1-Dichloroethene	2500	2000	ug/kg	82	SW846 8260A
Trichloroethene	2500	2400	ug/kg	97	SW846 8260A
Chlorobenzene	2500	2600	ug/kg	103	SW846 8260A
Toluene	2500	2500	ug/kg	102	SW846 8260A
Benzene	2500	2700	ug/kg	106	SW846 8260A

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
1,2-Dichloroethane-d4	86	(61 - 115)
Toluene-d8	98	(82 - 129)
Bromofluorobenzene	89	(64 - 112)

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFFVX102 Matrix.....: SOLID
 LCS Lot-Sample#: A8B200000-177
 Prep Date.....: 02/19/98 Analysis Date...: 02/23/98
 Prep Batch #:....: 8051177 Analysis Time...: 20:58
 Dilution Factor: 1

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
1,1-Dichloroethene	2500	2100	ug/kg	85	SW846 8260A
Trichloroethene	2500	2500	ug/kg	100	SW846 8260A
Chlorobenzene	2500	2700	ug/kg	106	SW846 8260A
Toluene	2500	2600	ug/kg	104	SW846 8260A
Benzene	2500	2700	ug/kg	109	SW846 8260A

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
1,2-Dichloroethane-d4	102	(61 - 115)
Toluene-d8	98	(82 - 129)
Bromofluorobenzene	97	(64 - 112)

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFFXX102 Matrix.....: SOLID
LCS Lot-Sample#: A8B200000-183
Prep Date.....: 02/19/98 Analysis Date..: 02/19/98
Prep Batch #....: 8051183 Analysis Time..: 09:42
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	20	22	ug/kg	109	SW846 8260A
Trichloroethene	20	19	ug/kg	96	SW846 8260A
Chlorobenzene	20	20	ug/kg	101	SW846 8260A
Toluene	20	21	ug/kg	107	SW846 8260A
Benzene	20	22	ug/kg	112	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	95	(61 - 115)
Toluene-d8	105	(82 - 129)
Bromofluorobenzene	99	(64 - 112)

NOTE (S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT
TOTAL Metals
Client Lot #....: I8B140114

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: I8B170000-225 Prep Batch #....: 8048225							
Arsenic	200	193	mg/kg	97	SW846 6010A	02/17-02/19/98	CFE3210A
			Dilution Factor:	1			
			Analysis Time..:	10:35			
Lead	50.0	49.3	mg/kg	99	SW846 6010A	02/17-02/19/98	CFE3210C
			Dilution Factor:	1			
			Analysis Time..:	10:35			
Selenium	200	190	mg/kg	95	SW846 6010A	02/17-02/19/98	CFE3210D
			Dilution Factor:	1			
			Analysis Time..:	10:35			
Barium	200	207	mg/kg	103	SW846 6010A	02/17-02/19/98	CFE3210E
			Dilution Factor:	1			
			Analysis Time..:	10:35			
Cadmium	5.0	5.0	mg/kg	99	SW846 6010A	02/17-02/19/98	CFE3210F
			Dilution Factor:	1			
			Analysis Time..:	10:35			
Chromium	20.0	20.6	mg/kg	103	SW846 6010A	02/17-02/19/98	CFE32108
			Dilution Factor:	1			
			Analysis Time..:	10:35			
Silver	5.0	4.6	mg/kg	92	SW846 6010A	02/17-02/19/98	CFE32109
			Dilution Factor:	1			
			Analysis Time..:	10:35			
LCS Lot-Sample#: I8B180000-174 Prep Batch #....: 8049174							
Mercury	0.42	0.41	mg/kg	99	SW846 7471A	02/18/98	CFEJK102
			Dilution Factor:	1			
			Analysis Time..:	13:25			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: I8B140114

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	PERCNT		PREPARATION-	PREP
	AMOUNT	AMOUNT	UNITS	RECVRY		
Total Recoverable			Work Order #: CFEQL102		LCS Lot-Sample#:	I8B180000-214
Petroleum Hydrocarbons	250	250	mg/kg	102	MCAWW	418.1
			Dilution Factor:	1		
			Analysis Time..:	15:00		

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: I8B140114 **Work Order #....:** CFDGF102 **Matrix.....:** SOLID
LCS Lot-Sample#: I8B160000-155
Prep Date.....: 02/16/98 **Analysis Date...:** 02/17/98
Prep Batch #....: 8047155 **Analysis Time...:** 23:07
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Diesel Range Organics	98	(38 - 139)	SW846 8015 MOD
<hr/>			
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
o-Terphenyl	110	(40 - 144)	
Dotriacontane	110	(42 - 159)	

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 Semivolatiles

Client Lot #....: I8B140114 Work Order #....: CFDMX102 Matrix.....: SOLID
LCS Lot-Sample#: I8B160000-201
Prep Date.....: 02/16/98 Analysis Date...: 02/19/98
Prep Batch #....: 8047201 Analysis Time...: 11:37
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Phenol	84	(36 - 105)	SW846 8270B
2-Chlorophenol	92	(35 - 109)	SW846 8270B
1,4-Dichlorobenzene	73	(32 - 107)	SW846 8270B
N-Nitrosodi-n-propylamine	76	(34 - 117)	SW846 8270B
1,2,4-Trichlorobenzene	72	(30 - 113)	SW846 8270B
4-Chloro-3-methylphenol	76	(40 - 111)	SW846 8270B
Acenaphthene	78	(37 - 114)	SW846 8270B
4-Nitrophenol	68	(49 - 107)	SW846 8270B
2,4-Dinitrotoluene	75	(46 - 104)	SW846 8270B
Pentachlorophenol	75	(29 - 106)	SW846 8270B
Pyrene	92	(51 - 134)	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	78	(25 - 121)
Phenol-d5	87	(24 - 113)
Nitrobenzene-d5	64	(23 - 120)
2-Fluorobiphenyl	68	(30 - 115)
2,4,6-Tribromophenol	74	(19 - 122)
Terphenyl-d14	84	(18 - 137)

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 #....:	I8B140114	Work Order #....:	CFEA8102	Matrix.....:	SOLID
LCS Lot-Sample#:	I8B180000-166				
Prep Date.....:	02/17/98	Analysis Date...:	02/17/98		
Prep Batch #....:	8049166	Analysis Time...:	11:13		
Dilution Factor:	1				

PARAMETER	PERCENT	RECOVERY	METHOD
	RECOVERY	LIMITS	
Gasoline Range Organics	102	(85 - 115)	SW846 8020/GRO
SURROGATE	PERCENT	RECOVERY	
	RECOVERY	LIMITS	
a,a,a-Trifluorotoluene (TFT)	89	(75 - 125)	

NOTE(S) :

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



Environmental
Services

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: I8B140114 Work Order #....: CFEPA102 Matrix.....: SOLID
LCS Lot-Sample#: I8B180000-193
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #....: 8049193 Analysis Time...: 19:49
Dilution Factor: 1

<u>PARAMETER</u>	PERCENT	RECOVERY	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Gasoline Range Organics	96	(85 - 115)	SW846 8020/GRO
Toluene	99	(85 - 115)	SW846 8020/GRO
Xylenes (total)	98	(85 - 115)	SW846 8020/GRO

<u>SURROGATE</u>	PERCENT	RECOVERY	<u>LIMITS</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	103		(75 - 125)

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: I8B140114 Work Order #...: CFE03102 Matrix.....: SOLID
 LCS Lot-Sample#: A8B170000-180
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #...: 8048180 Analysis Time...: 10:30
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	115	(60 - 119)	SW846 8260A
Trichloroethene	95	(74 - 115)	SW846 8260A
Chlorobenzene	101	(85 - 116)	SW846 8260A
Toluene	105	(87 - 118)	SW846 8260A
Benzene	110	(83 - 118)	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	93	(61 - 115)
Toluene-d8	102	(82 - 129)
Bromofluorobenzene	96	(64 - 112)

NOTE(S) :

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



Environmental
Services

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: I8B140114 Work Order #...: CFE8V102 Matrix.....: SOLID
LCS Lot-Sample#: A8B180000-165
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #...: 8049165 Analysis Time...: 16:45
Dilution Factor: 1

<u>PARAMETER</u>	PERCENT	RECOVERY	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,1-Dichloroethene	82	(60 - 119)	SW846 8260A
Trichloroethene	97	(74 - 115)	SW846 8260A
Chlorobenzene	103	(85 - 116)	SW846 8260A
Toluene	102	(87 - 118)	SW846 8260A
Benzene	106	(83 - 118)	SW846 8260A

<u>SURROGATE</u>	PERCENT	RECOVERY	<u>LIMITS</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,2-Dichloroethane-d4	86		(61 - 115)
Toluene-d8	98		(82 - 129)
Bromofluorobenzene	89		(64 - 112)

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT
GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFFVX102 Matrix.....: SOLID
 LCS Lot-Sample#: A8B200000-177
 Prep Date.....: 02/19/98 Analysis Date...: 02/23/98
 Prep Batch #....: 8051177 Analysis Time...: 20:58
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	85	(60 - 119)	SW846 8260A
Trichloroethene	100	(74 - 115)	SW846 8260A
Chlorobenzene	106	(85 - 116)	SW846 8260A
Toluene	104	(87 - 118)	SW846 8260A
Benzene	109	(83 - 118)	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	102	(61 - 115)
Toluene-d8	98	(82 - 129)
Bromofluorobenzene	97	(64 - 112)

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT
GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFFXX102 Matrix.....: SOLID
 LCS Lot-Sample#: A8B200000-183
 Prep Date.....: 02/19/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8051183 Analysis Time...: 09:42
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	109	(60 - 119)	SW846 8260A
Trichloroethene	96	(74 - 115)	SW846 8260A
Chlorobenzene	101	(85 - 116)	SW846 8260A
Toluene	107	(87 - 118)	SW846 8260A
Benzene	112	(83 - 118)	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	95	(61 - 115)
Toluene-d8	105	(82 - 129)
Bromofluorobenzene	99	(64 - 112)

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT
TOTAL Metals
Client Lot #....: I8B140114
Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: I8B170000-225 Prep Batch #....: 8048225						
Arsenic	97	(80 - 120)	SW846 6010A		02/17-02/19/98	CFE3210A
		Dilution Factor: 1				
		Analysis Time...: 10:35				
Lead	99	(80 - 120)	SW846 6010A		02/17-02/19/98	CFE3210C
		Dilution Factor: 1				
		Analysis Time...: 10:35				
Selenium	95	(80 - 120)	SW846 6010A		02/17-02/19/98	CFE3210D
		Dilution Factor: 1				
		Analysis Time...: 10:35				
Barium	103	(80 - 120)	SW846 6010A		02/17-02/19/98	CFE3210E
		Dilution Factor: 1				
		Analysis Time...: 10:35				
Cadmium	99	(80 - 120)	SW846 6010A		02/17-02/19/98	CFE3210F
		Dilution Factor: 1				
		Analysis Time...: 10:35				
Chromium	103	(80 - 120)	SW846 6010A		02/17-02/19/98	CFE32108
		Dilution Factor: 1				
		Analysis Time...: 10:35				
Silver	92	(80 - 120)	SW846 6010A		02/17-02/19/98	CFE32109
		Dilution Factor: 1				
		Analysis Time...: 10:35				
LCS Lot-Sample#: I8B180000-174 Prep Batch #....: 8049174						
Mercury	99	(81 - 120)	SW846 7471A		02/18/98	CFEJK102
		Dilution Factor: 1				
		Analysis Time...: 13:25				

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: I8B140114

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Recoverable Petroleum Hydrocarbons	102	(70 - 130)	Work Order #: CFEQL102 LCS Lot-Sample#: I8B180000-214 MCAWW 418.1 Dilution Factor: 1 Analysis Time...: 15:00	02/18-02/19/98	8049214

NOTE(S) :

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

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFCDN10F-MS Matrix.....: SOLID
 MS Lot-Sample #: C8B130128-002 CFCDN10G-MSD
 Date Sampled...: 02/12/98 00:00 Date Received...: 02/13/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/24/98
 Prep Batch #....: 8049165 Analysis Time...: 14:11
 Dilution Factor: 1 % Moisture.....: 57

<u>PARAMETER</u>	SAMPLE SPIKE MEASRD				PERCENT		
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
1,1-Dichloroethene	ND	15000	11000	a ug/kg	74		SW846 8260A
	ND	15000	11000	ug/kg	76	2.0	SW846 8260A
Trichloroethene	ND	15000	12000	ug/kg	80		SW846 8260A
	ND	15000	12000	ug/kg	82	2.2	SW846 8260A
Chlorobenzene	ND	15000	12000	ug/kg	82		SW846 8260A
	ND	15000	13000	ug/kg	86	4.2	SW846 8260A
Toluene	ND	15000	13000	ug/kg	79		SW846 8260A
	ND	15000	14000	ug/kg	83	4.3	SW846 8260A
Benzene	ND	15000	13000	ug/kg	90		SW846 8260A
	ND	15000	13000	ug/kg	89	1.1	SW846 8260A

<u>SURROGATE</u>	PERCENT		<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,2-Dichloroethane-d4	84	(61 - 115)	
	84	(61 - 115)	
Toluene-d8	78 *	(82 - 129)	
	78 *	(82 - 129)	
Bromofluorobenzene	78	(64 - 112)	
	78	(64 - 112)	

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.

* Surrogate recovery is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: I8B140114

Matrix.....: SOLID

Date Sampled...: 02/06/98 11:25 Date Received..: 02/07/98

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION-	WORK	ORDER #
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD			

MS Lot-Sample #: I8B130132-006 Prep Batch #....: 8049174

Mercury

ND	0.083	0.091	mg/kg	109	SW846	7471A	02/18/98	CFCFC10N	
ND	0.083	0.079	mg/kg	95	14	SW846	7471A	02/18/98	CFCFC10P

Dilution Factor: 1

Analysis Time...: 13:29

NOTE(S) :

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

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFDG9103-MS Matrix.....: SOLID
 MS Lot-Sample #: A8B160116-003 CFDG9104-MSD
 Date Sampled...: 02/12/98 11:15 Date Received...: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8051183 Analysis Time...: 14:24
 Dilution Factor: 1 % Moisture.....: 22

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT			
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	50	56	ug/kg	112		SW846 8260A
	ND	50	56	ug/kg	112	0.04	SW846 8260A
Trichloroethene	ND	50	48	ug/kg	96		SW846 8260A
	ND	50	49	ug/kg	97	1.2	SW846 8260A
Chlorobenzene	ND	50	52	ug/kg	103		SW846 8260A
	ND	50	52	ug/kg	105	1.5	SW846 8260A
Toluene	ND	50	54	ug/kg	107		SW846 8260A
	ND	50	54	ug/kg	109	1.4	SW846 8260A
Benzene	ND	50	60 a	ug/kg	120		SW846 8260A
	ND	50	59 a	ug/kg	119	1.2	SW846 8260A

SURROGATE	PERCENT		RECOVERY
	RECOVERY	LIMITS	
1,2-Dichloroethane-d4	106	(61 - 115)	
	105	(61 - 115)	
Toluene-d8	103	(82 - 129)	
	103	(82 - 129)	
Bromofluorobenzene	89	(64 - 112)	
	93	(64 - 112)	

NOTE (S) :

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

a Spiked analyte recovery is outside stated control limits.



Environmental
Services

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: I8B140114 Work Order #....: CFDRV106-MS Matrix.....: SOLID
MS Lot-Sample #: I8B170107-001 CFDRV107-MSD
Date Sampled....: 02/16/98 10:00 Date Received...: 02/17/98
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #....: 8049193 Analysis Time...: 18:23
Dilution Factor: 1 % Moisture.....: 24

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
Gasoline Range Organics	ND	26000	22000	ug/kg	82		SW846 8020/GRO
	ND	26000	22000	ug/kg	82	0.66	SW846 8020/GRO
Toluene	ND	3900	3300	ug/kg	85		SW846 8020/GRO
	ND	3900	3400	ug/kg	86	0.88	SW846 8020/GRO
Xylenes (total)	ND	8000	6700	ug/kg	84		SW846 8020/GRO
	ND	8000	6800	ug/kg	86	2.0	SW846 8020/GRO

SURROGATE	PERCENT		RECOVERY	LIMITS
	RECOVERY	LIMITS		
Bromofluorobenzene	85		(75 - 125)	
	78		(75 - 125)	

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 DATA REPORT

TOTAL Metals

Client Lot #....: I8B140114

Matrix.....: SOLID

Date Sampled...: 02/06/98 11:25 Date Received..: 02/07/98

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION- ANALYSIS DATE	WORK ORDER #		
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD				
MS Lot-Sample #: I8B140114-001 Prep Batch #....: 8048225										
Arsenic										
	2.9	220	188	mg/kg	84		SW846 6010A	02/17-02/19/98 CFD4E10F		
	2.9	220	185	mg/kg	83	1.6	SW846 6010A	02/17-02/19/98 CFD4E10F		
	Dilution Factor: 1									
	Analysis Time...: 10:50									
Barium										
	171	220	345 N	mg/kg	79		SW846 6010A	02/17-02/19/98 CFD4E110		
	171	220	354	mg/kg	83	2.7	SW846 6010A	02/17-02/19/98 CFD4E111		
	Dilution Factor: 1									
	Analysis Time...: 10:50									
Cadmium										
	ND	5.5	4.6	mg/kg	84		SW846 6010A	02/17-02/19/98 CFD4E112		
	ND	5.5	4.5	mg/kg	83	1.8	SW846 6010A	02/17-02/19/98 CFD4E113		
	Dilution Factor: 1									
	Analysis Time...: 10:50									
Lead										
	6.3	55.0	53.0	mg/kg	85		SW846 6010A	02/17-02/19/98 CFD4E10U		
	6.3	55.0	52.3	mg/kg	84	1.3	SW846 6010A	02/17-02/19/98 CFD4E10V		
	Dilution Factor: 1									
	Analysis Time...: 10:50									
Chromium										
	6.7	22.0	26.4	mg/kg	90		SW846 6010A	02/17-02/19/98 CFD4E10M		
	6.7	22.0	26.0	mg/kg	88	1.5	SW846 6010A	02/17-02/19/98 CFD4E10N		
	Dilution Factor: 1									
	Analysis Time...: 10:50									
Selenium										
	ND	220	182	mg/kg	83		SW846 6010A	02/17-02/19/98 CFD4E10W		
	ND	220	178	mg/kg	81	2.2	SW846 6010A	02/17-02/19/98 CFD4E10X		
	Dilution Factor: 1									
	Analysis Time...: 10:50									
Silver										
	ND	5.5	4.3 N	mg/kg	78		SW846 6010A	02/17-02/19/98 CFD4E10P		
	ND	5.5	4.4 N	mg/kg	79	1.3	SW846 6010A	02/17-02/19/98 CFD4E10Q		
	Dilution Factor: 1									
	Analysis Time...: 10:50									

NOTE (S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: I8B140114 **Work Order #....:** CFD4E10J-MS **Matrix.....:** SOLID
MS Lot-Sample #: I8B140114-001 CFD4E10K-MSD
Date Sampled...: 02/12/98 07:30 **Date Received...:** 02/14/98
Prep Date.....: 02/16/98 **Analysis Date...:** 02/17/98
Prep Batch #....: 8047155 **Analysis Time...:** 14:03
Dilution Factor: 1 **% Moisture.....:** 9.1

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
Diesel Range Organics	2200	37000	38000	ug/kg	98		SW846 8015 MOD
	2200	37000	41000	ug/kg	106	7.7	SW846 8015 MOD

SURROGATE	PERCENT		RECOVERY	
	RECOVERY	LIMITS	RECOVERY	LIMITS
o-Terphenyl	111	(40 - 144)	123	(40 - 144)
Dotriacontane	99	(42 - 159)	112	(42 - 159)

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 DATA REPORT

GC Volatiles

Client Lot #....: I8B140114 Work Order #....: CFD4E114-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B140114-001 CFD4E115-MSD
 Date Sampled...: 02/12/98 07:30 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #....: 8049166 Analysis Time...: 18:03
 Dilution Factor: 1 % Moisture.....: 9.1

<u>PARAMETER</u>	SAMPLE SPIKE MEASRD				PERCENT		
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
Gasoline Range Organics	ND	440	380	ug/kg	84		SW846 8020/GRO
	ND	440	380	ug/kg	84	0.08	SW846 8020/GRO
<u>SURROGATE</u>	PERCENT				RECOVERY		
	<u>RECOVERY</u>				<u>LIMITS</u>		
a,a,a-Trifluorotoluene (TFT)	78				(75 - 125)		
	78				(75 - 125)		

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 DATA REPORT**GC/MS Semivolatiles**

Client Lot #....: I8B140114 Work Order #...: CFD4N10J-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B140114-005 CFD4N10K-MSD
 Date Sampled...: 02/12/98 08:05 Date Received..: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date...: 02/24/98
 Prep Batch #....: 8047201 Analysis Time...: 15:41
 Dilution Factor: 1 % Moisture.....: 8.6

<u>PARAMETER</u>	<u>SAMPLE SPIKE MEASRD</u>				<u>PERCENT</u>		
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
Acenaphthene	ND	3600	2800	ug/kg	76		SW846 8270B
	ND	3600	3200	ug/kg	87	14	SW846 8270B
4-Chloro-3-methylphenol	ND	5500	3200	ug/kg	58		SW846 8270B
	ND	5500	3600	ug/kg	66	13	SW846 8270B
2-Chlorophenol	ND	5500	3300	ug/kg	60		SW846 8270B
	ND	5500	4100	ug/kg	74	22	SW846 8270B
1,4-Dichlorobenzene	ND	3600	2300	ug/kg	63		SW846 8270B
	ND	3600	2800	ug/kg	78	21	SW846 8270B
2,4-Dinitrotoluene	ND	3600	3000	ug/kg	83		SW846 8270B
	ND	3600	3600	ug/kg	98	16	SW846 8270B
4-Nitrophenol	ND	5500	6600	ug/kg	121		SW846 8270B
	Qualifiers: a, MSC						
	ND	5500	7300	ug/kg	133	9.9	SW846 8270B
	Qualifiers: a, MSC						
N-Nitrosodi-n-propylamine	ND	3600	3000	ug/kg	82		SW846 8270B
	ND	3600	3400	ug/kg	93	13	SW846 8270B
Pentachlorophenol	ND	5500	3900	ug/kg	70		SW846 8270B
	ND	5500	3800	ug/kg	69	1.5	SW846 8270B
Phenol	ND	5500	3500	ug/kg	64		SW846 8270B
	ND	5500	4000	ug/kg	74	14	SW846 8270B
Pyrene	ND	3600	3500	ug/kg	97		SW846 8270B
	ND	3600	3600	ug/kg	99	2.5	SW846 8270B
1,2,4-Trichlorobenzene	ND	3600	2600	ug/kg	70		SW846 8270B
	ND	3600	3100	ug/kg	85	20	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT</u>		<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>			
2-Fluorophenol	44		(25 - 121)	
	48		(25 - 121)	
Phenol-d5	65		(24 - 113)	
	73		(24 - 113)	
Nitrobenzene-d5	71		(23 - 120)	
	78		(23 - 120)	
2-Fluorobiphenyl	68		(30 - 115)	
	84		(30 - 115)	
2,4,6-Tribromophenol	62		(19 - 122)	
	60		(19 - 122)	
Terphenyl-d14	106		(18 - 137)	
	120		(18 - 137)	

