

DEPARTMENT OF TRANSPORTATION

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October 22, 2001

Mr. Barney Chan
Alameda County Department of Health Services
1131 Harborway Parkway
Alameda, California 94502

Subject: Off-site Site Investigation and Groundwater Monitoring at the South Oakland Maintenance Station located at 1112 29th Avenue in Oakland, Alameda County, California

Dear Mr. Chan:

Attached is a copy of Professional Service Industries' report titled "*Hazardous Waste Preliminary Site Investigation Report, South Oakland Maintenance Station, 1112 29th Avenue, Oakland California*" dated September 27, 2001 for work performed at the above-referenced site.

The work included installation of three boreholes down gradient and off-site to the Caltrans property to better define the lateral and vertical extent of specific gasoline constituents (Methyl tertiary Butyl Ether) in the ground water. No monitoring wells were installed off-site.

Neither petroleum hydrocarbons nor the respective volatile organic compounds were detected in the soil samples collected off-site above the laboratory method detection limits (MDLs). Grab groundwater samples collected from the three boreholes off-site did not contain detectable petroleum hydrocarbons except MtBE. MtBE was detected only in the groundwater sample collected from borehole B10 in a concentration of 2.1 micrograms per liter ($\mu\text{g/l}$) which is below the Primary Drinking Water Standard.

Groundwater samples from the four monitoring wells on-site were collected and analyzed at the same time as the off-site investigation. Both petroleum hydrocarbons and VOCs were detected in all the monitoring wells. The contaminant levels remain stabilized. The primary contaminant of concern continues to be MtBE.

Based on the results of the most recent site investigation, Caltrans recommends no further off-site investigations. We will, however, continue to monitor and sample the monitoring wells at the maintenance station.

Page 2 of 2
Mr. Barney Chan
10/22/01

If you have any questions or require additional information, please contact Ms. Frances Maroni of my staff at (510) 286-5657.

Sincerely,

HARRY Y. YAHATA
District Director

By: 

RAY BOYER
District Branch Chief
Office of Environmental Engineering

Attachment

cc: RBoyer, File

**HAZARDOUS WASTE PRELIMINARY
SITE INVESTIGATION REPORT
TASK ORDER NUMBER 04-987901-VC
CONTRACT NUMBER 43A0078**

**SOUTH OAKLAND MAINTENANCE STATION
1112 29th AVENUE
OAKLAND, CALIFORNIA**

prepared for

**CALIFORNIA DEPARTMENT OF
TRANSPORTATION
District 4
111 Grand Avenue
Oakland, California**

prepared by

**Professional Service Industries, Inc.
4703 Tidewater Avenue, Suite B
Oakland, California 94601
(510) 434-9200**

**September 27, 2001
575-1G026**

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STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATION

Information provided in this report is intended exclusively for the California Department of Transportation (Caltrans) (PSI Project Number: 575-1G026) for the evaluation of soil and/or groundwater contamination as it pertains to the subject site. Professional Service Industries, Inc., (PSI) is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation. The professional services provided have been performed in accordance with practices generally accepted by other geologists, hydrologists, hydrogeologists, engineers, and environmental scientists practicing in this field. No other warranty, either expressed or implied, is made. As with all subsurface investigations, there is no guarantee that the work conducted will identify any and all sources or locations of contamination.

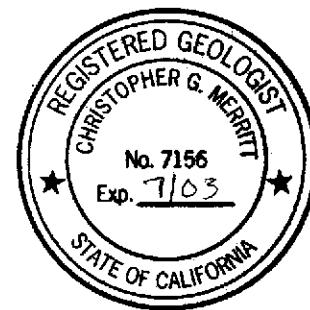
This report is issued with the understanding that Caltrans is responsible for ensuring that the information contained in this report is brought to the attention of the appropriate regulatory agency. This report has been reviewed by a geologist who is registered in the State of California and whose signature and license number appears below.

Professional Service Industries, Inc.



Frank R. Poss
Senior Hydrogeologist


CHRIS MERRITT
Chris Merritt R.G. (7156)
Project Geologist



1.0 INTRODUCTION

Professional Service Industries, Inc. (PSI) has been retained by the California Department of Transportation (Caltrans), under Task Order Number 04-987901-VC and Contract Number 43A0078, to assess current soil and groundwater conditions at the All-Aboard Mini Storage and to conduct quarterly groundwater monitoring for two quarters at the Caltrans South Oakland Maintenance Station in the City of Oakland, California (Figure 1). The All-Aboard Mini-Storage site is hydraulically down gradient of the Caltrans South Oakland Maintenance Station.

The scope of work for this investigation included:

- Drilling of 3 soil borings at the All-Aboard Mini-Storage site;
- Collection of soil and groundwater samples to characterize soil and groundwater quality at the All-Aboard Mini-Storage site;
- Quarterly groundwater monitoring of the four wells at the Caltrans South Oakland Maintenance Station; and
- Final Report detailing the results of the investigation.

1.1 PROJECT OBJECTIVE

The objective of the project is to evaluate the extent and nature of soil and groundwater contamination (primarily Methyl Tertiary Butyl Ether) associated with the Caltrans South Oakland Maintenance Station. Analytical results from the soil and groundwater investigation have been examined with respect to regulatory criteria and published guidelines.

1.2 PROJECT HISTORY

The site is currently used as a maintenance station by Caltrans. The maintenance station includes offices, a repair shop, a sign shop, and several material storage bins. The entire property covers approximately two acres. The site is paved with asphalt and is relatively flat. The Alameda/Oakland Estuary is approximately 0.5 miles southwest of the site.

One 4,000-gallon diesel underground storage