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: I8B140114 Work Order #....: CFD4N10J-MS Matrix.....: SOLID
MS Lot-Sample #: I8B140114-005 CFD4N10K-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
------------------	-----------------------------	----------------------------

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.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE DATA REPORT
GC/MS Volatiles

Client Lot #....: I8B140114 Work Order #....: CFD4X10L-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B140114-010 CFD4X10M-MSD
 Date Sampled...: 02/12/98 09:00 Date Received...: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date...: 02/24/98
 Prep Batch #....: 8051177 Analysis Time...: 15:13
 Dilution Factor: 1 % Moisture.....: 12

<u>PARAMETER</u>	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	METHOD
Benzene	ND	7100	7500	ug/kg	105		SW846 8260A
	ND	7100	7100	ug/kg	100	2.4	SW846 8260A
Chlorobenzene	ND	7100	7300	ug/kg	102		SW846 8260A
	ND	7100	6800	ug/kg	96	2.4	SW846 8260A
1,1-Dichloroethene	ND	7100	6100	ug/kg	85		SW846 8260A
	ND	7100	5500	ug/kg	77	2.4	SW846 8260A
Toluene	920	7100	7600	ug/kg	94		SW846 8260A
	920	7100	7700	ug/kg	95	2.4	SW846 8260A
Trichloroethene	ND	7100	6900	ug/kg	97		SW846 8260A
	ND	7100	6700	ug/kg	95	2.4	SW846 8260A

<u>SURROGATE</u>	PERCENT	RECOVERY
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	95	(61 - 115)
	95	(61 - 115)
Toluene-d8	93	(82 - 129)
	94	(82 - 129)
Bromofluorobenzene	95	(64 - 112)
	93	(64 - 112)

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 DATA REPORT

GC/MS Volatiles

Client Lot #...: I8B140114 Work Order #...: CF95K10D-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B090119-002 CF95K10E-MSD
 Date Sampled...: 02/06/98 11:25 Date Received...: 02/07/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #...: 8048180 Analysis Time...: 16:58
 Dilution Factor: 1 % Moisture....: 0.0

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	
1,1-Dichloroethene	ND	50	57	ug/kg	114		SW846 8260A
	ND	50	60	ug/kg	120	5.1	SW846 8260A
Trichloroethene	ND	50	47	ug/kg	95		SW846 8260A
	ND	50	47	ug/kg	95	0.01	SW846 8260A
Chlorobenzene	ND	50	50	ug/kg	101		SW846 8260A
	ND	50	51	ug/kg	102	1.6	SW846 8260A
Toluene	ND	50	54	ug/kg	107		SW846 8260A
	ND	50	53	ug/kg	106	0.66	SW846 8260A
Benzene	ND	50	56	ug/kg	113		SW846 8260A
	ND	50	56	ug/kg	113	0.18	SW846 8260A

SURROGATE	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	
1,2-Dichloroethane-d4	ND	50	50	ug/kg	94		(61 - 115)
	ND	50	50	ug/kg	90		(61 - 115)
Toluene-d8	ND	50	50	ug/kg	103		(82 - 129)
	ND	50	50	ug/kg	103		(82 - 129)
Bromofluorobenzene	ND	50	50	ug/kg	92		(64 - 112)
	ND	50	50	ug/kg	92		(64 - 112)

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 #....: I8B140114 Work Order #....: CFCDN10F-MS Matrix.....: SOLID
 MS Lot-Sample #: C8B130128-002 CFCDN10G-MSD
 Date Sampled...: 02/12/98 00:00 Date Received..: 02/13/98
 Prep Date.....: 02/17/98 Analysis Date..: 02/24/98
 Prep Batch #....: 8049165 Analysis Time..: 14:11
 Dilution Factor: 1 % Moisture.....: 57

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
1,1-Dichloroethene	74 a	(75 - 113)			SW846 8260A
	76	(75 - 113)	2.0	(0-20)	SW846 8260A
Trichloroethene	80	(71 - 110)			SW846 8260A
	82	(71 - 110)	2.2	(0-22)	SW846 8260A
Chlorobenzene	82	(81 - 115)			SW846 8260A
	86	(81 - 115)	4.2	(0-18)	SW846 8260A
Toluene	79	(78 - 126)			SW846 8260A
	83	(78 - 126)	4.3	(0-24)	SW846 8260A
Benzene	90	(78 - 117)			SW846 8260A
	89	(78 - 117)	1.1	(0-17)	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	84	(61 - 115)
	84	(61 - 115)
Toluene-d8	78 *	(82 - 129)
	78 *	(82 - 129)
Bromofluorobenzene	78	(64 - 112)
	78	(64 - 112)

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.

* Surrogate recovery is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: I8B140114

Matrix.....: SOLID

Date Sampled...: 02/06/98 11:25 Date Received...: 02/07/98

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
MS Lot-Sample #: I8B130132-006 Prep Batch #: 8049174						
Mercury	109	(75 - 125)		SW846 7471A	02/18/98	CFCFC10N
	95	(75 - 125) 14	(0-20)	SW846 7471A	02/18/98	CFCFC10P
		Dilution Factor: 1				
		Analysis Time...: 13:29				

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 #....: I8B140114 Work Order #....: CFDG9103-MS Matrix.....: SOLID
 MS Lot-Sample #: A8B160116-003 CFDG9104-MSD
 Date Sampled....: 02/12/98 11:15 Date Received...: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date...: 02/19/98
 Prep Batch #....: 8051183 Analysis Time...: 14:24
 Dilution Factor: 1 % Moisture.....: 22

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
1,1-Dichloroethene	112	(75 - 113)	0.04	(0-20)	SW846 8260A
	112	(75 - 113)			SW846 8260A
Trichloroethene	96	(71 - 110)	1.2	(0-22)	SW846 8260A
	97	(71 - 110)			SW846 8260A
Chlorobenzene	103	(81 - 115)	1.5	(0-18)	SW846 8260A
	105	(81 - 115)			SW846 8260A
Toluene	107	(78 - 126)	1.4	(0-24)	SW846 8260A
	109	(78 - 126)			SW846 8260A
Benzene	120 a	(78 - 117)	1.2	(0-17)	SW846 8260A
	119 a	(78 - 117)			SW846 8260A
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		<u>LIMITS</u>	
	<u>RECOVERY</u>				
1,2-Dichloroethane-d4	106			(61 - 115)	
	105			(61 - 115)	
Toluene-d8	103			(82 - 129)	
	103			(82 - 129)	
Bromofluorobenzene	89			(64 - 112)	
	93			(64 - 112)	

NOTE(S) :

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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT**GC Volatiles**

Client Lot #....: I8B140114 Work Order #....: CFDRV106-MS Matrix.....: SOLID
MS Lot-Sample #: I8B170107-001 CFDRV107-MSD
Date Sampled...: 02/16/98 10:00 Date Received...: 02/17/98
Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
Prep Batch #:....: 8049193 Analysis Time...: 18:23
Dilution Factor: 1 % Moisture.....: 24

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
Gasoline Range Organics	82	(75 - 125)	0.66	(0-30)	SW846 8020/GRO
	82	(75 - 125)			SW846 8020/GRO
Toluene	85	(75 - 125)	0.88	(0-30)	SW846 8020/GRO
	86	(75 - 125)			SW846 8020/GRO
Xylenes (total)	84	(75 - 125)	2.0	(0-30)	SW846 8020/GRO
	86	(75 - 125)			SW846 8020/GRO

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	85	(75 - 125)
	78	(75 - 125)

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 #....: I8B140114

Matrix.....: SOLID

Date Sampled...: 02/06/98 11:25 Date Received...: 02/07/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: I8B140114-001 Prep Batch #...: 8048225							
Arsenic	84	(80 - 120)			SW846 6010A	02/17-02/19/98	CFD4E10R
	83	(80 - 120) 1.6 (0-20)			SW846 6010A	02/17-02/19/98	CFD4E10T
Dilution Factor: 1							
Analysis Time...: 10:50							
Barium	79 N	(80 - 120)			SW846 6010A	02/17-02/19/98	CFD4E110
	83	(80 - 120) 2.7 (0-20)			SW846 6010A	02/17-02/19/98	CFD4E111
Dilution Factor: 1							
Analysis Time...: 10:50							
Cadmium	84	(80 - 120)			SW846 6010A	02/17-02/19/98	CFD4E112
	83	(80 - 120) 1.8 (0-20)			SW846 6010A	02/17-02/19/98	CFD4E113
Dilution Factor: 1							
Analysis Time...: 10:50							
Lead	85	(80 - 120)			SW846 6010A	02/17-02/19/98	CFD4E10U
	84	(80 - 120) 1.3 (0-20)			SW846 6010A	02/17-02/19/98	CFD4E10V
Dilution Factor: 1							
Analysis Time...: 10:50							
Chromium	90	(80 - 120)			SW846 6010A	02/17-02/19/98	CFD4E10M
	88	(80 - 120) 1.5 (0-20)			SW846 6010A	02/17-02/19/98	CFD4E10N
Dilution Factor: 1							
Analysis Time...: 10:50							
Selenium	83	(80 - 120)			SW846 6010A	02/17-02/19/98	CFD4E10W
	81	(80 - 120) 2.2 (0-20)			SW846 6010A	02/17-02/19/98	CFD4E10X
Dilution Factor: 1							
Analysis Time...: 10:50							
Silver	78 N	(80 - 120)			SW846 6010A	02/17-02/19/98	CFD4E10P
	79 N	(80 - 120) 1.3 (0-20)			SW846 6010A	02/17-02/19/98	CFD4E10Q
Dilution Factor: 1							
Analysis Time...: 10:50							

NOTE (S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT**GC Semivolatiles**

Client Lot #...: I8B140114 Work Order #...: CFD4E10J-MS Matrix.....: SOLID
MS Lot-Sample #: I8B140114-001 CFD4E10K-MSD
Date Sampled...: 02/12/98 07:30 Date Received...: 02/14/98
Prep Date.....: 02/16/98 Analysis Date...: 02/17/98
Prep Batch #...: 8047155 Analysis Time...: 14:03
Dilution Factor: 1 % Moisture.....: 9.1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Diesel Range Organics	98	(40 - 126)			SW846 8015 MOD
	106	(40 - 126)	7.7	(0-30)	SW846 8015 MOD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
o-Terphenyl	111	(40 - 144)
	123	(40 - 144)
Dotriacontane	99	(42 - 159)
	112	(42 - 159)

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 Volatiles

Client Lot #...: I8B140114 Work Order #...: CFD4E114-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B140114-001 CFD4E115-MSD
 Date Sampled...: 02/12/98 07:30 Date Received...: 02/14/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #...: 8049166 Analysis Time...: 18:03
 Dilution Factor: 1 % Moisture.....: 9.1

<u>PARAMETER</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	<u>RPD</u>	<u>RPD</u> <u>LIMITS</u>	<u>METHOD</u>
Gasoline Range Organics	84	(75 - 125)			SW846 8020/GRO
	84	(75 - 125)	0.08	(0-30)	SW846 8020/GRO
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>			
a,a,a-Trifluorotoluene (TFT)	78	(75 - 125)			
	78	(75 - 125)			

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 Semivolatiles

Client Lot #....: I8B140114 Work Order #....: CFD4N10J-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B140114-005 CFD4N10K-MSD
 Date Sampled...: 02/12/98 08:05 Date Received..: 02/14/98
 Prep Date.....: 02/16/98 Analysis Date..: 02/24/98
 Prep Batch #....: 8047201 Analysis Time..: 15:41
 Dilution Factor: 1 % Moisture.....: 8.6

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	76	(49 - 108)			SW846 8270B
	87	(49 - 108)	14	(0-27)	SW846 8270B
4-Chloro-3-methylphenol	58	(53 - 109)			SW846 8270B
	66	(53 - 109)	13	(0-25)	SW846 8270B
2-Chlorophenol	60	(44 - 99)			SW846 8270B
	74	(44 - 99)	22	(0-30)	SW846 8270B
1,4-Dichlorobenzene	63	(41 - 93)			SW846 8270B
	78	(41 - 93)	21	(0-36)	SW846 8270B
2,4-Dinitrotoluene	83	(40 - 112)			SW846 8270B
	98	(40 - 112)	16	(0-34)	SW846 8270B
4-Nitrophenol	121 a, MSC	(42 - 117)			SW846 8270B
	133 a, MSC	(42 - 117)	9.9	(0-29)	SW846 8270B
N-Nitrosodi-n-propylamine	82	(44 - 106)			SW846 8270B
	93	(44 - 106)	13	(0-32)	SW846 8270B
Pentachlorophenol	70	(1.0- 127)			SW846 8270B
	69	(1.0- 127)	1.5	(0-96)	SW846 8270B
Phenol	64	(40 - 103)			SW846 8270B
	74	(40 - 103)	14	(0-30)	SW846 8270B
Pyrene	97	(51 - 125)			SW846 8270B
	99	(51 - 125)	2.5	(0-36)	SW846 8270B
1,2,4-Trichlorobenzene	70	(42 - 101)			SW846 8270B
	85	(42 - 101)	20	(0-32)	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	44	(25 - 121)
	48	(25 - 121)
Phenol-d5	65	(24 - 113)
	73	(24 - 113)
Nitrobenzene-d5	71	(23 - 120)
	78	(23 - 120)
2-Fluorobiphenyl	68	(30 - 115)
	84	(30 - 115)
2,4,6-Tribromophenol	62	(19 - 122)
	60	(19 - 122)
Terphenyl-d14	106	(18 - 137)
	120	(18 - 137)

(Continued on next page)



MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: I8B140114 Work Order #....: CFD4N10J-MS Matrix.....: SOLID
MS Lot-Sample #: I8B140114-005 CFD4N10K-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
------------------	-----------------------------	----------------------------

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.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: I8B140114 Work Order #...: CFD4X10L-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B140114-010 CFD4X10M-MSD
 Date Sampled...: 02/12/98 09:00 Date Received..: 02/14/98
 Prep Date.....: 02/19/98 Analysis Date..: 02/24/98
 Prep Batch #...: 8051177 Analysis Time..: 15:13
 Dilution Factor: 1 % Moisture.....: 12

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Benzene	105	(78 - 117)	2.4	(0-17)	SW846 8260A
	100	(78 - 117)			SW846 8260A
Chlorobenzene	102	(81 - 115)	2.4	(0-18)	SW846 8260A
	96	(81 - 115)			SW846 8260A
1,1-Dichloroethene	85	(75 - 113)	2.4	(0-20)	SW846 8260A
	77	(75 - 113)			SW846 8260A
Toluene	94	(78 - 126)	2.4	(0-24)	SW846 8260A
	95	(78 - 126)			SW846 8260A
Trichloroethene	97	(71 - 110)	2.4	(0-22)	SW846 8260A
	95	(71 - 110)			SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	95	(61 - 115)
	95	(61 - 115)
Toluene-d8	93	(82 - 129)
	94	(82 - 129)
Bromofluorobenzene	95	(64 - 112)
	93	(64 - 112)

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 #....: I8B140114 Work Order #....: CF95K10D-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B090119-002 CF95K10E-MSD
 Date Sampled...: 02/06/98 11:25 Date Received...: 02/07/98
 Prep Date.....: 02/17/98 Analysis Date...: 02/17/98
 Prep Batch #....: 8048180 Analysis Time...: 16:58
 Dilution Factor: 1 % Moisture.....: 0.0

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	114	(10 - 234)	5.1	(0-27)	SW846 8260A
	120	(10 - 234)			SW846 8260A
Trichloroethene	95	(71 - 157)	0.01	(0-20)	SW846 8260A
	95	(71 - 157)			SW846 8260A
Chlorobenzene	101	(37 - 160)	1.6	(0-19)	SW846 8260A
	102	(37 - 160)			SW846 8260A
Toluene	107	(47 - 150)	0.66	(0-15)	SW846 8260A
	106	(47 - 150)			SW846 8260A
Benzene	113	(37 - 151)	0.18	(0-21)	SW846 8260A
	113	(37 - 151)			SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	94	(61 - 115)
	90	(61 - 115)
Toluene-d8	103	(82 - 129)
	103	(82 - 129)
Bromofluorobenzene	92	(64 - 112)
	92	(64 - 112)

NOTE(S) :

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

200

**Chain of Custody
Record**

Quanterra

I8B140114

QUA-4149 (1097)

CHAIN OF CUSTODY NUMBER

* 0 0 0 8 6 5 - 0 0 1 *

Client B.J. SERVICES			Project Manager Rick Johnson			Date 02/03/1998	Page <u>1</u> of <u>2</u>								
Address 3250 SOUTHSIDE RIVER ROAD			Telephone Number (Area Code)/Fax Number (505) 327-6222 / (281) 363-7595			Lab Location QUANTERRA - AUSTIN	Analysis								
City FARMINGTON	State NM	Zip Code 87401	Site Contact Rick Johnson C/O LES BAUGH				G	M	T	M	H	H	M	T	
							C	S	P	S	6	T	7	R	
							8	8	H	8	0	6	4	P	
							0	2	:	2	1	0	7	H	
							2	6	S	7	0	1	1	I	
							0	0	0	0	:	0	:	R	
							:	:	:	S	:	S			
							S	S	S	S					
Project Number/Name Farmington, NM			Carrier/Waybill Number												
Contract/Purchase Order/Quote Number CONTRACT / PURCHASE ORDER # : Farmington, NM RCRA						QUOTE: 22409									
Sample I.D. Number and Description	Date	Time	Sample Type	Containers			Preservative	Condition on Receipt/Comments							
				Volume	Type	No.									
#1	2/12/98	0730	SOLID	120mL	CLEAR GL	1	None	Good 3.8%							
#1		0730	SOLID	120mL	CLEAR GL	1	None	TM 2-14-98							
#1		0730	SOLID	250mL	CLEAR GL	1		XXX							
#2		0740	SOLID	120mL	CLEAR GL	1	None	X							
#2		0740	SOLID	120mL	CLEAR GL	1	None	XX							
#2		0740	SOLID	250mL	CLEAR GL	1		XXXXXX							
#3		0740	SOLID	120mL	CLEAR GL	1	None	X							
#3		0750	SOLID	120mL	CLEAR GL	1	None	XX							
#3		0750	SOLID	250mL	CLEAR GL	1		XXXXXX							
#4		0750	SOLID	120mL	CLEAR GL	1	None	X							
#4		0750	SOLID	120mL	CLEAR GL	1	None	XX							
#4		0750	SOLID	250mL	CLEAR GL	1		XXXXXX							
#5		0800	SOLID	120mL	CLEAR GL	1	None	X							
#5		0800	SOLID	120mL	CLEAR GL	1	None	XX							
#5		0800	SOLID	250mL	CLEAR GL	1		XXXXXX							
#6		0805	SOLID	120mL	CLEAR GL	1	None	X							
#6		0805	SOLID	120mL	CLEAR GL	1	None	XX							
#6		0805	SOLID	250mL	CLEAR GL	1		XXXXXX							
#6		0815	SOLID	120mL	CLEAR GL	1	None	X							

Special Instructions

#6-10 → Rush Turnaround plus (4 hr.) #1-5 Normal Turnaround (5 day.)

Possible Hazard Identification

Non-Hazard Flammable Skin Irritant Poison B Unknown 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

Normal Rush Other Specified

QC Level
 I. II. III.

Project Specific Requirements (Specify)

1. Relinquished By

Date

Time

1. Received By

Date

Time

2. Relinquished By

Date

Time

2. Received By

Date

Time

3. Relinquished By

Date

Time

3. Received By

Date

Time

Comments
1/13/98 - Today TAT you all approved the

AIR-3545 L-PRESS
Tom Malet

1-14-98 1008

Chain of Custody

Record

CHAIN OF CUSTODY NUMBER

Quanterra

I8B140114

* 0 0 0 8 6 5 - 0 0 2 *

QUA-4149 (1097)

Client B.J. SERVICES			Project Manager Rick Johnson			Date 02/03/1998	Page 2 of 2	
Address 3250 SOUTHSIDE RIVER ROAD			Telephone Number (Area Code)/Fax Number (505) 327-6222 / (281) 363-7595			Lab Location QUANTERRA - AUSTIN	Analysis	
City FARMINGTON	State NM	Zip Code 87401	Site Contact Rick Johnson C/O LES BAUGH				G M T M M M T	
							C S P S 6 T 7 R	
							8 8 H 8 0 6 4 P	
							0 2 : 2 1 0 7 H	
							2 6 S 7 0 1 1 I	
							0 0 : 0 0 : R	
							: : : : S	
							S S S S	
Project Number/Name Farmington, NM				Carrier/Waybill Number				
Contract/Purchase Order/Quote Number CONTRACT / PURCHASE ORDER # : Farmington, NM RCRA				QUOTE: 22409				
Sample I.D. Number and Description	Date	Time	Sample Type	Containers			Preservative	Condition on Receipt/Comments
				Volume	Type	No.		
#6	2/1/98	0815	SOLID	120mL	CLEAR GL	1	None	GOOD 3.8°C
#6		0815	SOLID	250mL	CLEAR GL	1		JAN 2-14-98
#7		0830	SOLID	120mL	CLEAR GL	1	None	
#7		0830	SOLID	120mL	CLEAR GL	1	None	
#7		0830	SOLID	250mL	CLEAR GL	1		
#8		0840	SOLID	120mL	CLEAR GL	1	None	
#8		0840	SOLID	120mL	CLEAR GL	1	None	
#8		0840	SOLID	120mL	CLEAR GL	1	None	
#9		0850	SOLID	120mL	CLEAR GL	1	None	
#9		0850	SOLID	120mL	CLEAR GL	1	None	
#9		0850	SOLID	250mL	CLEAR GL	1		
#10		0900	SOLID	120mL	CLEAR GL	1	None	
#10		0900	SOLID	120mL	CLEAR GL	1	None	
#10		0900	SOLID	250mL	CLEAR GL	1		

Special Instructions

#6-10 → Rush turnaround on samples (48 hrs); #1-5 Normal Turnaround (5 days)

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

 Normal Rush Other

QC Level

 I. II. III.

Project Specific Requirements (Specify)

1. Relinquished By

Date

Time

1. Received By

Date

Time

2/14/98 1200

Date

Time

2. Received By

Date

Time

Date

Time

3. Received By

Date

Time

Date

Time

4. Received By

Date

Time

Comments

2/14/98 - 7 day TAT for all original

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

**Certificate of
Analysis**

Quanterra Incorporated
5307 Industrial Oaks Boulevard, Suite 160
Austin, Texas 78735

512 892-6684 Direct
512 892-6652 Fax



ANALYTICAL REPORT

PROJECT NO. RCRA

Farmington, NM

Lot #: I8C160174

Rick Johnson

B.J. Services Company

QUANTERRA INCORPORATED

A handwritten signature in black ink, appearing to read "Sandra L. Green".

Sandra L. Green
Project Manager

April 1, 1998

**Case Narrative
I8C160174**

General

The following report contains the analytical results for three samples submitted to Quanterra-Austin by B.J. Services from Farmington, NM. The samples were received March 13, 1998, according to documented sample acceptance procedures.

Quanterra utilizes only USEPA approved methods and instrumentation in all analytical work. The samples presented in this report were analyzed for the parameters listed on the Analytical Method Summary page and in accordance with indicated methods. A summary of QC data for these analyses is included at the end of the report.

Diesel (DRO)

Per client request, diesel was added to sample BTM-Tank Hole-FWT (I8C160174-001). Since the EPA recommended holding time had expired on the extraction, the analysis was performed from the BN/A extract. Therefore, the following caveats apply:

- The Base Neutral/Acid internal standards were subtracted from the total result and this qualifies the result as estimated as denoted by the "E" flag.
- The initial analysis of the diesel exceeded the calibration range; however, the remaining extract had limited volume and no rerun was possible. This also qualifies the result as estimated.
- None of the quality control samples or surrogates recoveries could be performed or determined for this diesel analysis.

Base/Neutral/Acid Extractables

Sample BTM-Tank Hole-FWT (I8C160174-001) was run twice since the initial analysis revealed analytes which exceeded the calibration range denoted by the "E" flag. In the initial analysis, surrogate Nitrobenzene-d5 was reported outside of stated control limits due to confirmed matrix effect. In the secondary analysis, the surrogates were qualified as estimated due to dilution or the presence of interfering analytes. Phenol-d5 was reported also outside the stated control limits due to the matrix effect. Both analyses are included in the report.

Volatiles

Sample BTM-Tank Hole-FWT (I8C160174-001) was run twice since the initial analysis revealed analytes which exceeded the calibration range denoted by the "E" flag. Surrogate 4-Bromofluorobenzene was reported outside of the stated control limits due to matrix effect.

EXECUTIVE SUMMARY - Detection Highlights
I8C160174

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
BTM-TANK HOLE-FWT 03/12/98 13:35 001				
Diesel Range Organics	2600000 E	1900	ug/kg	SW846 8015 MOD
Barium	159	22.0	mg/kg	SW846 6010A
Chromium	3.0	1.1	mg/kg	SW846 6010A
Arsenic	1.2	1.1	mg/kg	SW846 6010A
Lead	2.8	0.33	mg/kg	SW846 6010A
Acenaphthene	650	360	ug/kg	SW846 8270B
Anthracene	410	360	ug/kg	SW846 8270B
Fluoranthene	410	360	ug/kg	SW846 8270B
Fluorene	1400	360	ug/kg	SW846 8270B
2-Methylnaphthalene	17000 E	360	ug/kg	SW846 8270B
2-Methylnaphthalene	17000 D	55	ug/kg	SW846 8270B
Naphthalene	7200 E	360	ug/kg	SW846 8270B
Naphthalene	5800 D	55	ug/kg	SW846 8270B
Phenanthrene	3200	360	ug/kg	SW846 8270B
Acetone	780	110	ug/kg	SW846 8260A
Ethylbenzene	310	27	ug/kg	SW846 8260A
Toluene	350	27	ug/kg	SW846 8260A
Xylenes (total)	8200 D	690	ug/kg	SW846 8260A
Xylenes (total)	5800 E	27	ug/kg	SW846 8260A
Percent Moisture	9.0	0.50	%	OCLP OLM03.1
NORTHWALL-FWT 03/12/98 13:01 002				
Diesel Range Organics	190000	1900	ug/kg	SW846 8015 MOD
Percent Moisture	10.0	0.50	%	OCLP OLM03.1
AWT-STOCKPILE 03/12/98 12:26 003				
Percent Moisture	8.5	0.50	%	OCLP OLM03.1

ANALYTICAL METHODS SUMMARY

I8C160174

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
% Moisture, Decanted-CLP	OCLP OLM03.1
Extractable Petroleum Hydrocarbons	SW846 8015 MOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Semivolatile Organic Compounds by GC/MS	SW846 8270B
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Volatile and Gasoline Range Organics (PID/FID)	SW846 8020/GRO
Volatile Organics by GC/MS	SW846 8260A

References:

- OCLP USEPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I8C160174

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIM
CFV7Q	001	BTM-TANK HOLE-FWT	03/12/98	13:35
CFV7R	002	NORTHWALL-FWT	03/12/98	13: []
CFV7T	003	AWT-STOCKPILE	03/12/98	12: []

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.



B.J. SERVICES COMPANY

Client Sample ID: BTM-TANK HOLE-FWT

GC Semivolatiles

Lot-Sample #....: I8C160174-001 Work Order #....: CFV7Q10K Matrix.....: SOLID
Date Sampled....: 03/12/98 13:35 Date Received...: 03/13/98
Prep Date.....: 03/28/98 Analysis Date...: 03/28/98
Prep Batch #....: 8091174 Analysis Time...: 12:42
Dilution Factor: 1
% Moisture.....: 9.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	2600000 E	1900	ug/kg	SW846 8015 MOD

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

TPH RESULT DETERMINED FROM GC/MS EXTRACT. RESULTS ARE ESTIMATED.

B.J. SERVICES COMPANY**Client Sample ID: BTM-TANK HOLE-FWT****GC/MS Semivolatiles**

Lot-Sample #....: I8C160174-001 Work Order #....: CFV7Q102 Matrix.....: SOLID
Date Sampled....: 03/12/98 13:35 Date Received...: 03/13/98
Prep Date.....: 03/19/98 Analysis Date...: 03/24/98
Prep Batch #....: 8078267 Analysis Time...: 19:41
Dilution Factor: 1
% Moisture.....: 9.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	650	360	ug/kg	SW846 8270B
Acenaphthylene	ND	360	ug/kg	SW846 8270B
Anthracene	410	360	ug/kg	SW846 8270B
Benz(a)anthracene	ND	360	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	360	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	360	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	360	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	360	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	ND	360	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	360	ug/kg	SW846 8270B
4-Chloroaniline	ND	360	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	360	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	360	ug/kg	SW846 8270B
2-Chlorophenol	ND	360	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	360	ug/kg	SW846 8270B
Chrysene	ND	360	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	360	ug/kg	SW846 8270B
Dibenzofuran	ND	360	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	360	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	360	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1800	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	360	ug/kg	SW846 8270B
Diethyl phthalate	ND	360	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	360	ug/kg	SW846 8270B
Dimethyl phthalate	ND	360	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1800	ug/kg	SW846 8270B

(Continued on next page)



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: BTM-TANK HOLE-FWT

GC/MS Semivolatiles

Lot-Sample #....: I8C160174-001 Work Order #....: CFV7Q102 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrophenol	ND	1800	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	360	ug/kg	SW846 8270B
Di-n-octyl phthalate	ND	360	ug/kg	SW846 8270B
Fluoranthene	410	360	ug/kg	SW846 8270B
Fluorene	1400	360	ug/kg	SW846 8270B
Hexachlorobenzene	ND	360	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	360	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1800	ug/kg	SW846 8270B
Hexachloroethane	ND	360	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg	SW846 8270B
Isophorone	ND	360	ug/kg	SW846 8270B
2-Methylnaphthalene	17000 E	360	ug/kg	SW846 8270B
2-Methylphenol	ND	360	ug/kg	SW846 8270B
4-Methylphenol	ND	360	ug/kg	SW846 8270B
Naphthalene	7200 E	360	ug/kg	SW846 8270B
2-Nitroaniline	ND	1800	ug/kg	SW846 8270B
3-Nitroaniline	ND	1800	ug/kg	SW846 8270B
4-Nitroaniline	ND	1800	ug/kg	SW846 8270B
Nitrobenzene	ND	360	ug/kg	SW846 8270B
2-Nitrophenol	ND	360	ug/kg	SW846 8270B
4-Nitrophenol	ND	1800	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	360	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	360	ug/kg	SW846 8270B
Pentachlorophenol	ND	1800	ug/kg	SW846 8270B
Phenanthrene	3200	360	ug/kg	SW846 8270B
Phenol	ND	360	ug/kg	SW846 8270B
Pyrene	ND	360	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	360	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	360	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	360	ug/kg	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	75	(25 - 121)
Phenol-d5	90	(24 - 113)
Nitrobenzene-d5	176 *	(23 - 120)
2-Fluorobiphenyl	78	(30 - 115)
2,4,6-Tribromophenol	106	(19 - 122)
Terphenyl-d14	90	(18 - 137)

NOTE(S):

* Surrogate recovery is outside stated control limits.

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

Surrogates outside acceptance criteria due to demonstrated matrix effect.

B.J. SERVICES COMPANY
Client Sample ID: BTM-TANK HOLE-FWT
GC/MS Semivolatiles

Lot-Sample #....: I8C160174-001 Work Order #....: CFV7Q202 Matrix.....: SOLID
 Date Sampled....: 03/12/98 13:35 Date Received...: 03/13/98
 Prep Date.....: 03/19/98 Analysis Date...: 03/25/98
 Prep Batch #....: 8078267 Analysis Time...: 17:09
 Dilution Factor: 5
 % Moisture.....: 9.0

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
2-Methylnaphthalene	17000 D	55	ug/kg SW846 8270B
Naphthalene	5800 D	55	ug/kg SW846 8270B
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
2-Fluorophenol	97 DIL	(25 - 121)	
Phenol-d5	129 DIL,*	(24 - 113)	
Nitrobenzene-d5	114 DIL	(23 - 120)	
2-Fluorobiphenyl	87 DIL	(30 - 115)	
2,4,6-Tribromophenol	86 DIL	(19 - 122)	
Terphenyl-d14	112 DIL	(18 - 137)	
	<u>RECOVERY</u>	<u>LIMITS</u>	

NOTE(S):

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

* 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.

B.J. SERVICES COMPANY
Client Sample ID: BTM-TANK HOLE-FWT
GC/MS Volatiles

Lot-Sample #....: I8C160174-001 Work Order #....: CFV7Q101 Matrix.....: SOLID
 Date Sampled...: 03/12/98 13:35 Date Received..: 03/13/98
 Prep Date.....: 03/20/98 Analysis Date..: 03/20/98
 Prep Batch #....: 8082293 Analysis Time..: 16:56
 Dilution Factor: 5
 % Moisture.....: 9.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	780	110	ug/kg	SW846 8260A
Benzene	ND	27	ug/kg	SW846 8260A
Bromodichloromethane	ND	27	ug/kg	SW846 8260A
Bromoform	ND	27	ug/kg	SW846 8260A
Bromomethane	ND	55	ug/kg	SW846 8260A
2-Butanone	ND	110	ug/kg	SW846 8260A
Carbon disulfide	ND	27	ug/kg	SW846 8260A
Carbon tetrachloride	ND	27	ug/kg	SW846 8260A
Chlorobenzene	ND	27	ug/kg	SW846 8260A
Chloroethane	ND	55	ug/kg	SW846 8260A
Chloroform	ND	27	ug/kg	SW846 8260A
Chloromethane	ND	55	ug/kg	SW846 8260A
Dibromochloromethane	ND	27	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	27	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	27	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	27	ug/kg	SW846 8260A
1,2-Dichloroethene (total)	ND	27	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	27	ug/kg	SW846 8260A
cis-1,3-Dichloropropene	ND	27	ug/kg	SW846 8260A
trans-1,3-Dichloropropene	ND	27	ug/kg	SW846 8260A
Ethylbenzene	310	27	ug/kg	SW846 8260A
2-Hexanone	ND	110	ug/kg	SW846 8260A
Methylene chloride	ND	27	ug/kg	SW846 8260A
4-Methyl-2-pentanone	ND	110	ug/kg	SW846 8260A
Styrene	ND	27	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	27	ug/kg	SW846 8260A
Tetrachloroethene	ND	27	ug/kg	SW846 8260A
Toluene	350	27	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	27	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	27	ug/kg	SW846 8260A
Trichloroethene	ND	27	ug/kg	SW846 8260A
Vinyl chloride	ND	55	ug/kg	SW846 8260A
Xylenes (total)	5800 E	27	ug/kg	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	149 *	(74 - 121)
Toluene-d8	91	(81 - 117)
Dibromofluoromethane	92	(80 - 120)

(Continued on next page)

B.J. SERVICES COMPANY

Client Sample ID: BTM-TANK HOLE-FWT

GC/MS Volatiles

Lot-Sample #....: I8C160174-001 Work Order #....: CFV7Q101 Matrix.....: SOLID

NOTE(S):

- Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

B.J. SERVICES COMPANY
Client Sample ID: BTM-TANK HOLE-FWT
GC/MS Volatiles

Lot-Sample #....: I8C160174-001 Work Order #....: CFV7Q201 Matrix.....: SOLID
 Date Sampled....: 03/12/98 13:35 Date Received...: 03/13/98
 Prep Date.....: 03/20/98 Analysis Date...: 03/20/98
 Prep Batch #....: 8082301 Analysis Time...: 21:56
 Dilution Factor: 1
 % Moisture.....: 9.0

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Xylenes (total)	8200 D	690	ug/kg	SW846 8260A
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
4-Bromofluorobenzene	112	(74 - 121)		
Toluene-d8	99	(81 - 117)		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

Dibromofluoromethane recovery is 97%.

B.J. SERVICES COMPANY
Client Sample ID: NORTHWALL-FWT
GC Semivolatiles

Lot-Sample #....: I8C160174-002 Work Order #....: CFV7R102 Matrix.....: SOLID
 Date Sampled....: 03/12/98 13:01 Date Received...: 03/13/98
 Prep Date.....: 03/18/98 Analysis Date...: 03/24/98
 Prep Batch #....: 8077245 Analysis Time...: 11:20
 Dilution Factor: 1
 % Moisture.....: 10

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
Diesel Range Organics	190000	1900	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		
o-Terphenyl	78	(40 - 144)		
Dotriacontane	82	(42 - 159)		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: AWT-STOCKPILE
GC Volatiles

Lot-Sample #....: I8C160174-003 Work Order #....: CFV7T103 Matrix.....: SOLID
 Date Sampled....: 03/12/98 12:26 Date Received...: 03/13/98
 Prep Date.....: 03/17/98 Analysis Date...: 03/17/98
 Prep Batch #....: 8078176 Analysis Time...: 12:39
 Dilution Factor: 1
 % Moisture.....: 8.5

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.1	ug/kg	SW846 8020/GRO
Toluene	ND	1.1	ug/kg	SW846 8020/GRO
Xylenes (total)	ND	1.1	ug/kg	SW846 8020/GRO
Ethylbenzene	ND	1.1	ug/kg	SW846 8020/GRO

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	98	(75 - 125)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: AWT-STOCKPILE

GC Volatiles.

Lot-Sample #....: I8C160174-003 Work Order #....: CFV7T103 Matrix.....: SOLID
 Date Sampled....: 03/12/98 12:26 Date Received...: 03/13/98
 Prep Date.....: 03/17/98 Analysis Date...: 03/17/98
 Prep Batch #....: 8078176 Analysis Time...: 12:39
 Dilution Factor: 1
 % Moisture.....: 8.5

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Benzene	ND	1.1	ug/kg	SW846 8020/GRO
Toluene	ND	1.1	ug/kg	SW846 8020/GRO
Xylenes (total)	ND	1.1	ug/kg	SW846 8020/GRO
Ethylbenzene	ND	1.1	ug/kg	SW846 8020/GRO

SURROGATE	PERCENT RECOVERY	RECOVERY		LIMITS
		LIMITS	(75 - 125)	
a,a,a-Trifluorotoluene (TFT)	98			

NOTE(S):

Results and reporting limits have been adjusted for dry weight.



B.J. SERVICES COMPANY

Client Sample ID: BTM-TANK HOLE-FWT

General Chemistry

Lot-Sample #....: I8C160174-001 Work Order #...: CFV7Q Matrix.....: SOLID
Date Sampled....: 03/12/98 13:35 Date Received..: 03/13/98
% Moisture.....: 9.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
Percent Moisture	9.0	0.50	%	OCLP OLM03.1	ANALYSIS DATE	BATCH #
	Dilution Factor: 1				03/19/98	8078260
	Analysis Time..: 00:00					

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: NORTHWALL-FWT

General Chemistry

Lot-Sample #....: I8C160174-002 Work Order #....: CFV7R Matrix.....: SOLID
 Date Sampled....: 03/12/98 13:01 Date Received..: 03/13/98
 % Moisture.....: 10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	10.0	0.50	%	OCLP OLM03.1	03/24/98	808320

Dilution Factor: 1
Analysis Time..: 14:00

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: AWT-STOCKPILE

General Chemistry

Lot-Sample #...: I8C160174-003 Work Order #...: CFV7T Matrix.....: SOLID
Date Sampled...: 03/12/98 12:26 Date Received..: 03/13/98
% Moisture.....: 8.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	8.5	0.50	%	OCLP OLM03.1	03/26-03/27/98	8086138
		Dilution Factor: 1				
		Analysis Time..:	08:00			

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: BTM-TANK HOLE-FWT

TOTAL Metals

Lot-Sample #....: I8C160174-001

Matrix.....: SOLID

Date Sampled...: 03/12/98 13:35 Date Received..: 03/13/98

% Moisture.....: 9.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 8076220						
Arsenic	1.2	1.1	mg/kg	SW846 6010A	03/17-03/18/98 CFV7Q107	
		Dilution Factor: 1				
		Analysis Time..: 13:13				
Barium	159	22.0	mg/kg	SW846 6010A	03/17-03/19/98 CFV7Q103	
		Dilution Factor: 1				
		Analysis Time..: 17:21				
Cadmium	ND	0.55	mg/kg	SW846 6010A	03/17-03/19/98 CFV7Q104	
		Dilution Factor: 1				
		Analysis Time..: 17:21				
Lead	2.8	0.33	mg/kg	SW846 6010A	03/17-03/18/98 CFV7Q108	
		Dilution Factor: 1				
		Analysis Time..: 13:13				
Chromium	3.0	1.1	mg/kg	SW846 6010A	03/17-03/19/98 CFV7Q105	
		Dilution Factor: 1				
		Analysis Time..: 17:21				
Selenium	ND	0.55	mg/kg	SW846 6010A	03/17-03/18/98 CFV7Q109	
		Dilution Factor: 1				
		Analysis Time..: 13:13				
Silver	ND	1.1	mg/kg	SW846 6010A	03/17-03/19/98 CFV7Q106	
		Dilution Factor: 1				
		Analysis Time..: 17:21				
Prep Batch #....: 8077239						
Mercury	ND	0.11	mg/kg	SW846 7471A	03/18-03/19/98 CFV7Q10A	
		Dilution Factor: 1				
		Analysis Time..: 12:54				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

QC DATA ASSOCIATION SUMMARY

I8C160174

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 6010A		8076220	8076087
	SOLID	OCLP OLM03.1		8078260	8078115
	SOLID	SW846 8015 MOD		8091174	
	SOLID	SW846 8270B		8078267	8078121
	SOLID	SW846 8260A		8082293	8082135
	SOLID	SW846 8260A		8082301	8082142
	SOLID	SW846 7471A		8077239	8077101
002	SOLID	OCLP OLM03.1		8083200	8083071
	SOLID	SW846 8015 MOD		8077245	8077106
003	SOLID	OCLP OLM03.1		8086138	8086032
	SOLID	SW846 8020/GRO		8078176	8078055

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: I8C160174
 MB Lot-Sample #: I8C180000-245

Analysis Date..: 03/24/98
 Dilution Factor: 1

Work Order #....: CFWVF101

Prep Date.....: 03/18/98
 Prep Batch #....: 8077245

Matrix.....: SOLID

Analysis Time..: 13:16

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Diesel Range Organics	ND	1700	ug/kg	SW846 8015 MOD
SURROGATE	PERCENT	RECOVERY	LIMITS	
o-Terphenyl	76	(40 - 144)		
Dotriacontane	87	(42 - 159)		

NOTE(S):

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

METHOD BLANK REPORT

GC/MS Semivolatiles

 Client Lot #...: I8C160174
 MB Lot-Sample #: I8C190000-267

Work Order #...: CFXPL101

Matrix.....: SOLID

 Analysis Date..: 03/24/98
 Dilution Factor: 1

 Prep Date.....: 03/19/98
 Prep Batch #: 8078267

Analysis Time..: 18:34

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270B
Acenaphthylene	ND	330	ug/kg	SW846 8270B
Anthracene	ND	330	ug/kg	SW846 8270B
Benz(a)anthracene	ND	330	ug/kg	SW846 8270B
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270B
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270B
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270B
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270B
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270B
bis(2-Chloroethyl) ether	ND	330	ug/kg	SW846 8270B
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270B
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270B
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270B
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270B
4-Chloroaniline	ND	330	ug/kg	SW846 8270B
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270B
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270B
2-Chlorophenol	ND	330	ug/kg	SW846 8270B
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270B
Chrysene	ND	330	ug/kg	SW846 8270B
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270B
Dibenzofuran	ND	330	ug/kg	SW846 8270B
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270B
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270B
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270B
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270B
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270B
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270B
Diethyl phthalate	ND	330	ug/kg	SW846 8270B
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270B
Dimethyl phthalate	ND	330	ug/kg	SW846 8270B
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	SW846 8270B
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270B
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270B
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: I8C160174

Work Order #....: CFXPL101

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270B
Fluoranthene	ND	330	ug/kg	SW846 8270B
Fluorene	ND	330	ug/kg	SW846 8270B
Hexachlorobenzene	ND	330	ug/kg	SW846 8270B
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270B
Hexachlorocyclopentadiene	ND	1600	ug/kg	SW846 8270B
Hexachloroethane	ND	330	ug/kg	SW846 8270B
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270B
Isophorone	ND	330	ug/kg	SW846 8270B
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270B
2-Methylphenol	ND	330	ug/kg	SW846 8270B
4-Methylphenol	ND	330	ug/kg	SW846 8270B
Naphthalene	ND	330	ug/kg	SW846 8270B
2-Nitroaniline	ND	1600	ug/kg	SW846 8270B
3-Nitroaniline	ND	1600	ug/kg	SW846 8270B
4-Nitroaniline	ND	1600	ug/kg	SW846 8270B
Nitrobenzene	ND	330	ug/kg	SW846 8270B
2-Nitrophenol	ND	330	ug/kg	SW846 8270B
4-Nitrophenol	ND	1600	ug/kg	SW846 8270B
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270B
N-Nitrosodi-n-propylamine	ND	330	ug/kg	SW846 8270B
Pentachlorophenol	ND	1600	ug/kg	SW846 8270B
Phenanthrene	ND	330	ug/kg	SW846 8270B
Phenol	ND	330	ug/kg	SW846 8270B
Pyrene	ND	330	ug/kg	SW846 8270B
1,2,4-Trichlorobenzene	ND	330	ug/kg	SW846 8270B
2,4,5-Trichlorophenol	ND	330	ug/kg	SW846 8270B
2,4,6-Trichlorophenol	ND	330	ug/kg	SW846 8270B
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
		(25 - 121)	(24 - 113)	(23 - 120)
2-Fluorophenol	74			
Phenol-d5	82			
Nitrobenzene-d5	85			
2-Fluorobiphenyl	68			
2,4,6-Tribromophenol	67			
Terphenyl-d14	88			

NOTE(S):

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

225



Environmental
Services

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: I8C160174
MB Lot-Sample #: I8C190000-176

Work Order #....: CFX3K101

Matrix.....: SOLID

Analysis Date...: 03/17/98
Dilution Factor: 1

Prep Date.....: 03/17/98
Prep Batch #: 8078176

Analysis Time..: 11:58

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/kg
Toluene	ND	1.0	ug/kg
Xylenes (total)	ND	1.0	ug/kg
Ethylbenzene	ND	1.0	ug/kg

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
a,a,a-Trifluorotoluene (TFT)	100	(75 - 125)

NOTE(S):

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: I8C160174

MB Lot-Sample #: I8C230000-293

Work Order #...: CG1RH101

Matrix.....: SOLID

Analysis Date..: 03/20/98

Prep Date.....: 03/20/98

Analysis Time..: 12:34

Dilution Factor: 1

Prep Batch #: 8082293

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acetone	ND	20	ug/kg	SW846 8260A
Benzene	ND	5.0	ug/kg	SW846 8260A
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260A
Bromoform	ND	5.0	ug/kg	SW846 8260A
Bromomethane	ND	10	ug/kg	SW846 8260A
2-Butanone	ND	20	ug/kg	SW846 8260A
Carbon disulfide	ND	5.0	ug/kg	SW846 8260A
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260A
Chlorobenzene	ND	5.0	ug/kg	SW846 8260A
Chloroethane	ND	10	ug/kg	SW846 8260A
Chloroform	ND	5.0	ug/kg	SW846 8260A
Chloromethane	ND	10	ug/kg	SW846 8260A
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260A
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260A
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260A
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260A
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260A
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260A
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260A
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260A
Ethylbenzene	ND	5.0	ug/kg	SW846 8260A
2-Hexanone	ND	20	ug/kg	SW846 8260A
Methylene chloride	ND	5.0	ug/kg	SW846 8260A
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260A
Styrene	ND	5.0	ug/kg	SW846 8260A
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260A
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260A
Toluene	ND	5.0	ug/kg	SW846 8260A
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260A
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260A
Trichloroethene	ND	5.0	ug/kg	SW846 8260A
Vinyl chloride	ND	10	ug/kg	SW846 8260A
Xylenes (total)	ND	5.0	ug/kg	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	102	(74 - 121)
Toluene-d8	96	(81 - 117)
Dibromofluoromethane	93	(80 - 120)

NOTE(S):

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



Environmental
Services

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: I8C160174 Work Order #....: CG1RV101 Matrix.....: SOLID
MB Lot-Sample #: I8C230000-301

Analysis Date...: 03/20/98 Prep Date.....: 03/20/98 Analysis Time..: 21:23
Dilution Factor: 125 Prep Batch #....: 8082301

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Xylenes (total)	ND	78000	ug/kg	SW846 8260A
<hr/>				
SURROGATE	PERCENT	RECOVERY		
4-Bromofluorobenzene	RECOVERY	LIMITS		
4-Bromofluorobenzene	110	(74 - 121)		
Toluene-d8	102	(81 - 117)		

NOTE(S):

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

Dibromofluoromethane recovery is 101%.

METHOD BLANK REPORT
TOTAL Metals
Client Lot #...: I8C160174
Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>ANALYSIS DATE</u>	<u>ORDER #</u>
MB Lot-Sample #: I8C170000-220 Prep Batch #...: 8076220						
Arsenic	ND	1.0	mg/kg	SW846 6010A	03/17-03/18/98	CFVWA102
		Dilution Factor: 1				
		Analysis Time..: 12:43				
Barium	ND	20.0	mg/kg	SW846 6010A	03/17-03/19/98	CFVWA10N
		Dilution Factor: 1				
		Analysis Time..: 16:48				
Cadmium	ND	0.50	mg/kg	SW846 6010A	03/17-03/19/98	CFVWA10R
		Dilution Factor: 1				
		Analysis Time..: 16:48				
Lead	ND	0.30	mg/kg	SW846 6010A	03/17-03/18/98	CFVWA103
		Dilution Factor: 1				
		Analysis Time..: 12:43				
Chromium	ND	1.0	mg/kg	SW846 6010A	03/17-03/19/98	CFVWA101
		Dilution Factor: 1				
		Analysis Time..: 16:48				
Selenium	ND	0.50	mg/kg	SW846 6010A	03/17-03/18/98	CFVWA10V
		Dilution Factor: 1				
		Analysis Time..: 12:43				
Silver	ND	1.0	mg/kg	SW846 6010A	03/17-03/19/98	CFVWA10U
		Dilution Factor: 1				
		Analysis Time..: 16:48				
MB Lot-Sample #: I8C180000-239 Prep Batch #...: 8077239						
Mercury	ND	0.10	mg/kg	SW846 7471A	03/18-03/19/98	CFWTX101
		Dilution Factor: 1				
		Analysis Time..: 12:12				

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: I8C160174 Work Order #...: CFWVF102 Matrix.....: SOLID
LCS Lot-Sample#: I8C180000-245
Prep Date.....: 03/18/98 Analysis Date...: 03/24/98
Prep Batch #...: 8077245 Analysis Time...: 01:54
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	PERCENT <u>UNITS</u> RECOVERY	METHOD
Diesel Range Organics	33000	31000	ug/kg	93
SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS	
o-Terphenyl		82	(40 - 144)	
Dotriacontane		91	(42 - 159)	

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 #....: I8C160174 **Work Order #....:** CFWVF102 **Matrix.....:** SOLID
LCS Lot-Sample#: I8C180000-245
Prep Date.....: 03/18/98 **Analysis Date...:** 03/24/98
Prep Batch #....: 8077245 **Analysis Time...:** 01:54
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Diesel Range Organics	93	(38 - 139)	SW846 8015 MOD
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
o-Terphenyl	82	(40 - 144)	
Dotriacontane	91	(42 - 159)	

NOTE(S):

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: I8C160174 Work Order #....: CFXPL102 Matrix.....: SOLID
LCS Lot-Sample#: I8C190000-267
Prep Date.....: 03/19/98 Analysis Date...: 03/24/98
Prep Batch #....: 8078267 Analysis Time...: 19:07
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Phenol	5000	3900	ug/kg	78	SW846 8270B
2-Chlorophenol	5000	3800	ug/kg	76	SW846 8270B
1,4-Dichlorobenzene	3300	2400	ug/kg	72	SW846 8270B
N-Nitrosodi-n-propylamine	3300	2800	ug/kg	85	SW846 8270B
1,2,4-Trichlorobenzene	3300	2200	ug/kg	65	SW846 8270B
4-Chloro-3-methylphenol	5000	4000	ug/kg	81	SW846 8270B
Acenaphthene	3300	2400	ug/kg	71	SW846 8270B
4-Nitrophenol	5000	4400	ug/kg	88	SW846 8270B
2,4-Dinitrotoluene	3300	2500	ug/kg	76	SW846 8270B
Pentachlorophenol	5000	3200	ug/kg	64	SW846 8270B
Pyrene	3300	3000	ug/kg	91	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	75	(25 - 121)
Phenol-d5	84	(24 - 113)
Nitrobenzene-d5	87	(23 - 120)
2-Fluorobiphenyl	67	(30 - 115)
2,4,6-Tribromophenol	83	(19 - 122)
Terphenyl-d14	91	(18 - 137)

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 Semivolatiles

Client Lot #....: I8C160174 Work Order #....: CFXPL102 Matrix.....: SOLID
LCS Lot-Sample#: I8C190000-267
Prep Date.....: 03/19/98 Analysis Date...: 03/24/98
Prep Batch #:....: 8078267 Analysis Time...: 19:07
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Phenol	78	(36 - 105)	SW846 8270B
2-Chlorophenol	76	(35 - 109)	SW846 8270B
1,4-Dichlorobenzene	72	(32 - 107)	SW846 8270B
N-Nitrosodi-n-propylamine	85	(34 - 117)	SW846 8270B
1,2,4-Trichlorobenzene	65	(30 - 113)	SW846 8270B
4-Chloro-3-methylphenol	81	(40 - 111)	SW846 8270B
Acenaphthene	71	(37 - 114)	SW846 8270B
4-Nitrophenol	88	(49 - 107)	SW846 8270B
2,4-Dinitrotoluene	76	(46 - 104)	SW846 8270B
Pentachlorophenol	64	(29 - 106)	SW846 8270B
Pyrene	91	(51 - 134)	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	75	(25 - 121)
Phenol-d5	84	(24 - 113)
Nitrobenzene-d5	87	(23 - 120)
2-Fluorobiphenyl	67	(30 - 115)
2,4,6-Tribromophenol	83	(19 - 122)
Terphenyl-d14	91	(18 - 137)

NOTE(S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: I8C160174 Work Order #....: CFX3K102 Matrix.....: SOLID
LCS Lot-Sample#: I8C190000-176
Prep Date.....: 03/17/98 Analysis Date...: 03/17/98
Prep Batch #....: 8078176 Analysis Time...: 10:37
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
Xylenes (total)	120	120	ug/kg	102	SW846 8020/G
Benzene	20	20	ug/kg	99	SW846 8020/G
Toluene	60	61	ug/kg	102	SW846 8020/G
Ethylbenzene	20	21	ug/kg	104	SW846 8020/G

SURROGATE	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	93	(75 - 125)

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT**GC Volatiles**

Client Lot #....: I8C160174 Work Order #....: CFX3K102 Matrix.....: SOLID
LCS Lot-Sample#: I8C190000-176
Prep Date.....: 03/17/98 Analysis Date...: 03/17/98
Prep Batch #....: 8078176 Analysis Time...: 10:37
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Xylenes (total)	102	(85 - 115)	SW846 8020/GRO
Benzene	99	(85 - 115)	SW846 8020/GRO
Toluene	102	(85 - 115)	SW846 8020/GRO
Ethylbenzene	104	(85 - 115)	SW846 8020/GRO

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	93	(75 - 125)

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8C160174 Work Order #....: CG1RH102 Matrix.....: SOLID
LCS Lot-Sample#: I8C230000-293
Prep Date.....: 03/20/98 Analysis Date...: 03/20/98
Prep Batch #....: 8082293 Analysis Time...: 12:02
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
1,1-Dichloroethene	50	45	ug/kg	90	SW846 8260A
Trichloroethene	50	43	ug/kg	85	SW846 8260A
Benzene	50	47	ug/kg	95	SW846 8260A
Toluene	50	49	ug/kg	98	SW846 8260A
Chlorobenzene	50	49	ug/kg	98	SW846 8260A

SURROGATE	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
4-Bromofluorobenzene	104	(74 - 121)
Toluene-d8	98	(81 - 117)
Dibromofluoromethane	96	(80 - 120)

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 #....: I8C160174 **Work Order #....:** CG1RH102 **Matrix.....:** SOLID
LCS Lot-Sample#: I8C230000-293
Prep Date.....: 03/20/98 **Analysis Date...:** 03/20/98
Prep Batch #....: 8082293 **Analysis Time...:** 12:02
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	90	(67 - 126)	SW846 8260A
Trichloroethene	85	(66 - 116)	SW846 8260A
Benzene	95	(78 - 113)	SW846 8260A
Toluene	98	(80 - 119)	SW846 8260A
Chlorobenzene	98	(82 - 117)	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	104	(74 - 121)
Toluene-d8	98	(81 - 117)
Dibromofluoromethane	96	(80 - 120)

NOTE(S):

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

Bold print denotes control parameters



Environmental
Services

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8C160174 Work Order #....: CG1RV102 Matrix.....: SOLID
LCS Lot-Sample#: I8C230000-301
Prep Date.....: 03/20/98 Analysis Date...: 03/20/98
Prep Batch #....: 8082301 Analysis Time...: 20:50
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	6200	5300	ug/kg	85	SW846 8260A
Trichloroethene	6200	6200	ug/kg	99	SW846 8260A
Benzene	6200	6500	ug/kg	104	SW846 8260A
Toluene	6200	7200	ug/kg	115	SW846 8260A
Chlorobenzene	6200	7200	ug/kg	116	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	111	(74 - 121)
Toluene-d8	104	(81 - 117)

NOTE(S):

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

Bold print denotes control parameters

Dibromofluoromethane recovery is 103 %.

LABORATORY CONTROL SAMPLE EVALUATION REPORT
GC/MS Volatiles

Client Lot #....: I8C160174 Work Order #....: CG1RV102 Matrix.....: SOLID
 LCS Lot-Sample#: I8C230000-301
 Prep Date.....: 03/20/98 Analysis Date...: 03/20/98
 Prep Batch #....: 8082301 Analysis Time...: 20:50
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,1-Dichloroethene	85	(67 - 126)	SW846 8260A
Trichloroethene	99	(66 - 116)	SW846 8260A
Benzene	104	(78 - 113)	SW846 8260A
Toluene	115	(80 - 119)	SW846 8260A
Chlorobenzene	116	(82 - 117)	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	111	(74 - 121)	
Toluene-d8	104	(81 - 117)	

NOTE(S):

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

Bold print denotes control parameters

Dibromofluoromethane recovery is 103%.

LABORATORY CONTROL SAMPLE DATA REPORT
TOTAL Metals
Client Lot #....: I8C160174
Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: I8C170000-220 Prep Batch #...: 8076220						
Chromium	20.0	21.3	mg/kg	107	SW846 6010A	03/17-03/19/98 CFVWA107
Dilution Factor: 1						
Analysis Time..: 16:50						
Arsenic	200	204	mg/kg	102	SW846 6010A	03/17-03/18/98 CFVWA108
Dilution Factor: 1						
Analysis Time..: 12:48						
Lead	50.0	52.2	mg/kg	104	SW846 6010A	03/17-03/18/98 CFVWA109
Dilution Factor: 1						
Analysis Time..: 12:48						
Silver	5.0	4.1	mg/kg	82	SW846 6010A	03/17-03/20/98 CFVWA11C
Dilution Factor: 1						
Analysis Time..: 15:35						
Selenium	200	193	mg/kg	97	SW846 6010A	03/17-03/18/98 CFVWA11D
Dilution Factor: 1						
Analysis Time..: 12:48						
Barium	200	210	mg/kg	105	SW846 6010A	03/17-03/19/98 CFVWA116
Dilution Factor: 1						
Analysis Time..: 16:50						
Cadmium	5.0	5.4	mg/kg	108	SW846 6010A	03/17-03/19/98 CFVWA119
Dilution Factor: 1						
Analysis Time..: 16:50						
LCS Lot-Sample#: I8C180000-239 Prep Batch #...: 8077239						
Mercury	0.42	0.41	mg/kg	98	SW846 7471A	03/18-03/19/98 CFWTX102
Dilution Factor: 1						
Analysis Time..: 12:14						

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT
TOTAL Metals
Client Lot #....: I8C160174

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: I8C170000-220			Prep Batch #....: 8076220		
Chromium	107	(80 - 120)	SW846 6010A	03/17-03/19/98	CFVWA107
		Dilution Factor: 1			
		Analysis Time..: 16:50			
Arsenic	102	(80 - 120)	SW846 6010A	03/17-03/18/98	CFVWA108
		Dilution Factor: 1			
		Analysis Time..: 12:48			
Lead	104	(80 - 120)	SW846 6010A	03/17-03/18/98	CFVWA109
		Dilution Factor: 1			
		Analysis Time..: 12:48			
Silver	82	(80 - 120)	SW846 6010A	03/17-03/20/98	CFVWA11C
		Dilution Factor: 1			
		Analysis Time..: 15:35			
Selenium	97	(80 - 120)	SW846 6010A	03/17-03/18/98	CFVWA11D
		Dilution Factor: 1			
		Analysis Time..: 12:48			
Barium	105	(80 - 120)	SW846 6010A	03/17-03/19/98	CFVWA116
		Dilution Factor: 1			
		Analysis Time..: 16:50			
Cadmium	108	(80 - 120)	SW846 6010A	03/17-03/19/98	CFVWA119
		Dilution Factor: 1			
		Analysis Time..: 16:50			
LCS Lot-Sample#: I8C180000-239			Prep Batch #....: 8077239		
Mercury	98	(81 - 120)	SW846 7471A	03/18-03/19/98	CFWTX102
		Dilution Factor: 1			
		Analysis Time..: 12:14			

NOTE(S):

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



Environmental
Services

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: I8C160174

Matrix.....: SOLID

Date Sampled...: 03/12/98 09:55 Date Received..: 03/13/98

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: I8B200136-033 Prep Batch #...: 8076220									
Arsenic									
	ND	233	202	mg/kg	87		SW846 6010A	03/17-03/18/98	CFG2310C
	ND	233	206	mg/kg	88	1.8	SW846 6010A	03/17-03/18/98	CFG2310F
	Dilution Factor: 1								
	Analysis Time.: 13:03								
Barium									
	35.2	200	240	mg/kg	102		SW846 6010A	03/17-03/19/98	CFG2311N
	35.2	200	236	mg/kg	101	1.5	SW846 6010A	03/17-03/19/98	CFG2311P
	Dilution Factor: 1								
	Analysis Time.: 16:58								
Cadmium									
	ND	5.0	5.0	mg/kg	100		SW846 6010A	03/17-03/19/98	CFG23120
	ND	5.0	4.7	mg/kg	94	6.1	SW846 6010A	03/17-03/19/98	CFG23121
	Dilution Factor: 1								
	Analysis Time.: 16:58								
Chromium									
	12.6	23.3	35.1	mg/kg	97		SW846 6010A	03/17-03/19/98	CFG23108
	12.6	23.3	32.5	mg/kg	86	7.9	SW846 6010A	03/17-03/19/98	CFG23109
	Dilution Factor: 1								
	Analysis Time.: 16:58								
Lead									
	4.7	58.1	58.2	mg/kg	92		SW846 6010A	03/17-03/18/98	CFG2310J
	4.7	58.1	58.7	mg/kg	93	0.84	SW846 6010A	03/17-03/18/98	CFG2310L
	Dilution Factor: 1								
	Analysis Time.: 13:03								
Selenium									
	ND	233	198	mg/kg	85		SW846 6010A	03/17-03/18/98	CFG23129
	ND	233	199	mg/kg	86	0.74	SW846 6010A	03/17-03/18/98	CFG2312A
	Dilution Factor: 1								
	Analysis Time.: 13:03								
Silver									
	ND	5.8	5.1	mg/kg	88		SW846 6010A	03/17-03/19/98	CFG23126
	ND	5.8	4.8	mg/kg	82	7.1	SW846 6010A	03/17-03/19/98	CFG23127
	Dilution Factor: 1								
	Analysis Time.: 16:58								

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 DATA REPORT

TOTAL Metals

Client Lot #...: I8C160174

Matrix.....: SOLID

Date Sampled...: 03/12/98 09:55 Date Received..: 03/13/98

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION-	WORK			
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD					
MS Lot-Sample #: I8C160125-009 Prep Batch #...: 8077239											
Mercury											
ND	0.083	0.10	mg/kg	105	SW846	7471A	03/18-03/19/98	CFTVN10R			
ND	0.083	0.11	mg/kg	107	1.4	SW846	7471A	03/18-03/19/98	CFTVN10T		
Dilution Factor: 1											
Analysis Time.: 12:18											

NOTE(S):

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



Environmental
Services

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: I8C160174

Matrix.....: SOLID

Date Sampled...: 03/12/98 09:55 Date Received...: 03/13/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: I8B200136-033 Prep Batch #...: 8076220							
Arsenic	87	(80 - 120)			SW846 6010A	03/17-03/18/98	CFG2310C
	88	(80 - 120) 1.8	(0-20)		SW846 6010A	03/17-03/18/98	CFG2310F
Dilution Factor: 1							
Analysis Time..: 13:03							
Barium	102	(80 - 120)			SW846 6010A	03/17-03/19/98	CFG2311N
	101	(80 - 120) 1.5	(0-20)		SW846 6010A	03/17-03/19/98	CFG2311P
Dilution Factor: 1							
Analysis Time..: 16:58							
Cadmium	100	(80 - 120)			SW846 6010A	03/17-03/19/98	CFG23120
	94	(80 - 120) 6.1	(0-20)		SW846 6010A	03/17-03/19/98	CFG23121
Dilution Factor: 1							
Analysis Time..: 16:58							
Chromium	97	(80 - 120)			SW846 6010A	03/17-03/19/98	CFG23108
	86	(80 - 120) 7.9	(0-20)		SW846 6010A	03/17-03/19/98	CFG23109
Dilution Factor: 1							
Analysis Time..: 16:58							
Lead	92	(80 - 120)			SW846 6010A	03/17-03/18/98	CFG2310J
	93	(80 - 120) 0.84	(0-20)		SW846 6010A	03/17-03/18/98	CFG2310L
Dilution Factor: 1							
Analysis Time..: 13:03							
Selenium	85	(80 - 120)			SW846 6010A	03/17-03/18/98	CFG23129
	86	(80 - 120) 0.74	(0-20)		SW846 6010A	03/17-03/18/98	CFG2312A
Dilution Factor: 1							
Analysis Time..: 13:03							
Silver	88	(80 - 120)			SW846 6010A	03/17-03/19/98	CFG23126
	82	(80 - 120) 7.1	(0-20)		SW846 6010A	03/17-03/19/98	CFG23127
Dilution Factor: 1							
Analysis Time..: 16:58							

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 #....: I8C160174

Date Sampled...: 03/12/98 09:55 Date Received...: 03/13/98

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: I8C160125-009 Prep Batch #...: 8077239							
Mercury	105	(75 - 125)			SW846 7471A	03/18-03/19/98 CFTVN10R	
	107	(75 - 125) 1.4 (0-20)			SW846 7471A	03/18-03/19/98 CFTVN10T	

Dilution Factor: 1
Analysis Time...: 12:18

NOTE(S):

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

MATRIX SPIKE SAMPLE DATA REPORT
GC/MS Semivolatiles

Client Lot #....: I8C160174 Work Order #....: CFV7Q10F-MS Matrix.....: SOLID
 MS Lot-Sample #: I8C160174-001 CFV7Q10G-MSD
 Date Sampled....: 03/12/98 13:35 Date Received...: 03/13/98
 Prep Date.....: 03/19/98 Analysis Date...: 03/24/98
 Prep Batch #....: 8078267 Analysis Time...: 20:14
 Dilution Factor: 1 % Moisture.....: 9.0

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
Acenaphthene	650	3700	3100	ug/kg	66		SW846 8270B
	650	3700	3200	ug/kg	70	4.1	SW846 8270B
4-Chloro-3-methylphenol	ND	5500	3500	ug/kg	63		SW846 8270B
	ND	5500	3300	ug/kg	60	5.0	SW846 8270B
2-Chlorophenol	ND	5500	3800	ug/kg	69		SW846 8270B
	ND	5500	4200	ug/kg	76	9.6	SW846 8270B
1,4-Dichlorobenzene	ND	3700	2300	ug/kg	63		SW846 8270B
	ND	3700	2700	ug/kg	73	14	SW846 8270B
2,4-Dinitrotoluene	ND	3700	1900	ug/kg	51		SW846 8270B
	ND	3700	2000	ug/kg	55	8.7	SW846 8270B
4-Nitrophenol	ND	5500	4500	ug/kg	81		SW846 8270B
	ND	5500	4600	ug/kg	83	2.5	SW846 8270B
N-Nitrosodi-n-propylamine	ND	3700	3400	ug/kg	92		SW846 8270B
	ND	3700	3900	ug/kg	106	14	SW846 8270B
Pentachlorophenol	ND	5500	4300	ug/kg	78		SW846 8270B
	ND	5500	4200	ug/kg	77	1.7	SW846 8270B
Phenol	ND	5500	4800	ug/kg	87		SW846 8270B
	ND	5500	5100	ug/kg	93	7.4	SW846 8270B
Pyrene	ND	3700	3100	ug/kg	77		SW846 8270B
	ND	3700	3300	ug/kg	82	5.7	SW846 8270B
1,2,4-Trichlorobenzene	ND	3700	4800	ug/kg	130		SW846 8270B
	Qualifiers: a, MSC						
	ND	3700	5400	ug/kg	149	14	SW846 8270B
	Qualifiers: a, MSC						

SURROGATE	PERCENT		LIMITS
	RECOVERY	LIMITS	
2-Fluorophenol	74		(25 - 121)
	86		(25 - 121)
Phenol-d5	94		(24 - 113)
	99		(24 - 113)
Nitrobenzene-d5	162 *		(23 - 120)
	190 *		(23 - 120)
2-Fluorobiphenyl	78		(30 - 115)
	80		(30 - 115)
2,4,6-Tribromophenol	107		(19 - 122)
	107		(19 - 122)
Terphenyl-d14	93		(18 - 137)
	93		(18 - 137)

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: I8C160174 **Work Order #....:** CFV7Q10F-MS **Matrix.....:** SOLID
MS Lot-Sample #: I8C160174-001 CFV7Q10G-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
------------------	-----------------------------	----------------------------

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.

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

Surrogates outside acceptance criteria due to demonstrated matrix effect.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: I8C160174 Work Order #....: CFV7Q10F-MS Matrix.....: SOLID
 MS Lot-Sample #: I8C160174-001 CFV7Q10G-MSD
 Date Sampled...: 03/12/98 13:35 Date Received..: 03/13/98
 Prep Date.....: 03/19/98 Analysis Date..: 03/24/98
 Prep Batch #....: 8078267 Analysis Time..: 20:14
 Dilution Factor: 1 % Moisture.....: 9.0

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	66	(49 - 108)			SW846 8270B
	70	(49 - 108)	4.1	(0-27)	SW846 8270B
4-Chloro-3-methylphenol	63	(53 - 109)			SW846 8270B
	60	(53 - 109)	5.0	(0-25)	SW846 8270B
2-Chlorophenol	69	(44 - 99)			SW846 8270B
	76	(44 - 99)	9.6	(0-30)	SW846 8270B
1,4-Dichlorobenzene	63	(41 - 93)			SW846 8270B
	73	(41 - 93)	14	(0-36)	SW846 8270B
2,4-Dinitrotoluene	51	(40 - 112)			SW846 8270B
	55	(40 - 112)	8.7	(0-34)	SW846 8270B
4-Nitrophenol	81	(42 - 117)			SW846 8270B
	83	(42 - 117)	2.5	(0-29)	SW846 8270B
N-Nitrosodi-n-propylamine	92	(44 - 106)			SW846 8270B
	106	(44 - 106)	14	(0-32)	SW846 8270B
Pentachlorophenol	78	(1.0- 127)			SW846 8270B
	77	(1.0- 127)	1.7	(0-96)	SW846 8270B
Phenol	87	(40 - 103)			SW846 8270B
	93	(40 - 103)	7.4	(0-30)	SW846 8270B
Pyrene	77	(51 - 125)			SW846 8270B
	82	(51 - 125)	5.7	(0-36)	SW846 8270B
1,2,4-Trichlorobenzene	130 a, MSC	(42 - 101)			SW846 8270B
	149 a, MSC	(42 - 101)	14	(0-32)	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	74	(25 - 121)
	86	(25 - 121)
Phenol-d5	94	(24 - 113)
	99	(24 - 113)
Nitrobenzene-d5	162 *	(23 - 120)
	190 *	(23 - 120)
2-Fluorobiphenyl	78	(30 - 115)
	80	(30 - 115)
2,4,6-Tribromophenol	107	(19 - 122)
	107	(19 - 122)
Terphenyl-d14	93	(18 - 137)
	93	(18 - 137)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: I8C160174 **Work Order #....:** CFV7Q10F-MS **Matrix.....:** SOLID
MS Lot-Sample #: I8C160174-001 CFV7Q10G-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
------------------	-----------------------------	----------------------------

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.

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

Surrogates outside acceptance criteria due to demonstrated matrix effect.

MATRIX SPIKE SAMPLE DATA REPORT**GC/MS Volatiles**

Client Lot #....: I8C160174 Work Order #....: CFV7Q10H-MS Matrix.....: SOLID
MS Lot-Sample #: I8C160174-001 CFV7Q10J-MSD
Date Sampled...: 03/12/98 13:35 Date Received..: 03/13/98
Prep Date.....: 03/20/98 Analysis Date..: 03/20/98
Prep Batch #....: 8082301 Analysis Time..: 23:01
Dilution Factor: 1 % Moisture.....: 9.0

<u>PARAMETER</u>	<u>SAMPLE SPIKE MEASRD</u>				<u>PERCENT</u>		
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
1,1-Dichloroethene	6900	5800	ug/kg	84		SW846	8260A
	6900	5800	ug/kg	84	0.03	SW846	8260A
Trichloroethene	6900	6500	ug/kg	95		SW846	8260A
	6900	6600	ug/kg	96	0.99	SW846	8260A
Benzene	6900	7000	ug/kg	102		SW846	8260A
	6900	7000	ug/kg	102	0.24	SW846	8260A
Toluene	6900	7900	ug/kg	115		SW846	8260A
	6900	7900	ug/kg	116	0.82	SW846	8260A
Chlorobenzene	6900	7600	ug/kg	111		SW846	8260A
	6900	7600	ug/kg	110	0.43	SW846	8260A

<u>SURROGATE</u>	<u>PERCENT</u>		<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	106	(74 - 121)	
	111	(74 - 121)	
Toluene-d8	100	(81 - 117)	
	101	(81 - 117)	

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.

Dibromofluoromethane recovery is 102%.

Dibromofluoromethane recovery is 99%.

25

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: I8C160174 **Work Order #....:** CFV7Q10H-MS **Matrix.....:** SOLID
MS Lot-Sample #: I8C160174-001 **CFV7Q10J-MSD**
Date Sampled....: 03/12/98 13:35 **Date Received...:** 03/13/98
Prep Date.....: 03/20/98 **Analysis Date...:** 03/20/98
Prep Batch #....: 8082301 **Analysis Time..:** 23:01
Dilution Factor: 1 **% Moisture.....:** 9.0

PARAMETER	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	RECOVERY	LIMITS			
1,1-Dichloroethene	84	(69 - 122)	0.03	(0-15)	SW846 8260A
	84	(69 - 122)			SW846 8260A
Trichloroethene	95	(50 - 130)	0.99	(0-18)	SW846 8260A
	96	(50 - 130)			SW846 8260A
Benzene	102	(74 - 120)	0.24	(0-13)	SW846 8260A
	102	(74 - 120)			SW846 8260A
Toluene	115	(76 - 126)	0.82	(0-33)	SW846 8260A
	116	(76 - 126)			SW846 8260A
Chlorobenzene	111	(78 - 121)	0.43	(0-13)	SW846 8260A
	110	(78 - 121)			SW846 8260A

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
4-Bromofluorobenzene	106	(74 - 121)
	111	(74 - 121)
Toluene-d8	100	(81 - 117)
	101	(81 - 117)

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.

Dibromofluoromethane recovery is 102%.

Dibromofluoromethane recovery is 99%.

MATRIX SPIKE SAMPLE DATA REPORT
GC Semivolatiles

Client Lot #....: I8C160174 **Work Order #....:** CFV7R104-MS **Matrix.....:** SOLID
MS Lot-Sample #: I8C160174-002 CFV7R105-MSD
Date Sampled....: 03/12/98 13:01 **Date Received...:** 03/13/98
Prep Date.....: 03/18/98 **Analysis Date...:** 03/24/98
Prep Batch #....: 8077245 **Analysis Time...:** 11:59
Dilution Factor: 1 **% Moisture.....:** 10

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	
Diesel Range Organics	190000	37000	200000	ug/kg	26		SW846 8015 MOD
	190000	37000	230000	ug/kg	116	16	SW846 8015 MOD

SURROGATE	PERCENT		RECOVERY	LIMITS
	RECOVERY	LIMITS		
o-Terphenyl	84	0	(40 - 144)	
	90	0	(40 - 144)	
Dotriacontane	89	0	(42 - 159)	
	96	0	(42 - 159)	

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

GC Semivolatiles

Client Lot #....: I8C160174 Work Order #....: CFV7R104-MS Matrix.....: SOLID
 MS Lot-Sample #: I8C160174-002 CFV7R105-MSD
 Date Sampled...: 03/12/98 13:01 Date Received..: 03/13/98
 Prep Date.....: 03/18/98 Analysis Date...: 03/24/98
 Prep Batch #....: 8077245 Analysis Time...: 11:59
 Dilution Factor: 1 % Moisture.....: 10

PARAMETER	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	RECOVERY	LIMITS			
Diesel Range Organics	26 a 116	(40 - 126) (40 - 126)	16	(0-30)	SW846 8015 MOD SW846 8015 MOD

SURROGATE	PERCENT	RECOVERY	LIMITS
	RECOVERY	LIMITS	
o-Terphenyl	84	(40 - 144)	
	90	(40 - 144)	
Dotriacontane	89	(42 - 159)	
	96	(42 - 159)	

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.



Environmental
Services

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: I8C160174 Work Order #....: CFV7T104-MS Matrix.....: SOLID
MS Lot-Sample #: I8C160174-003 CFV7T105-MSD
Date Sampled...: 03/12/98 12:26 Date Received..: 03/13/98
Prep Date.....: 03/17/98 Analysis Date..: 03/17/98
Prep Batch #....: 8078176 Analysis Time..: 13:19
Dilution Factor: 1 % Moisture.....: 8.5

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT			METHOD
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD		
Benzene	ND	22	22	ug/kg	102			SW846 8020/GRO
	ND	22	22	ug/kg	100	2.3		SW846 8020/GRO
Toluene	ND	66	68	ug/kg	103			SW846 8020/GRO
	ND	66	66	ug/kg	101	1.8		SW846 8020/GRO
Xylenes (total)	ND	130	130	ug/kg	100			SW846 8020/GRO
	ND	130	130	ug/kg	99	0.95		SW846 8020/GRO
Ethylbenzene	ND	22	22	ug/kg	102			SW846 8020/GRO
	ND	22	22	ug/kg	100	2.2		SW846 8020/GRO
SURROGATE	PERCENT			RECOVERY			LIMITS	
	RECOVERY			(75 - 125)				
a,a,a-Trifluorotoluene (TFT)	103			100			(75 - 125)	

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 Volatiles

Client Lot #....: I8C160174 **Work Order #....:** CFV7T104-MS **Matrix.....:** SOLID
MS Lot-Sample #: I8C160174-003 CFV7T105-MSD
Date Sampled....: 03/12/98 12:26 **Date Received..:** 03/13/98
Prep Date.....: 03/17/98 **Analysis Date..:** 03/17/98
Prep Batch #....: 8078176 **Analysis Time..:** 13:19
Dilution Factor: 1 **% Moisture.....:** 8.5

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>RPD</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
Benzene	102	(75 - 125)			SW846 8020/GRO
	100	(75 - 125)	2.3	(0-30)	SW846 8020/GRO
Toluene	103	(75 - 125)			SW846 8020/GRO
	101	(75 - 125)	1.8	(0-30)	SW846 8020/GRO
Xylenes (total)	100	(75 - 125)			SW846 8020/GRO
	99	(75 - 125)	0.95	(0-30)	SW846 8020/GRO
Ethylbenzene	102	(75 - 125)			SW846 8020/GRO
	100	(75 - 125)	2.2	(0-30)	SW846 8020/GRO

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	103	(75 - 125)
	100	(75 - 125)

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 DATA REPORT

GC/MS Volatiles

Client Lot #....: I8C160174 Work Order #....: CFW4P10K-MS Matrix.....: SOLID
 MS Lot-Sample #: I8C170192-001 CFW4P10L-MSD
 Date Sampled....: 03/12/98 15:30 Date Received...: 03/16/98
 Prep Date.....: 03/20/98 Analysis Date...: 03/20/98
 Prep Batch #....: 8082293 Analysis Time...: 13:40
 Dilution Factor: 1 % Moisture.....: 13

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	50	42		ug/kg	84		SW846 8260A
	50	40		ug/kg	80	5.4	SW846 8260A
Trichloroethene	50	37		ug/kg	74		SW846 8260A
	50	34		ug/kg	68	9.8	SW846 8260A
Benzene	50	48		ug/kg	81		SW846 8260A
	50	45		ug/kg	76	6.1	SW846 8260A
Toluene	50	42		ug/kg	82		SW846 8260A
	50	39 a		ug/kg	75	9.0	SW846 8260A
Chlorobenzene	50	38 a		ug/kg	76		SW846 8260A
	50	34 a		ug/kg	69	9.4	SW846 8260A

SURROGATE	PERCENT		RECOVERY
	RECOVERY	LIMITS	
4-Bromofluorobenzene	98		(74 - 121)
	100		(74 - 121)
Toluene-d8	95		(81 - 117)
	96		(81 - 117)
Dibromofluoromethane	92		(80 - 120)
	93		(80 - 120)

NOTE(S) :

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

Bold print denotes control parameters

a Spiked analytic recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: I8C160174 **Work Order #....:** CFW4P10K-MS **Matrix.....:** SOLID
MS Lot-Sample #: I8C170192-001 CFW4P10L-MSD
Date Sampled....: 03/12/98 15:30 **Date Received...:** 03/16/98
Prep Date.....: 03/20/98 **Analysis Date..:** 03/20/98
Prep Batch #....: 8082293 **Analysis Time..:** 13:40
Dilution Factor: 1 **% Moisture.....:** 13

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	84	(69 - 122)	5.4	(0-15)	SW846 8260A
	80	(69 - 122)			SW846 8260A
Trichloroethene	74	(50 - 130)	9.8	(0-18)	SW846 8260A
	68	(50 - 130)			SW846 8260A
Benzene	81	(74 - 120)	6.1	(0-13)	SW846 8260A
	76	(74 - 120)			SW846 8260A
Toluene	82	(76 - 126)	9.0	(0-33)	SW846 8260A
	75 a	(76 - 126)			SW846 8260A
Chlorobenzene	76 a	(78 - 121)	9.4	(0-13)	SW846 8260A
	69 a	(78 - 121)			SW846 8260A
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS			
4-Bromofluorobenzene	98	(74 - 121)			
	100	(74 - 121)			
Toluene-d8	95	(81 - 117)			
	96	(81 - 117)			
Dibromofluoromethane	92	(80 - 120)			
	93	(80 - 120)			

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.



*Environmental
Services*

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: I8C160174 Work Order #....: CFKLT-SMP Matrix.....: SOLID

Date Sampled...: 02/25/98 13:41 Date Received..: 02/26/98

Moisture.....: 13

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	13.0	13.0	%	0.0	(0-14)	SD Lot-Sample #: I8B270117-026 OCLP OLM03.1	03/24/98	8083200

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 #....: I8C160174

Work Order #....: CFTMO-SMP
CFTMO-DUP

Matrix.....: SOLID

Date Sampled...: 03/12/98 15:15 Date Received...: 03/14/98

% Moisture.....: 18

PARAM	RESULT	DUPLICATE	UNITS	RPD	LIMIT	METHOD	PREPARATION-	PREP
		RESULT					ANALYSIS DATE	
Percent Moisture	17.8	18.3	%	2.8	(0-14)	SD Lot-Sample #: I8C160107-002 OCLP OLM03.1	03/26-03/27/98	8086138

Dilution Factor: 1

Analysis Time..: 00:00



*Environmental
Services*

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: I8C160174 Work Order #....: CFV7Q-SMP Matrix.....: SOLID

Date Sampled...: 03/12/98 13:35 Date Received..: 03/13/98

% Moisture.....: 9.0

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	9.0	8.9	%	1.1	(0-14)	SD Lot-Sample #: I8C160174-001 OCLP OLM03.1	03/19/98	8078260

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.

**Certificate of
Analysis**

Quanterra Incorporated
5307 Industrial Oaks Boulevard, Suite 160
Austin, Texas 78735

512 892-6684 Direct
512 892-6652 Fax



ANALYTICAL REPORT

PROJECT NO. RCRA

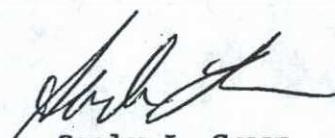
Farmington, NM

Lot #: I8B150103

Rick Johnson

B.J. Services Company

QUANTERRA INCORPORATED



Sandra L. Green
Project Manager

March 4, 1998

EXECUTIVE SUMMARY - Detection Highlights
I8B150103

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
FWT-BACKFILL 02/12/98 10:15 001				
Flashpoint	>150	>150	deg F	SW846 1010
Total Recoverable Petroleum Hydrocarbons	14000	1100	mg/kg	MCAWW 418.1
Corrosivity	7.6	1.0	No Units	SW846 9045A
Percent Moisture	8.4	0.50	%	OCLP OLM03.1
AWT-BACKFILL 02/12/98 10:30 002				
Flashpoint	>150	>150	deg F	SW846 1010
Total Recoverable Petroleum Hydrocarbons	110	11	mg/kg	MCAWW 418.1
Corrosivity	7.9	1.0	No Units	SW846 9045A
Percent Moisture	8.8	0.50	%	OCLP OLM03.1
AWT-SOLIDS/SLUDGE 02/12/98 11:00 003				
Flashpoint	>150	>150	deg F	SW846 1010
Total Recoverable Petroleum Hydrocarbons	49000	2900	mg/kg	MCAWW 418.1
Corrosivity	9.5	1.0	No Units	SW846 9045A
Percent Moisture	30.1	0.50	%	OCLP OLM03.1
FWT-SLUDGE 02/12/98 13:00 004				
Benzene	0.18	0.050	mg/L	SW846 8260A
Flashpoint	>150	>150	deg F	SW846 1010
Total Recoverable Petroleum Hydrocarbons	550000	10000	mg/kg	MCAWW 418.1
Corrosivity	5.1	1.0	No Units	SW846 9045A
Percent Moisture	52.2	0.50	%	OCLP OLM03.1

ANALYTICAL METHODS SUMMARY

I8B150103

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
% Moisture, Decanted-CLP	OCLP OLM03.1
Corrosivity	SW846 9045A
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Pensky-Martens Method for Determining Ignitability	SW846 1010
Reactive Cyanide	SW846 7.3.3
Reactive Sulfide	SW846 7.3.4
Total Recoverable Petroleum Hydrocarbons	MCAWW-418.1
TCLP BNA's	SW846 8270B
TCLP Metals (ICP)	SW846 6010A
TCLP Volatiles	SW846 8260A

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
- OCLP USEPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.



Environmental
Services

SAMPLE SUMMARY

I8B150103

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
CFDA2	001	FWT-BACKFILL	02/12/98	10:15
CFDA3	002	AWT-BACKFILL	02/12/98	10:30
CFDA4	003	AWT-SOLIDS/SLUDGE	02/12/98	11:00
CFDA5	004	FWT-SLUDGE	02/12/98	13:00

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.

B.J. SERVICES COMPANY
Client Sample ID: FWT-BACKFILL
TCLP GC/MS Semivolatiles

Lot-Sample #....: I8B150103-001 Work Order #....: CFDA2107
 Date Sampled...: 02/12/98 10:15 Date Received..: 02/14/98
 Leach Date.....: 02/16/98 Prep Date.....: 02/18/98
 Leach Batch #...: P804704 Prep Batch #....: 8049233
 Dilution Factor: 1
 % Moisture.....: 8.4

Matrix.....: SOLID
 Analysis Date...: 02/26/98
 Analysis Time...: 13:46

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
o-Cresol	ND	0.050	mg/L	SW846 8270B
m-Cresol & p-Cresol	ND	0.10	mg/L	SW846 8270B
1,4-Dichlorobenzene	ND	0.050	mg/L	SW846 8270B
2,4-Dinitrotoluene	ND	0.050	mg/L	SW846 8270B
Hexachlorobenzene	ND	0.050	mg/L	SW846 8270B
Hexachlorobutadiene	ND	0.050	mg/L	SW846 8270B
Hexachloroethane	ND	0.050	mg/L	SW846 8270B
Nitrobenzene	ND	0.050	mg/L	SW846 8270B
Pentachlorophenol	ND	0.25	mg/L	SW846 8270B
Pyridine	ND	0.10	mg/L	SW846 8270B
2,4,5-Trichlorophenol	ND	0.050	mg/L	SW846 8270B
2,4,6-Trichlorophenol	ND	0.050	mg/L	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	RECOVERY	
		<u>LIMITS</u>	
2-Fluorophenol	69	(21 - 100)	
Phenol-d5	85	(10 - 94)	
Nitrobenzene-d5	75	(35 - 114)	
2-Fluorobiphenyl	59	(43 - 116)	
2,4,6-Tribromophenol	76	(10 - 123)	
Terphenyl-d14	93	(33 - 141)	

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: FWT-BACKFILL

TCLP GC/MS Volatiles

Lot-Sample #....:	I8B150103-001	Work Order #....:	CFDA210J	Matrix.....:	SOLID
Date Sampled....:	02/12/98 10:15	Date Received...:	02/14/98	Analysis Date..:	02/28/98
Leach Date.....:	02/23/98	Prep Date.....:	02/27/98	Analysis Time..:	00:41
Leach Batch #...:	P805602	Prep Batch #....:	8062161		
Dilution Factor:	1				
% Moisture.....:	8.4				

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	0.050	mg/L	SW846 8260A
Carbon tetrachloride	ND	0.050	mg/L	SW846 8260A
Chlorobenzene	ND	0.050	mg/L	SW846 8260A
Chloroform	ND	0.050	mg/L	SW846 8260A
1,2-Dichloroethane	ND	0.050	mg/L	SW846 8260A
1,1-Dichloroethylene	ND	0.050	mg/L	SW846 8260A
Methyl ethyl ketone	ND	0.20	mg/L	SW846 8260A
Tetrachloroethylene	ND	0.050	mg/L	SW846 8260A
Trichloroethylene	ND	0.050	mg/L	SW846 8260A
Vinyl chloride	ND	0.10	mg/L	SW846 8260A
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
4-Bromofluorobenzene	94	(86 - 115)		
Toluene-d8	100	(88 - 110)		
Dibromofluoromethane	99	(86 - 118)		

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

B.J. SERVICES COMPANY

Client Sample ID: AWT-BACKFILL

TCLP GC/MS Semivolatiles

Lot-Sample #....: I8B150103-002 Work Order #....: CFDA3107
 Date Sampled....: 02/12/98 10:30 Date Received...: 02/14/98
 Leach Date.....: 02/16/98 Prep Date.....: 02/18/98
 Leach Batch #...: P804704 Prep Batch #....: 8049233
 Dilution Factor: 1
 % Moisture.....: 8.8

Matrix.....: SOLID
 Analysis Date...: 02/26/98
 Analysis Time...: 15:49

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
o-Cresol	ND	0.050	mg/L	SW846 8270B
m-Cresol & p-Cresol	ND	0.10	mg/L	SW846 8270B
1,4-Dichlorobenzene	ND	0.050	mg/L	SW846 8270B
2,4-Dinitrotoluene	ND	0.050	mg/L	SW846 8270B
Hexachlorobenzene	ND	0.050	mg/L	SW846 8270B
Hexachlorobutadiene	ND	0.050	mg/L	SW846 8270B
Hexachloroethane	ND	0.050	mg/L	SW846 8270B
Nitrobenzene	ND	0.050	mg/L	SW846 8270B
Pentachlorophenol	ND	0.25	mg/L	SW846 8270B
Pyridine	ND	0.10	mg/L	SW846 8270B
2,4,5-Trichlorophenol	ND	0.050	mg/L	SW846 8270B
2,4,6-Trichlorophenol	ND	0.050	mg/L	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	76	(21 - 100)
Phenol-d5	89	(10 - 94)
Nitrobenzene-d5	74	(35 - 114)
2-Fluorobiphenyl	57	(43 - 116)
2,4,6-Tribromophenol	79	(10 - 123)
Terphenyl-d14	88	(33 - 141)

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: AWT-BACKFILL

TCLP GC/MS Volatiles

Lot-Sample #....: I8B150103-002 Work Order #....: CFDA310J
Date Sampled....: 02/12/98 10:30 Date Received...: 02/14/98
Leach Date.....: 02/23/98 Prep Date.....: 02/27/98
Leach Batch #...: P805602 Prep Batch #....: 8062161
Dilution Factor: 1
% Moisture.....: 8.8

Matrix.....: SOLID

Analysis Date...: 02/28/98
Analysis Time...: 01:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.050	mg/L	SW846 8260A
Carbon tetrachloride	ND	0.050	mg/L	SW846 8260A
Chlorobenzene	ND	0.050	mg/L	SW846 8260A
Chloroform	ND	0.050	mg/L	SW846 8260A
1,2-Dichloroethane	ND	0.050	mg/L	SW846 8260A
1,1-Dichloroethylene	ND	0.050	mg/L	SW846 8260A
Methyl ethyl ketone	ND	0.20	mg/L	SW846 8260A
Tetrachloroethylene	ND	0.050	mg/L	SW846 8260A
Trichloroethylene	ND	0.050	mg/L	SW846 8260A
Vinyl chloride	ND	0.10	mg/L	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	95	(86 - 115)
Toluene-d8	98	(88 - 110)
Dibromofluoromethane	100	(86 - 118)

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

B.J. SERVICES COMPANY
Client Sample ID: AWT-SOLIDS/SLUDGE
TCLP GC/MS Semivolatiles

Lot-Sample #....: I8B150103-003 Work Order #....: CFDA4107 Matrix.....: SOLID
 Date Sampled...: 02/12/98 11:00 Date Received...: 02/13/98
 Leach Date.....: 02/16/98 Prep Date.....: 02/18/98 Analysis Date...: 02/26/98
 Leach Batch #...: P804704 Prep Batch #....: 8049233 Analysis Time...: 16:20
 Dilution Factor: 1
 % Moisture.....: 30

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
o-Cresol	ND	0.050	mg/L	SW846 8270B
m-Cresol & p-Cresol	ND	0.10	mg/L	SW846 8270B
1,4-Dichlorobenzene	ND	0.050	mg/L	SW846 8270B
2,4-Dinitrotoluene	ND	0.050	mg/L	SW846 8270B
Hexachlorobenzene	ND	0.050	mg/L	SW846 8270B
Hexachlorobutadiene	ND	0.050	mg/L	SW846 8270B
Hexachloroethane	ND	0.050	mg/L	SW846 8270B
Nitrobenzene	ND	0.050	mg/L	SW846 8270B
Pentachlorophenol	ND	0.25	mg/L	SW846 8270B
Pyridine	ND	0.10	mg/L	SW846 8270B
2,4,5-Trichlorophenol	ND	0.050	mg/L	SW846 8270B
2,4,6-Trichlorophenol	ND	0.050	mg/L	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	RECOVERY	
		<u>LIMITS</u>	
2-Fluorophenol	79	(21 - 100)	
Phenol-d5	96 *	(10 - 94)	
Nitrobenzene-d5	106	(35 - 114)	
2-Fluorobiphenyl	58	(43 - 116)	
2,4,6-Tribromophenol	51	(10 - 123)	
Terphenyl-d14	90	(33 - 141)	

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

* Surrogate recovery is outside stated control limits.

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

Surrogates outside acceptance criteria due to demonstrated matrix effect.

B.J. SERVICES COMPANY
Client Sample ID: AWT-SOLIDS/SLUDGE
TCLP GC/MS Volatiles

Lot-Sample #....: I8B150103-003 Work Order #....: CFDA410J Matrix.....: SOLID
 Date Sampled...: 02/12/98 11:00 Date Received...: 02/13/98
 Leach Date.....: 02/23/98 Prep Date.....: 02/27/98 Analysis Date...: 02/28/98
 Leach Batch #...: P805602 Prep Batch #....: 8062161 Analysis Time...: 01:49
 Dilution Factor: 1
 % Moisture.....: 30

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	0.050	mg/L	SW846 8260A
Carbon tetrachloride	ND	0.050	mg/L	SW846 8260A
Chlorobenzene	ND	0.050	mg/L	SW846 8260A
Chloroform	ND	0.050	mg/L	SW846 8260A
1,2-Dichloroethane	ND	0.050	mg/L	SW846 8260A
1,1-Dichloroethylene	ND	0.050	mg/L	SW846 8260A
Methyl ethyl ketone	ND	0.20	mg/L	SW846 8260A
Tetrachloroethylene	ND	0.050	mg/L	SW846 8260A
Trichloroethylene	ND	0.050	mg/L	SW846 8260A
Vinyl chloride	ND	0.10	mg/L	SW846 8260A
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
4-Bromofluorobenzene	92	(86 - 115)		
Toluene-d8	100	(88 - 110)		
Dibromofluoromethane	97	(86 - 118)		

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

B.J. SERVICES COMPANY

Client Sample ID: FWT-SLUDGE

TCLP GC/MS Semivolatiles

Lot-Sample #....: I8B150103-004 Work Order #....: CFDA5107
 Date Sampled....: 02/12/98 13:00 Date Received...: 02/13/98
 Leach Date.....: 02/16/98 Prep Date.....: 02/18/98
 Leach Batch #...: P804704 Prep Batch #....: 8049233
 Dilution Factor: 1
 % Moisture.....: 52

Matrix.....: SOLID

Analysis Date...: 02/26/98
 Analysis Time...: 16:50

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
o-Cresol	ND	0.050	mg/L	SW846 8270B
m-Cresol & p-Cresol	ND	0.10	mg/L	SW846 8270B
1,4-Dichlorobenzene	ND	0.050	mg/L	SW846 8270B
2,4-Dinitrotoluene	ND	0.050	mg/L	SW846 8270B
Hexachlorobenzene	ND	0.050	mg/L	SW846 8270B
Hexachlorobutadiene	ND	0.050	mg/L	SW846 8270B
Hexachloroethane	ND	0.050	mg/L	SW846 8270B
Nitrobenzene	ND	0.050	mg/L	SW846 8270B
Pentachlorophenol	ND	0.25	mg/L	SW846 8270B
Pyridine	ND	0.10	mg/L	SW846 8270B
2,4,5-Trichlorophenol	ND	0.050	mg/L	SW846 8270B
2,4,6-Trichlorophenol	ND	0.050	mg/L	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
2-Fluorophenol	83	(21 - 100)	
Phenol-d5	94	(10 - 94)	
Nitrobenzene-d5	76	(35 - 114)	
2-Fluorobiphenyl	59	(43 - 116)	
2,4,6-Tribromophenol	69	(10 - 123)	
Terphenyl-d14	45	(33 - 141)	

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

B.J. SERVICES COMPANY
Client Sample ID: FWT-SLUDGE
TCLP GC/MS Volatiles

Lot-Sample #....: I8B150103-004 Work Order #....: CFDA510J
 Date Sampled....: 02/12/98 13:00 Date Received...: 02/13/98
 Leach Date.....: 02/23/98 Prep Date.....: 02/27/98
 Leach Batch #...: P805602 Prep Batch #....: 8062161
 Dilution Factor: 1
 % Moisture.....: 52

Matrix.....: SOLID

 Analysis Date...: 02/28/98
 Analysis Time...: 02:23

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	0.18	0.050	mg/L	SW846 8260A
Carbon tetrachloride	ND	0.050	mg/L	SW846 8260A
Chlorobenzene	ND	0.050	mg/L	SW846 8260A
Chloroform	ND	0.050	mg/L	SW846 8260A
1,2-Dichloroethane	ND	0.050	mg/L	SW846 8260A
1,1-Dichloroethylene	ND	0.050	mg/L	SW846 8260A
Methyl ethyl ketone	ND	0.20	mg/L	SW846 8260A
Tetrachloroethylene	ND	0.050	mg/L	SW846 8260A
Trichloroethylene	ND	0.050	mg/L	SW846 8260A
Vinyl chloride	ND	0.10	mg/L	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	89	(86 - 115)
Toluene-d8	97	(88 - 110)
Dibromofluoromethane	97	(86 - 118)

NOTE (S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

B.J. SERVICES COMPANY
Client Sample ID: FWT-BACKFILL
General Chemistry

Lot-Sample #....: I8B150103-001 Work Order #....: CFDA2 Matrix.....: SOLID
 Date Sampled...: 02/12/98 10:15 Date Received...: 02/14/98
 % Moisture.....: 8.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Corrosivity	7.6	1.0	No Units	SW846 9045A	02/16/98	8047188
		Dilution Factor: 1				
		Analysis Time...: 14:00				
Flashpoint	>150	>150	deg F	SW846 1010	02/15-02/16/98	8047152
		Dilution Factor: 1				
		Analysis Time...: 12:00				
Percent Moisture	8.4	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time...: 10:00				
Reactive Cyanide	ND	220	mg/kg	SW846 7.3.3	02/16-02/17/98	8047136
		Dilution Factor: 1				
		Analysis Time...: 16:00				
Reactive Sulfide	ND	220	mg/kg	SW846 7.3.4	02/16/98	8047137
		Dilution Factor: 1				
		Analysis Time...: 13:00				
Total Recoverable Petroleum Hydrocarbons	14000	1100	mg/kg	MCAWW 418.1	02/24-02/25/98	8055155
		Dilution Factor: 100				
		Analysis Time...: 13:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY

Client Sample ID: AWT-BACKFILL

General Chemistry

Lot-Sample #....: I8B150103-002 Work Order #....: CFDA3 Matrix.....: SOLID
Date Sampled...: 02/12/98 10:30 Date Received..: 02/14/98
% Moisture.....: 8.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Corrosivity	7.9	1.0	No Units	SW846 9045A	02/16/98	8047188
		Dilution Factor: 1				
		Analysis Time...: 14:00				
Flashpoint	>150	>150	deg F	SW846 1010	02/15-02/16/98	8047152
		Dilution Factor: 1				
		Analysis Time...: 12:00				
Percent Moisture	8.8	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time...: 10:00				
Reactive Cyanide	ND	220	mg/kg	SW846 7.3.3	02/16-02/17/98	8047136
		Dilution Factor: 1				
		Analysis Time...: 16:00				
Reactive Sulfide	ND	220	mg/kg	SW846 7.3.4	02/16/98	8047137
		Dilution Factor: 1				
		Analysis Time...: 13:00				
Total Recoverable Petroleum Hydrocarbons	110	11	mg/kg	MCAWW 418.1	02/24-02/25/98	8055155
		Dilution Factor: 1				
		Analysis Time...: 13:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B.J. SERVICES COMPANY
Client Sample ID: AWT-SOLIDS/SLUDGE
General Chemistry

Lot-Sample #....: I8B150103-003 Work Order #....: CFDA4 Matrix.....: SOLID
 Date Sampled...: 02/12/98 11:00 Date Received...: 02/13/98
 % Moisture.....: 30

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Corrosivity	9.5	1.0	No Units	SW846 9045A	02/16/98	8047188
		Dilution Factor: 1				
		Analysis Time...: 14:00				
Flashpoint	>150	>150	deg F	SW846 1010	02/15-02/16/98	8047152
		Dilution Factor: 1				
		Analysis Time...: 12:00				
Percent Moisture	30.1	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time...: 10:00				
Reactive Cyanide	ND	290	mg/kg	SW846 7.3.3	02/16-02/17/98	8047136
		Dilution Factor: 1				
		Analysis Time...: 16:00				
Reactive Sulfide	ND	290	mg/kg	SW846 7.3.4	02/16/98	8047137
		Dilution Factor: 1				
		Analysis Time...: 13:00				
Total Recoverable Petroleum Hydrocarbons	49000	2900	mg/kg	MCAWW 418.1	02/24-02/25/98	8055155
		Dilution Factor: 200				
		Analysis Time...: 13:00				

NOTE (S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.



Environmental
Services

B.J. SERVICES COMPANY

Client Sample ID: FWT-SLUDGE

General Chemistry

Lot-Sample #....: I8B150103-004 Work Order #....: CFDA5 Matrix.....: SOLID
Date Sampled...: 02/12/98 13:00 Date Received...: 02/13/98
% Moisture.....: 52

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Corrosivity	5.1	1.0	No Units	SW846 9045A	02/16/98	8047188
		Dilution Factor: 1				
		Analysis Time...: 14:00				
Flashpoint	>150	>150	deg F	SW846 1010	02/15-02/16/98	8047152
		Dilution Factor: 1				
		Analysis Time...: 12:00				
Percent Moisture	52.2	0.50	%	OCLP OLM03.1	02/17-02/18/98	8048212
		Dilution Factor: 1				
		Analysis Time...: 10:00				
Reactive Cyanide	ND	420	mg/kg	SW846 7.3.3	02/16-02/17/98	8047136
		Dilution Factor: 1				
		Analysis Time...: 16:00				
Reactive Sulfide	ND	420	mg/kg	SW846 7.3.4	02/16/98	8047137
		Dilution Factor: 1				
		Analysis Time...: 13:00				
Total Recoverable Petroleum Hydrocarbons	550000	10000	mg/kg	MCAWW 418.1	03/01-03/03/98	8061186
		Dilution Factor: 500				
		Analysis Time...: 10:00				

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Client Sample ID: FWT-BACKFILL

TCLP Metals

Lot-Sample #....: I8B150103-001 Matrix.....: SOLID
 Date Sampled...: 02/12/98 10:15 Date Received..: 02/14/98
 Leach Date.....: 02/16/98 Leach Batch #..: P804704

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 8049226						
Silver	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA2108
		Dilution Factor: 1				
		Analysis Time...: 14:22				
Arsenic	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA2109
		Dilution Factor: 1				
		Analysis Time...: 14:22				
Barium	ND	10.0	mg/L	SW846 6010A	02/18-02/19/98	CFDA210A
		Dilution Factor: 1				
		Analysis Time...: 14:22				
Cadmium	ND	0.10	mg/L	SW846 6010A	02/18-02/19/98	CFDA210C
		Dilution Factor: 1				
		Analysis Time...: 14:22				
Chromium	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA210D
		Dilution Factor: 1				
		Analysis Time...: 14:22				
Lead	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA210E
		Dilution Factor: 1				
		Analysis Time...: 14:22				
Selenium	ND	0.25	mg/L	SW846 6010A	02/18-02/19/98	CFDA210F
		Dilution Factor: 1				
		Analysis Time...: 14:22				
Prep Batch #....: 8051213						
Mercury	ND	0.0020	mg/L	SW846 7470A	02/20-02/24/98	CFDA210G
		Dilution Factor: 1				
		Analysis Time...: 08:53				

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

Client Sample ID: AWT-BACKFILL

TCLP Metals

Lot-Sample #....: I8B150103-002
Date Sampled...: 02/12/98 10:30 Date Received...: 02/14/98
Leach Date.....: 02/16/98 Leach Batch #...: P804704

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	8049226					
Silver	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA3108
		Dilution Factor: 1				
		Analysis Time...:	15:59			
Arsenic	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA3109
		Dilution Factor: 1				
		Analysis Time...:	15:59			
Barium	ND	10.0	mg/L	SW846 6010A	02/18-02/19/98	CFDA310A
		Dilution Factor: 1				
		Analysis Time...:	15:59			
Cadmium	ND	0.10	mg/L	SW846 6010A	02/18-02/19/98	CFDA310C
		Dilution Factor: 1				
		Analysis Time...:	15:59			
Chromium	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA310D
		Dilution Factor: 1				
		Analysis Time...:	15:59			
Lead	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA310E
		Dilution Factor: 1				
		Analysis Time...:	15:59			
Selenium	ND	0.25	mg/L	SW846 6010A	02/18-02/19/98	CFDA310F
		Dilution Factor: 1				
		Analysis Time...:	15:59			
Prep Batch #....:	8051213					
Mercury	ND	0.0020	mg/L	SW846 7470A	02/20-02/24/98	CFDA310G
		Dilution Factor: 1				
		Analysis Time...:	09:05			

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

D.U. SERVICES COMPANY

Client Sample ID: AWT-SOLIDS/SLUDGE
TCLP Metals
Lot-Sample #....: I8B150103-003

Matrix.....: SOLID

Date Sampled....: 02/12/98 11:00 **Date Received...:** 02/13/98

Leach Date.....: 02/16/98 **Leach Batch #...:** P804704

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 8049226						
Silver	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA4108
		Dilution Factor: 1				
		Analysis Time...: 16:01				
Arsenic	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA4109
		Dilution Factor: 1				
		Analysis Time...: 16:01				
Barium	ND	10.0	mg/L	SW846 6010A	02/18-02/19/98	CFDA410A
		Dilution Factor: 1				
		Analysis Time...: 16:01				
Cadmium	ND	0.10	mg/L	SW846 6010A	02/18-02/19/98	CFDA410C
		Dilution Factor: 1				
		Analysis Time...: 16:01				
Chromium	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA410D
		Dilution Factor: 1				
		Analysis Time...: 16:01				
Lead	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA410E
		Dilution Factor: 1				
		Analysis Time...: 16:01				
Selenium	ND	0.25	mg/L	SW846 6010A	02/18-02/19/98	CFDA410F
		Dilution Factor: 1				
		Analysis Time...: 16:01				
Prep Batch #....: 8051213						
Mercury	ND	0.0020	mg/L	SW846 7470A	02/20-02/24/98	CFDA410G
		Dilution Factor: 1				
		Analysis Time...: 09:07				

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

D.O.T. SERVICES COMPANY

Client Sample ID: FWT-SLUDGE

TCLP Metals

Lot-Sample #....: I8B150103-004

Matrix.....: SOLID

Date Sampled...: 02/12/98 13:00 Date Received..: 02/13/98

Leach Date.....: 02/16/98 Leach Batch #...: P804704

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	8049226					
Silver	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA5108
		Dilution Factor: 1				
		Analysis Time...:	16:04			
Arsenic	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA5109
		Dilution Factor: 1				
		Analysis Time...:	16:04			
Barium	ND	10.0	mg/L	SW846 6010A	02/18-02/19/98	CFDA510A
		Dilution Factor: 1				
		Analysis Time...:	16:04			
Cadmium	ND	0.10	mg/L	SW846 6010A	02/18-02/19/98	CFDA510C
		Dilution Factor: 1				
		Analysis Time...:	16:04			
Chromium	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA510D
		Dilution Factor: 1				
		Analysis Time...:	16:04			
Lead	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDA510E
		Dilution Factor: 1				
		Analysis Time...:	16:04			
Selenium	ND	0.25	mg/L	SW846 6010A	02/18-02/19/98	CFDA510F
		Dilution Factor: 1				
		Analysis Time...:	16:04			
Prep Batch #....:	8051213					
Mercury	ND	0.0020	mg/L	SW846 7470A	02/20-02/24/98	CFDA510G
		Dilution Factor: 1				
		Analysis Time...:	09:09			

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

QC DATA ASSOCIATION SUMMARY

I8B150103

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 1010		8047152	8047082
	SOLID	MCAWW 418.1		8055155	8055038
	SOLID	SW846 6010A	P804704	8049226	8049086
	SOLID	SW846 9045A		8047188	8047076
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 7.3.3		8047136	8047032
	SOLID	SW846 7.3.4		8047137	8047033
	SOLID	SW846 8270B	P804704	8049233	8049093
	SOLID	SW846 8260A	P805602	8062161	8062042
	SOLID	SW846 7470A	P804704	8051213	8051082
002	SOLID	SW846 1010		8047152	8047082
	SOLID	MCAWW 418.1		8055155	8055038
	SOLID	SW846 6010A	P804704	8049226	8049086
	SOLID	SW846 9045A		8047188	8047076
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 7.3.3		8047136	8047032
	SOLID	SW846 7.3.4		8047137	8047033
	SOLID	SW846 8270B	P804704	8049233	8049093
	SOLID	SW846 8260A	P805602	8062161	8062042
	SOLID	SW846 7470A	P804704	8051213	8051082
003	SOLID	SW846 1010		8047152	8047082
	SOLID	MCAWW 418.1		8055155	8055038
	SOLID	SW846 6010A	P804704	8049226	8049086
	SOLID	SW846 9045A		8047188	8047076
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 7.3.3		8047136	8047032
	SOLID	SW846 7.3.4		8047137	8047033
	SOLID	SW846 8270B	P804704	8049233	8049093
	SOLID	SW846 8260A	P805602	8062161	8062042
	SOLID	SW846 7470A	P804704	8051213	8051082
004	SOLID	SW846 1010		8047152	8047082
	SOLID	MCAWW 418.1		8061186	8061073
	SOLID	SW846 6010A	P804704	8049226	8049086
	SOLID	SW846 9045A		8047188	8047076
	SOLID	OCLP OLM03.1		8048212	
	SOLID	SW846 7.3.3		8047136	8047032
	SOLID	SW846 7.3.4		8047137	8047033
	SOLID	SW846 8270B	P804704	8049233	8049093
	SOLID	SW846 8260A	P805602	8062161	8062042
	SOLID	SW846 7470A	P804704	8051213	8051082

METHOD BLANK REPORT

TCLP GC/MS Semivolatiles

Client Lot #....: I8B150103
MB Lot-Sample #: I8B160000-214
Leach Date.....: 02/16/98
Leach Batch #...: P804704
Dilution Factor: 1

Work Order #....: CFDN9109
Prep Date.....: 02/18/98
Prep Batch #....: 8049233

Matrix.....: SOLID
Analysis Date..: 02/26/98
Analysis Time..: 12:45

PARAMETER
o-Cresol
m-Cresol & p-Cresol
1,4-Dichlorobenzene
2,4-Dinitrotoluene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Nitrobenzene
Pentachlorophenol
Pyridine
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol

RESULT	REPORTING LIMIT	UNITS	METHOD
ND	0.050	mg/L	SW846 8270B
ND	0.10	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B
ND	0.25	mg/L	SW846 8270B
ND	0.10	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B
ND	0.050	mg/L	SW846 8270B

SURROGATE
2-Fluorophenol
Phenol-d5
Nitrobenzene-d5
2-Fluorobiphenyl
2,4,6-Tribromophenol
Terphenyl-d14

PERCENT RECOVERY	RECOVERY LIMITS
71	(21 - 100)
88	(10 - 94)
68	(35 - 114)
50	(43 - 116)
71	(10 - 123)
90	(33 - 141)

NOTE(S) :

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: I8B150103
 MB Lot-Sample #: I8C030000-161
 Analysis Date...: 02/27/98
 Dilution Factor: 1

Work Order #....: CFLX7101
 Prep Date.....: 02/27/98
 Prep Batch #: 8062161

Matrix.....: SOLID
 Analysis Time..: 17:18

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Benzene	ND	0.050	mg/L	SW846 8260A
Carbon tetrachloride	ND	0.050	mg/L	SW846 8260A
Chlorobenzene	ND	0.050	mg/L	SW846 8260A
Chloroform	ND	0.050	mg/L	SW846 8260A
1,2-Dichloroethane	ND	0.050	mg/L	SW846 8260A
1,1-Dichloroethylene	ND	0.050	mg/L	SW846 8260A
Methyl ethyl ketone	ND	0.20	mg/L	SW846 8260A
Tetrachloroethylene	ND	0.050	mg/L	SW846 8260A
Trichloroethylene	ND	0.050	mg/L	SW846 8260A
Vinyl chloride	ND	0.10	mg/L	SW846 8260A

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
4-Bromofluorobenzene	91	(86	- 115)
Toluene-d8	97	(88	- 110)
Dibromofluoromethane	96	(86	- 118)

NOTE (S) :

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

METHOD BLANK REPORT

TCLP Metals

Client Lot #....: I8B150103

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #:	I8B160000-214	Prep Batch #....:	8051213			
Leach Date.....:	02/16/98	Leach Batch #...:	P804704			
Mercury	ND	0.0020	mg/L	SW846 7470A	02/20-02/24/98	CFDN9106
		Dilution Factor:	1			
		Analysis Time...:	08:49			
MB Lot-Sample #:	I8B160000-214	Prep Batch #....:	8049226			
Leach Date.....:	02/16/98	Leach Batch #...:	P804704			
Silver	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDN9107
		Dilution Factor:	1			
		Analysis Time...:	14:17			
Arsenic	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDN9108
		Dilution Factor:	1			
		Analysis Time...:	14:17			
Barium	ND	10.0	mg/L	SW846 6010A	02/18-02/19/98	CFDN9101
		Dilution Factor:	1			
		Analysis Time...:	14:17			
Cadmium	ND	0.10	mg/L	SW846 6010A	02/18-02/19/98	CFDN9102
		Dilution Factor:	1			
		Analysis Time...:	14:17			
Chromium	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDN9103
		Dilution Factor:	1			
		Analysis Time...:	14:17			
Lead	ND	0.50	mg/L	SW846 6010A	02/18-02/19/98	CFDN9104
		Dilution Factor:	1			
		Analysis Time...:	14:17			
Selenium	ND	0.25	mg/L	SW846 6010A	02/18-02/19/98	CFDN9105
		Dilution Factor:	1			
		Analysis Time...:	14:17			

NOTE(S) :

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

METHOD BLANK REPORT

General Chemistry

Client Lot #....: I8B150103

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	PREP
		LIMIT	UNITS	ANALYSIS DATE			
Total Recoverable Petroleum Hydrocarbons		Work Order #:	CFH8D101	MB Lot-Sample #:	I8B240000-155		
	ND	10	mg/kg		MCAWW 418.1	02/24-02/25/98	8055155
		Dilution Factor:	1				
		Analysis Time..:	13:00				
Total Recoverable Petroleum Hydrocarbons		Work Order #:	CFLG2101	MB Lot-Sample #:	I8C020000-186		
	ND	10	mg/kg		MCAWW 418.1	03/01-03/03/98	8061186
		Dilution Factor:	1				
		Analysis Time..:	10:00				

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: I8B150103 **Work Order #....:** CFETD101 **Matrix.....:** SOLID
LCS Lot-Sample#: I8B180000-233
Prep Date.....: 02/18/98 **Analysis Date..:** 02/26/98
Prep Batch #....: 8049233 **Analysis Time..:** 13:16
Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>UNITS</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>				
Pyridine	0.40	0.18	mg/L	45	SW846	8270B
1,4-Dichlorobenzene	0.40	0.25	mg/L	63	SW846	8270B
o-Cresol	0.40	0.34	mg/L	84	SW846	8270B
m-Cresol & p-Cresol	0.80	0.69	mg/L	87	SW846	8270B
Hexachloroethane	0.40	0.25	mg/L	64	SW846	8270B
Nitrobenzene	0.40	0.30	mg/L	76	SW846	8270B
Hexachlorobutadiene	0.40	0.24	mg/L	60	SW846	8270B
2,4,6-Trichlorophenol	0.40	0.27	mg/L	67	SW846	8270B
2,4,5-Trichlorophenol	0.40	0.27	mg/L	67	SW846	8270B
2,4-Dinitrotoluene	0.40	0.28	mg/L	70	SW846	8270B
Hexachlorobenzene	0.40	0.35	mg/L	88	SW846	8270B
Pentachlorophenol	0.40	0.35	mg/L	87	SW846	8270B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
2-Fluorophenol	80	(21 - 100)
Phenol-d5	93	(10 - 94)
Nitrobenzene-d5	74	(35 - 114)
2-Fluorobiphenyl	61	(43 - 116)
2,4,6-Tribromophenol	78	(10 - 123)
Terphenyl-d14	104	(33 - 141)

NOTE (S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: I8B150103 Work Order #....: CFLX7102 Matrix.....: SOLID
 LCS Lot-Sample#: I8C030000-161
 Prep Date.....: 02/27/98 Analysis Date...: 02/27/98
 Prep Batch #....: 8062161 Analysis Time...: 17:52
 Dilution Factor: 1

PARAMETER	SPIKE	MEASURED	UNITS	PERCENT	METHOD	
	AMOUNT	AMOUNT		RECOVERY		
Vinyl chloride	0.50	0.71	mg/L	142	SW846 8260A	
1,1-Dichloroethylene	0.50	0.65	mg/L	129	SW846 8260A	
Chloroform	0.50	0.50	mg/L	100	SW846 8260A	
1,2-Dichloroethane	0.50	0.47	mg/L	94	SW846 8260A	
Methyl ethyl ketone	0.50	0.13	mg/L	27	SW846 8260A	
Carbon tetrachloride	0.50	0.57	mg/L	113	SW846 8260A	
Trichloroethylene	0.50	0.52	mg/L	104	SW846 8260A	
Benzene	0.50	0.51	mg/L	101	SW846 8260A	
Tetrachloroethylene	0.50	0.56	mg/L	112	SW846 8260A	
Chlorobenzene	0.50	0.52	mg/L	104	SW846 8260A	
1,4-Dichlorobenzene	0.50	0.53	mg/L	107	SW846 8260A	
<hr/>		<hr/>		<hr/>		
SURROGATE		PERCENT	RECOVERY		LIMITS	
4-Bromofluorobenzene		91	(86 - 115)			
Toluene-d8		96	(88 - 110)			
Dibromofluoromethane		104	(86 - 118)			

NOTE(S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: I8B150103

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Corrosivity	9.0	9.2	No Units	101	SW846 9045A	02/16/98	8047188
				Dilution Factor: 1			
				Analysis Time...: 14:00			
Flashpoint	81	81	deg F	100	SW846 1010	02/15-02/16/98	8047152
				Dilution Factor: 1			
				Analysis Time...: 10:00			
Reactive Cyanide	40	2.9	mg/L	7.3	SW846 7.3.3	02/16-02/17/98	8047136
				Dilution Factor: 1			
				Analysis Time...: 16:00			
Total Recoverable Petroleum Hydrocarbons	250	210	mg/kg	86	MCAWW 418.1	02/24-02/25/98	8055155
				Dilution Factor: 1			
				Analysis Time...: 00:00			
Total Recoverable Petroleum Hydrocarbons	250	230	mg/kg	91	MCAWW 418.1	03/01-03/03/98	8061186
				Dilution Factor: 1			
				Analysis Time...: 13:00			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT
General Chemistry
Client Lot #....: I8B150103

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RCVRY</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP ANALYSIS DATE</u>	<u>BATCH #</u>
Corrosivity	9.0	9.2	No Units	101	SW846 9045A	Work Order #: CFDLG101 LCS Lot-Sample#: I8B160000-188	02/16/98	8047188
				Dilution Factor: 1				
				Analysis Time...: 14:00				
Flashpoint	81	81	deg F	100	SW846 1010	Work Order #: CFDMMP101 LCS Lot-Sample#: I8B160000-152	02/15-02/16/98	8047152
				Dilution Factor: 1				
				Analysis Time...: 10:00				
Reactive Cyanide	40	2.9	mg/L	7.3	SW846 7.3.3	Work Order #: CFDE0102 LCS Lot-Sample#: I8B160000-136	02/16-02/17/98	8047136
				Dilution Factor: 1				
				Analysis Time...: 16:00				
Total Recoverable Petroleum Hydrocarbons	250	210	mg/kg	86	MCAWW 418.1	Work Order #: CFH8D102 LCS Lot-Sample#: I8B240000-155	02/24-02/25/98	8055155
				Dilution Factor: 1				
				Analysis Time...: 00:00				
Total Recoverable Petroleum Hydrocarbons	250	230	mg/kg	91	MCAWW 418.1	Work Order #: CFLG2102 LCS Lot-Sample#: I8C020000-186	03/01-03/03/98	8061186
				Dilution Factor: 1				
				Analysis Time...: 13:00				

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT
TCLP Metals
Client Lot #....: I8B150103
Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: I8B180000-226 Prep Batch #....: 8049226							
Barium	2.0	2.0	mg/L	100	SW846 6010A	02/18-02/19/98	CFETA101
Dilution Factor: 1							
Analysis Time...: 14:20							
Cadmium	0.050	0.054	mg/L	109	SW846 6010A	02/18-02/19/98	CFETA102
Dilution Factor: 1							
Analysis Time...: 14:20							
Chromium	0.20	0.20	mg/L	101	SW846 6010A	02/18-02/19/98	CFETA103
Dilution Factor: 1							
Analysis Time...: 14:20							
Lead	0.50	0.46	mg/L	93	SW846 6010A	02/18-02/19/98	CFETA104
Dilution Factor: 1							
Analysis Time...: 14:20							
Selenium	2.0	1.9	mg/L	94	SW846 6010A	02/18-02/19/98	CFETA105
Dilution Factor: 1							
Analysis Time...: 14:20							
Silver	0.050	0.046	mg/L	93	SW846 6010A	02/18-02/19/98	CFETA106
Dilution Factor: 1							
Analysis Time...: 14:20							
Arsenic	2.0	2.0	mg/L	100	SW846 6010A	02/18-02/19/98	CFETA107
Dilution Factor: 1							
Analysis Time...: 14:20							
LCS Lot-Sample#: I8B200000-213 Prep Batch #....: 8051213							
Mercury	0.0050	0.0049	mg/L	99	SW846 7470A	02/20-02/24/98	CFG8X101
Dilution Factor: 1							
Analysis Time...: 08:51							

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: I8B150103 **Work Order #....:** CFETD101 **Matrix.....:** SOLID
LCS Lot-Sample#: I8B180000-233
Prep Date.....: 02/18/98 **Analysis Date...:** 02/26/98
Prep Batch #....: 8049233 **Analysis Time...:** 13:16
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Pyridine	45	(1.0 - 144)	SW846 8270B
1,4-Dichlorobenzene	63	(26 - 112)	SW846 8270B
o-Cresol	84	(21 - 137)	SW846 8270B
m-Cresol & p-Cresol	87	(19 - 126)	SW846 8270B
Hexachloroethane	64	(26 - 102)	SW846 8270B
Nitrobenzene	76	(42 - 120)	SW846 8270B
Hexachlorobutadiene	60	(33 - 111)	SW846 8270B
2,4,6-Trichlorophenol	67	(19 - 122)	SW846 8270B
2,4,5-Trichlorophenol	67	(29 - 123)	SW846 8270B
2,4-Dinitrotoluene	70	(31 - 106)	SW846 8270B
Hexachlorobenzene	88	(42 - 120)	SW846 8270B
Pentachlorophenol	87	(12 - 156)	SW846 8270B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	80	(21 - 100)
Phenol-d5	93	(10 - 94)
Nitrobenzene-d5	74	(35 - 114)
2-Fluorobiphenyl	61	(43 - 116)
2,4,6-Tribromophenol	78	(10 - 123)
Terphenyl-d14	104	(33 - 141)

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 #....: I8B150103 Work Order #....: CFLX7102 Matrix.....: SOLID
LCS Lot-Sample#: I8C030000-161
Prep Date.....: 02/27/98 Analysis Date...: 02/27/98
Prep Batch #....: 8062161 Analysis Time...: 17:52
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Vinyl chloride	142	(1.0 - 251)	SW846 8260A
1,1-Dichloroethylene	129	(59 - 155)	SW846 8260A
Chloroform	100	(51 - 136)	SW846 8260A
1,2-Dichloroethane	94	(49 - 155)	SW846 8260A
Methyl ethyl ketone	27	(25 - 250)	SW846 8260A
Carbon tetrachloride	113	(71 - 240)	SW846 8260A
Trichloroethylene	104	(71 - 157)	SW846 8260A
Benzene	101	(37 - 151)	SW846 8260A
Tetrachloroethylene	112	(46 - 157)	SW846 8260A
Chlorobenzene	104	(37 - 160)	SW846 8260A
1,4-Dichlorobenzene	107	(75 - 137)	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	91	(86 - 115)
Toluene-d8	96	(88 - 110)
Dibromofluoromethane	104	(86 - 118)

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

Client Lot #....: I8B150103

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Corrosivity	101	Work Order #: CFDLG101 (90 - 110)	LCS Lot-Sample#: I8B160000-188 SW846 9045A	02/16/98	8047188
		Dilution Factor: 1			
		Analysis Time...: 14:00			
Flashpoint	100	Work Order #: CFDMP101 (95 - 105)	LCS Lot-Sample#: I8B160000-152 SW846 1010	02/15-02/16/98	8047152
		Dilution Factor: 1			
		Analysis Time...: 10:00			
Reactive Cyanide	7.3	Work Order #: CFDE0102 (1.0- 64)	LCS Lot-Sample#: I8B160000-136 SW846 7.3.3	02/16-02/17/98	8047136
		Dilution Factor: 1			
		Analysis Time...: 16:00			
Total Recoverable Petroleum Hydrocarbons	86	Work Order #: CFH8D102 (70 - 130)	LCS Lot-Sample#: I8B240000-155 MCAWW 418.1	02/24-02/25/98	8055155
		Dilution Factor: 1			
		Analysis Time...: 00:00			
Total Recoverable Petroleum Hydrocarbons	91	Work Order #: CFLG2102 (70 - 130)	LCS Lot-Sample#: I8C020000-186 MCAWW 418.1	03/01-03/03/98	8061186
		Dilution Factor: 1			
		Analysis Time...: 13:00			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT
General Chemistry
Client Lot #...: I8B150103
Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Corrosivity	101	(90 - 110)	Work Order #: CFDLG101 LCS Lot-Sample#: I8B160000-188 SW846 9045A	02/16/98	8047188
			Dilution Factor: 1		
			Analysis Time...: 14:00		
Flashpoint	100	(95 - 105)	Work Order #: CFDMP101 LCS Lot-Sample#: I8B160000-152 SW846 1010	02/15-02/16/98	8047152
			Dilution Factor: 1		
			Analysis Time...: 10:00		
Reactive Cyanide	7.3	(1.0- 64)	Work Order #: CFDE0102 LCS Lot-Sample#: I8B160000-136 SW846 7.3.3	02/16-02/17/98	8047136
			Dilution Factor: 1		
			Analysis Time...: 16:00		
Total Recoverable Petroleum Hydrocarbons	86	(70 - 130)	Work Order #: CFH8D102 LCS Lot-Sample#: I8B240000-155 MCAWW 418.1	02/24-02/25/98	8055155
			Dilution Factor: 1		
			Analysis Time...: 00:00		
Total Recoverable Petroleum Hydrocarbons	91	(70 - 130)	Work Order #: CFLG2102 LCS Lot-Sample#: I8C020000-186 MCAWW 418.1	03/01-03/03/98	8061186
			Dilution Factor: 1		
			Analysis Time...: 13:00		

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT
TCLP Metals
Client Lot #....: I8B150103

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: I8B180000-226 Prep Batch #....: 8049226					
Barium	100	(80 - 120)	SW846 6010A	02/18-02/19/98	CFETA101
		Dilution Factor: 1			
		Analysis Time...: 14:20			
Cadmium	109	(80 - 120)	SW846 6010A	02/18-02/19/98	CFETA102
		Dilution Factor: 1			
		Analysis Time...: 14:20			
Chromium	101	(80 - 120)	SW846 6010A	02/18-02/19/98	CFETA103
		Dilution Factor: 1			
		Analysis Time...: 14:20			
Lead	93	(80 - 120)	SW846 6010A	02/18-02/19/98	CFETA104
		Dilution Factor: 1			
		Analysis Time...: 14:20			
Selenium	94	(80 - 120)	SW846 6010A	02/18-02/19/98	CFETA105
		Dilution Factor: 1			
		Analysis Time...: 14:20			
Silver	93	(80 - 120)	SW846 6010A	02/18-02/19/98	CFETA106
		Dilution Factor: 1			
		Analysis Time...: 14:20			
Arsenic	100	(80 - 120)	SW846 6010A	02/18-02/19/98	CFETA107
		Dilution Factor: 1			
		Analysis Time...: 14:20			
LCS Lot-Sample#: I8B200000-213 Prep Batch #....: 8051213					
Mercury	99	(80 - 120)	SW846 7470A	02/20-02/24/98	CFG8X101
		Dilution Factor: 1			
		Analysis Time...: 08:51			

NOTE(S) :

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

MATRIX SPIKE SAMPLE DATA REPORT

TCLP Metals

Client Lot #....: I8B150103

Matrix.....: SOLID

Date Sampled...: 02/13/98 09:00 Date Received..: 02/13/98

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMT	UNITS	RECVRY	RPD	METHOD		
MS Lot-Sample #:	I8B150103-001	Prep Batch #...:	8049226					
Leach Date.....:	02/16/98	Leach Batch #..:	P804704					
Silver								
ND	1.0	0.99	mg/L	99		SW846 6010A	02/18-02/19/98	CFDA210V
ND	1.0	1.0	mg/L	101	1.4	SW846 6010A	02/18-02/19/98	CFDA210X
			Dilution Factor: 1					
			Analysis Time...: 14:27					
Arsenic								
ND	5.0	4.9	mg/L	98		SW846 6010A	02/18-02/19/98	CFDA211C
ND	5.0	4.9	mg/L	98	0.32	SW846 6010A	02/18-02/19/98	CFDA211C
			Dilution Factor: 1					
			Analysis Time...: 14:27					
Barium								
ND	50.0	53.2	mg/L	101		SW846 6010A	02/18-02/19/98	CFDA210F
ND	50.0	53.7	mg/L	102	1.0	SW846 6010A	02/18-02/19/98	CFDA210I
			Dilution Factor: 1					
			Analysis Time...: 14:27					
Cadmium								
ND	1.0	0.92	mg/L	91		SW846 6010A	02/18-02/19/98	CFDA210M
ND	1.0	0.93	mg/L	92	1.0	SW846 6010A	02/18-02/19/98	CFDA210N
			Dilution Factor: 1					
			Analysis Time...: 14:27					
Chromium								
ND	5.0	4.8	mg/L	96		SW846 6010A	02/18-02/19/98	CFDA210F
ND	5.0	4.9	mg/L	97	0.82	SW846 6010A	02/18-02/19/98	CFDA210C
			Dilution Factor: 1					
			Analysis Time...: 14:27					
Lead								
ND	5.0	4.5	mg/L	91		SW846 6010A	02/18-02/19/98	CFDA210F
ND	5.0	4.6	mg/L	92	0.70	SW846 6010A	02/18-02/19/98	CFDA210F
			Dilution Factor: 1					
			Analysis Time...: 14:27					
Selenium								
ND	1.0	0.90	mg/L	90		SW846 6010A	02/18-02/19/98	CFDA210L
ND	1.0	0.91	mg/L	91	1.5	SW846 6010A	02/18-02/19/98	CFDA210V
			Dilution Factor: 1					
			Analysis Time...: 14:27					

MS Lot-Sample #: I8B150103-001 | Prep Batch #...: | 8051213 |

Leach Date.....: 02/16/98 | Leach Batch #..: | P804704 |

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT
TCLP Metals
Client Lot #...: I8B150103
Matrix.....: SOLID
Date Sampled...: 02/13/98 09:00 Date Received...: 02/13/98

PARAMETER	SAMPLE SPIKE MEASURED			UNITS	PERCNT			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMT	AMOUNT		RECVRY	RPD				
Mercury	ND	0.001	0.00089	mg/L	89		SW846 7470A	02/20-02/24/98	CFDA2114	
	ND	0.001	0.00081	mg/L	81	9.4	SW846 7470A	02/20-02/24/98	CFDA2115	
Dilution Factor: 1										
Analysis Time...: 09:00										

NOTE(S) :

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

MATRIX SPIKE SAMPLE DATA REPORT

TCLP GC/MS Semivolatiles

Client Lot #....: I8B150103 Work Order #....: CFDA2112-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B150103-001 CFDA2113-MSD
 Date Sampled...: 02/12/98 10:15 Date Received...: 02/14/98
 Leach Date.....: 02/16/98 Prep Date.....: 02/18/98 Analysis Date...: 02/26/98
 Leach Batch #...: P804704 Prep Batch #....: 8049233 Analysis Time..: 15:19
 Dilution Factor: 1

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
o-Cresol	ND	0.40	0.30	mg/L	76		SW846 8270B
	ND	0.40	0.30	mg/L	75	1.8	SW846 8270B
m-Cresol & p-Cresol	ND	0.80	0.64	mg/L	80		SW846 8270B
	ND	0.80	0.63	mg/L	78	2.0	SW846 8270B
1,4-Dichlorobenzene	ND	0.40	0.23	mg/L	56		SW846 8270B
	ND	0.40	0.23	mg/L	57	1.3	SW846 8270B
2,4-Dinitrotoluene	ND	0.40	0.29	mg/L	72		SW846 8270B
	ND	0.40	0.31	mg/L	79	8.2	SW846 8270B
Hexachlorobenzene	ND	0.40	0.21	mg/L	53		SW846 8270B
	ND	0.40	0.22	mg/L	55	5.0	SW846 8270B
Hexachlorobutadiene	ND	0.40	0.23	mg/L	57		SW846 8270B
	ND	0.40	0.24	mg/L	59	3.6	SW846 8270B
Hexachloroethane	ND	0.40	0.24	mg/L	59		SW846 8270B
	ND	0.40	0.25	mg/L	62	4.0	SW846 8270B
Nitrobenzene	ND	0.40	0.28	mg/L	70		SW846 8270B
	ND	0.40	0.29	mg/L	73	4.2	SW846 8270B
Pentachlorophenol	ND	0.40	0.27	mg/L	68		SW846 8270B
	ND	0.40	0.28	mg/L	71	4.4	SW846 8270B
Pyridine	ND	0.40	0.29	mg/L	72		SW846 8270B
	ND	0.40	0.30	mg/L	76	5.0	SW846 8270B
2,4,5-Trichlorophenol	ND	0.40	0.30	mg/L	74		SW846 8270B
	ND	0.40	0.32	mg/L	79	7.0	SW846 8270B
2,4,6-Trichlorophenol	ND	0.40	0.28	mg/L	69		SW846 8270B
	ND	0.40	0.28	mg/L	70	2.0	SW846 8270B

SURROGATE	PERCENT		RECOVERY LIMITS
	RECOVERY	LIMITS	
2-Fluorophenol	71		(21 - 100)
	71		(21 - 100)
Phenol-d5	83		(10 - 94)
	87		(10 - 94)
Nitrobenzene-d5	67		(35 - 114)
	70		(35 - 114)
2-Fluorobiphenyl	57		(43 - 116)
	55		(43 - 116)
2,4,6-Tribromophenol	67		(10 - 123)
	71		(10 - 123)
Terphenyl-d14	64		(33 - 141)
	50		(33 - 141)

NOTE (S) :

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT
TCLP GC/MS Volatiles

Client Lot #....: I8B150103 Work Order #....: CFFV210E-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B200120-002 CFFV210F-MSD
 Date Sampled....: 02/19/98 10:30 Date Received...: 02/20/98
 Leach Date.....: 02/23/98 Prep Date.....: 02/27/98 Analysis Date...: 02/27/98
 Leach Batch #...: P805602 Prep Batch #....: 8062161 Analysis Time...: 19:00
 Dilution Factor: 1

<u>PARAMETER</u>	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>		<u>RECOVERY</u>	<u>RPD</u>	
Vinyl chloride	ND	0.50	0.68	mg/L	136		SW846 8260A
	ND	0.50	0.70	mg/L	140	2.8	SW846 8260A
1,1-Dichloroethylene	ND	0.50	0.50	mg/L	100		SW846 8260A
	ND	0.50	0.55	mg/L	110	9.0	SW846 8260A
Chloroform	ND	0.50	0.48	mg/L	96		SW846 8260A
	ND	0.50	0.48	mg/L	95	0.20	SW846 8260A
1,2-Dichloroethane	ND	0.50	0.46	mg/L	91		SW846 8260A
	ND	0.50	0.47	mg/L	94	2.5	SW846 8260A
Methyl ethyl ketone	ND	0.50	0.13	mg/L	26		SW846 8260A
	ND	0.50	0.15	mg/L	30	14	SW846 8260A
Carbon tetrachloride	ND	0.50	0.53	mg/L	106		SW846 8260A
	ND	0.50	0.55	mg/L	110	4.0	SW846 8260A
Trichloroethylene	ND	0.50	0.52	mg/L	104		SW846 8260A
	ND	0.50	0.53	mg/L	106	2.7	SW846 8260A
Benzene	ND	0.50	0.48	mg/L	96		SW846 8260A
	ND	0.50	0.50	mg/L	99	3.2	SW846 8260A
Tetrachloroethylene	ND	0.50	0.59	mg/L	119		SW846 8260A
	ND	0.50	0.55	mg/L	110	7.8	SW846 8260A
Chlorobenzene	ND	0.50	0.52	mg/L	103		SW846 8260A
	ND	0.50	0.52	mg/L	105	1.2	SW846 8260A
1,4-Dichlorobenzene	ND	0.50	0.52	mg/L	103		SW846 8260A
	ND	0.50	0.53	mg/L	105	1.6	SW846 8260A

<u>SURROGATE</u>	PERCENT	RECOVERY	LIMITS
	<u>RECOVERY</u>		
4-Bromofluorobenzene	90		(86 - 115)
	93		(86 - 115)
Toluene-d8	103		(88 - 110)
	95		(88 - 110)
Dibromofluoromethane	102		(86 - 118)
	101		(86 - 118)

NOTE(S) :

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

Bold print denotes control parameters

300

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #....: I8B150103

Matrix.....: SOLID

Date Sampled....: 02/13/98 09:00 Date Received..: 02/13/98

PARAMETER	SAMPLE SPIKE MEASURED			UNITS	PERCNT		METHOD	PREPARATION-	PREP	ANALYSIS DATE	BATCH #
	AMOUNT	AMT	AMOUNT		RECVRY	RPD					
Reactive Cyanide				WO#: CFD2Q10K-MS/CFD2Q10L-MSD			MS	Lot-Sample #:	I8B140105-001		
	ND	40	0.20 N	mg/kg	0.51		SW846	7.3.3	02/16-02/17/98	8047136	
	ND	40	0.20 N	mg/kg	0.49	4.0	SW846	7.3.3	02/16-02/17/98	8047136	
Dilution Factor: 1											
Analysis Time...: 16:00											
Total Recoverable				WO#: CFDA310K-MS/CFDA310L-MSD			MS	Lot-Sample #:	I8B150103-002		
Petroleum Hydrocarbons											
	110	270	270 N	mg/kg	57		MCAWW	418.1	02/24-02/25/98	8055155	
	110	270	200 N	mg/kg	32	29	MCAWW	418.1	02/24-02/25/98	8055155	
Dilution Factor: 1											
Analysis Time...: 13:00											
Total Recoverable				WO#: CFDA510K-MS/CFDA510L-MSD			MS	Lot-Sample #:	I8B150103-004		
Petroleum Hydrocarbons											
	550000	520	480000 NC	mg/kg			MCAWW	418.1	03/01-03/03/98	8061186	
	550000	520	540000 NC	mg/kg			MCAWW	418.1	03/01-03/03/98	8061186	
Dilution Factor: 1											
Analysis Time...: 10:00											

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #....: I8B150103

Matrix.....: SOLID

Date Sampled...: 02/13/98 09:00 Date Received..: 02/13/98

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION-	PREP
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	ANALYSIS DATE
Reactive Cyanide				WO#: CFD2Q10K-MS/CFD2Q10L-MSD			MS Lot-Sample #:	I8B140105-001
	ND	40	0.20 N	mg/kg	0.51		SW846 7.3.3	02/16-02/17/98 8047136
	ND	40	0.20 N	mg/kg	0.49	4.0	SW846 7.3.3	02/16-02/17/98 8047136
			Dilution Factor:	1				
			Analysis Time...:	16:00				
Total Recoverable				WO#: CFDA310K-MS/CFDA310L-MSD			MS Lot-Sample #:	I8B150103-002
Petroleum Hydrocarbons								
	110	270	270 N	mg/kg	57		MCAWW 418.1	02/24-02/25/98 8055155
	110	270	200 N	mg/kg	32	29	MCAWW 418.1	02/24-02/25/98 8055155
			Dilution Factor:	1				
			Analysis Time...:	13:00				
Total Recoverable				WO#: CFDA510K-MS/CFDA510L-MSD			MS Lot-Sample #:	I8B150103-004
Petroleum Hydrocarbons								
	550000	520	480000 NC	mg/kg			MCAWW 418.1	03/01-03/03/98 8061186
	550000	520	540000 NC	mg/kg			MCAWW 418.1	03/01-03/03/98 8061186
			Dilution Factor:	1				
			Analysis Time...:	10:00				

NOTE (S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and RPD were not calculated.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: I8B150103

Date Sampled...: 02/13/98 09:00 Date Received..: 02/13/98

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MS Lot-Sample #: I8B150103-001 Prep Batch #...: 8049226							
		Leach Date.....: 02/16/98		Leach Batch #...:	P804704		
Silver	99	(80 - 120)			SW846 6010A	02/18-02/19/98	CFDA210W
	101	(80 - 120) 1.4 (0-20)			SW846 6010A	02/18-02/19/98	CFDA210X
		Dilution Factor: 1					
		Analysis Time..: 14:27					
Arsenic	98	(80 - 120)			SW846 6010A	02/18-02/19/98	CFDA2110
	98	(80 - 120) 0.32 (0-20)			SW846 6010A	02/18-02/19/98	CFDA2111
		Dilution Factor: 1					
		Analysis Time..: 14:27					
Barium	101	(80 - 120)			SW846 6010A	02/18-02/19/98	CFDA210K
	102	(80 - 120) 1.0 (0-20)			SW846 6010A	02/18-02/19/98	CFDA210L
		Dilution Factor: 1					
		Analysis Time..: 14:27					
Cadmium	91	(80 - 120)			SW846 6010A	02/18-02/19/98	CFDA210M
	92	(80 - 120) 1.0 (0-20)			SW846 6010A	02/18-02/19/98	CFDA210N
		Dilution Factor: 1					
		Analysis Time..: 14:27					
Chromium	96	(80 - 120)			SW846 6010A	02/18-02/19/98	CFDA210P
	97	(80 - 120) 0.82 (0-20)			SW846 6010A	02/18-02/19/98	CFDA210Q
		Dilution Factor: 1					
		Analysis Time..: 14:27					
Lead	91	(80 - 120)			SW846 6010A	02/18-02/19/98	CFDA210R
	92	(80 - 120) 0.70 (0-20)			SW846 6010A	02/18-02/19/98	CFDA210T
		Dilution Factor: 1					
		Analysis Time..: 14:27					
Selenium	90	(80 - 120)			SW846 6010A	02/18-02/19/98	CFDA210U
	91	(80 - 120) 1.5 (0-20)			SW846 6010A	02/18-02/19/98	CFDA210V
		Dilution Factor: 1					
		Analysis Time..: 14:27					
MS Lot-Sample #: I8B150103-001 Prep Batch #...: 8051213							
		Leach Date.....: 02/16/98		Leach Batch #...:	P804704		
Mercury	89	(75 - 125)			SW846 7470A	02/20-02/24/98	CFDA2114
	81	(75 - 125) 9.4 (0-20)			SW846 7470A	02/20-02/24/98	CFDA2115
		Dilution Factor: 1					
		Analysis Time..: 09:00					

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT
TCLP GC/MS Semivolatiles

Client Lot #....: I8B150103 Work Order #....: CFDA2112-MS Matrix.....: SOLID
 MS Lot-Sample #: I8B150103-001 CFDA2113-MSD
 Date Sampled....: 02/12/98 10:15 Date Received...: 02/14/98
 Leach Date.....: 02/16/98 Prep Date.....: 02/18/98 Analysis Date...: 02/26/98
 Leach Batch #..: P804704 Prep Batch #....: 8049233 Analysis Time...: 15:19
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
o-Cresol	76	(21 - 137)			SW846 8270B
	75	(21 - 137)	1.8	(0-70)	SW846 8270B
m-Cresol & p-Cresol	80	(19 - 126)			SW846 8270B
	78	(19 - 126)	2.0	(0-94)	SW846 8270B
1,4-Dichlorobenzene	56	(26 - 112)			SW846 8270B
	57	(26 - 112)	1.3	(0-40)	SW846 8270B
2,4-Dinitrotoluene	72	(31 - 106)			SW846 8270B
	79	(31 - 106)	8.2	(0-55)	SW846 8270B
Hexachlorobenzene	53	(42 - 120)			SW846 8270B
	55	(42 - 120)	5.0	(0-39)	SW846 8270B
Hexachlorobutadiene	57	(33 - 111)			SW846 8270B
	59	(33 - 111)	3.6	(0-40)	SW846 8270B
Hexachloroethane	59	(26 - 102)			SW846 8270B
	62	(26 - 102)	4.0	(0-44)	SW846 8270B
Nitrobenzene	70	(42 - 120)			SW846 8270B
	73	(42 - 120)	4.2	(0-40)	SW846 8270B
Pentachlorophenol	68	(12 - 156)			SW846 8270B
	71	(12 - 156)	4.4	(0-76)	SW846 8270B
Pyridine	72	(1.0- 144)			SW846 8270B
	76	(1.0- 144)	5.0	(0-95)	SW846 8270B
2,4,5-Trichlorophenol	74	(29 - 123)			SW846 8270B
	79	(29 - 123)	7.0	(0-63)	SW846 8270B
2,4,6-Trichlorophenol	69	(19 - 122)			SW846 8270B
	70	(19 - 122)	2.0	(0-64)	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	71	(21 - 100)
	71	(21 - 100)
Phenol-d5	83	(10 - 94)
	87	(10 - 94)
Nitrobenzene-d5	67	(35 - 114)
	70	(35 - 114)
2-Fluorobiphenyl	57	(43 - 116)
	55	(43 - 116)
2,4,6-Tribromophenol	67	(10 - 123)
	71	(10 - 123)
Terphenyl-d14	64	(33 - 141)
	50	(33 - 141)

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

TCLP GC/MS Volatiles

Client Lot #....: I8B150103 **Work Order #....:** CFFV210E-MS **Matrix.....:** SOLID
MS Lot-Sample #: I8B200120-002 CFFV210F-MSD
Date Sampled....: 02/19/98 10:30 **Date Received...:** 02/20/98
Leach Date.....: 02/23/98 **Prep Date.....:** 02/27/98 **Analysis Date..:** 02/27/98
Leach Batch #..: P805602 **Prep Batch #....:** 8062161 **Analysis Time..:** 19:00
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
Vinyl chloride	136	(1.0 - 251)			SW846 8260A
	140	(1.0 - 251)	2.8	(0-30)	SW846 8260A
1,1-Dichloroethylene	100	(59 - 155)			SW846 8260A
	110	(59 - 155)	9.0	(0-30)	SW846 8260A
Chloroform	96	(51 - 136)			SW846 8260A
	95	(51 - 136)	0.20	(0-30)	SW846 8260A
1,2-Dichloroethane	91	(49 - 155)			SW846 8260A
	94	(49 - 155)	2.5	(0-30)	SW846 8260A
Methyl ethyl ketone	26	(25 - 250)			SW846 8260A
	30	(25 - 250)	14	(0-30)	SW846 8260A
Carbon tetrachloride	106	(71 - 240)			SW846 8260A
	110	(71 - 240)	4.0	(0-30)	SW846 8260A
Trichloroethylene	104	(71 - 157)			SW846 8260A
	106	(71 - 157)	2.7	(0-30)	SW846 8260A
Benzene	96	(37 - 151)			SW846 8260A
	99	(37 - 151)	3.2	(0-30)	SW846 8260A
Tetrachloroethylene	119	(46 - 157)			SW846 8260A
	110	(46 - 157)	7.8	(0-30)	SW846 8260A
Chlorobenzene	103	(37 - 160)			SW846 8260A
	105	(37 - 160)	1.2	(0-30)	SW846 8260A
1,4-Dichlorobenzene	103	(75 - 137)			SW846 8260A
	105	(75 - 137)	1.6	(0-30)	SW846 8260A

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	90		(86 - 115)
	93		(86 - 115)
Toluene-d8	103		(88 - 110)
	95		(88 - 110)
Dibromofluoromethane	102		(86 - 118)
	101		(86 - 118)

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

General Chemistry

Client Lot #....: I8B150103

Matrix.....: SOLID

Date Sampled...: 02/13/98 09:00 Date Received..: 02/13/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-	PREP
						ANALYSIS DATE	BATCH #
Reactive Cyanide			WO#: CFD2Q10K-MS/CFD2Q10L-MSD		MS	Lot-Sample #:	I8B140105-001
	0.51 N	(1.0 - 64)			SW846 7.3.3	02/16-02/17/98	8047136
	0.49 N	(1.0 - 64)	4.0	(0-213)	SW846 7.3.3	02/16-02/17/98	8047136
			Dilution Factor:	1			
			Analysis Time..:	16:00			
Total Recoverable Petroleum Hydrocarbons			WO#: CFDA310K-MS/CFDA310L-MSD		MS	Lot-Sample #:	I8B150103-002
	57 N	(70 - 130)			MCAWW 418.1	02/24-02/25/98	8055155
	32 N	(70 - 130)	29	(0-30)	MCAWW 418.1	02/24-02/25/98	8055155
			Dilution Factor:	1			
			Analysis Time..:	13:00			
Total Recoverable Petroleum Hydrocarbons			WO#: CFDA510K-MS/CFDA510L-MSD		MS	Lot-Sample #:	I8B150103-004
	NC	(70 - 130)			MCAWW 418.1	03/01-03/03/98	8061186
	NC	(70 - 130)		(0-30)	MCAWW 418.1	03/01-03/03/98	8061186
			Dilution Factor:	1			
			Analysis Time..:	10:00			

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and RPD were not calculated.

MATRIX SPIKE SAMPLE EVALUATION REPORT
General Chemistry
Client Lot #....: I8B150103

Matrix.....: SOLID

Date Sampled...: 02/13/98 09:00 **Date Received..:** 02/13/98

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
						<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Reactive Cyanide			WO#:	CFD2Q10K-MS/CFD2Q10L-MSD	MS	Lot-Sample #:	I8B140105-001
	0.51 N	(1.0 - 64)			SW846 7.3.3	02/16-02/17/98	8047136
	0.49 N	(1.0 - 64)	4.0	(0-213)	SW846 7.3.3	02/16-02/17/98	8047136
					Dilution Factor: 1		
					Analysis Time...: 16:00		
Total Recoverable Petroleum Hydrocarbons			WO#:	CFDA310K-MS/CFDA310L-MSD	MS	Lot-Sample #:	I8B150103-002
	57 N	(70 - 130)			MCAWW 418.1	02/24-02/25/98	8055155
	32 N	(70 - 130)	29	(0-30)	MCAWW 418.1	02/24-02/25/98	8055155
					Dilution Factor: 1		
					Analysis Time...: 13:00		
Total Recoverable Petroleum Hydrocarbons			WO#:	CFDA510K-MS/CFDA510L-MSD	MS	Lot-Sample #:	I8B150103-004
	NC	(70 - 130)			MCAWW 418.1	03/01-03/03/98	8061186
	NC	(70 - 130)		(0-30)	MCAWW 418.1	03/01-03/03/98	8061186
					Dilution Factor: 1		
					Analysis Time...: 10:00		

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and RPD were not calculated.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Date Sampled...: 02/13/98 09:00 Date Received...: 02/13/98

% Moisture.....: 0.0

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Reactive Cyanide	ND	ND	mg/kg	0	(0-213)	SD Lot-Sample #: I8B140105-001 SW846 7.3.3	02/16-02/17/98	8047136
			Dilution Factor: 1					
			Analysis Time...: 16:00					
Reactive Sulfide	ND	ND	mg/kg	0	(0-20)	SD Lot-Sample #: I8B140105-001 SW846 7.3.4	02/16/98/17/98	8047137
			Dilution Factor: 1					
			Analysis Time...: 00:00					

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: I8B150103

Work Order #....: CFD2Q-SMP

Matrix.....: SOLID

CFD2Q-DUP

Date Sampled....: 02/13/98 09:00 Date Received...: 02/13/98

% Moisture.....: 0.0

<u>PARAM</u>	<u>RESULT</u>	<u>DUPPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
							<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Flashpoint	>150		deg F	0.0	(0-20)	SD Lot-Sample #: I8B140105-001 SW846 1010	02/15-02/16/98	8047152
					Dilution Factor: 1			
					Analysis Time...: 00:00			
Corrosivity	6.5	6.4	No Units	0.62	(0-20)	SD Lot-Sample #: I8B140105-001 SW846 9045A	02/16/98/16/98	8047188
					Dilution Factor: 1			
					Analysis Time...: 00:00			

APPENDIX F
WASTE SOIL DISPOSAL DOCUMENTATION

CERTIFICATE OF WASTE STATUS

1. Generator (Name): Address: Contact:	BJ Services Company USA 8701 New Trails Dr. The Woodlands, Tx. 77381 Rick N. Johnson (281) 367-7521	3. Location (Street Address &/or ULSTR): 3250 Southside River Rd. Farmington, NM 87401 Contact: Jack Hartlers (505) 327-6222
2. Originating Site (Name):	BJ Services Company, USA - Farmington District	4. Destination Name: EnviroTech 5796 US Hwy 64 Farmington, NM 87401 Contact: Lauren Brown (505) 632-0615

5. Source and Description of Waste: * - see attached analytical
Waste Soil derived from removal of an
underground field waste tank; impacted w/ petroleum hydrocarbons

I, RICK N. JOHNSON, representative for:
BJ Services Company, USA do hereby certify
that according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988 regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste

NON-EXEMPT oilfield waste which is non-hazardous by
characteristic analysis or by production identification

For Non-exempt waste only the following documentation is attached (check appropriate items):

- MSDS Information
 RCRA TCLP Analysis (attached)
 Chain of Custody
 Other (Description)

Name (Signature): RICK N.

Printed Name: RICK N. JOHNSON

Title: Environmental Specialist

Date: 4-15-98

Attach list of originating sites as appropriate.

ENVIROTECH INC.

10995

Bill of Lading

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 - 3014 • FARMINGTON, NEW MEXICO 87401

MONTH OF April 98

MANIFEST		COMPLETE DESCRIPTION OF SHIPMENT				TRANSPORTING COMPANY				
DATE	No.	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	COMPANY	T.M.	TRK #	DRIVER SIGNATURE
4-27	1	B.I. Services 92101-02 Goldwater Tank	LF245	TPH-Cadmium Soil	T10	248	BAKELA	1117	#16	Lorenzo Paula
"	2	"	"	"	T10	16	BAKELA	1136	C19	Charles Paula
"	3	"	"	"	T10	16	FOURZ	1135	834	Clayton Clark
"	4	"	"	"	T10	18	FOURZ	1130	835	Robert Knutson
"	5	"	"	"	T10	18	BAKELA C	1137	#3	Kay 26 Las Lin
"	6	"	"	"	T10	18	FOURZ	1254	833	Broda 1400
"	7.2	"	"	"	T10	18	BAKELA	1329	#16	Lorenzo Paula
"	8	"	"	"	T10	18	BAKELA C	1400	C14	Charles Paula
"	9	"	"	"	T10	18	BAKELA C	1405	#3	Kay 26 Las Lin
"	10	"	"	"	T10	18	FOURZ	1406	835	Robert Knutson
"	11	"	"	"	T10	18	FOURZ	1409	834	Clayton Clark
"	12	"	"	"	T10	18	FOURZ	1449	833	Broda 1400
"	13	"	"	"	T10	18	BAKELA	1500	#16	Lorenzo Paula
"	14	"	"	"	T10	18	BAKELA	1600	834	Charles Paula
"	15	"	"	"	T10	18	BAKELA C	1609	#3	Kay 26 Las Lin
"	16	"	"	"	T10	18	FOURZ	1613	835	Robert Knutson

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

ENTERED MAY - 3 1998

NAME Joseph McDonald

COMPANY Envirotech Inc

SIGNATURE Joseph McDonald

DATE 4-27-98

ENVIROTECH INC.

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

16996

Bill of Lading

MONTH OF Sept. 1 18

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME Joseph McDonald

COMPANY Envirotech Inc

SIGNATURE John McDonald

DATE 4-27-98

315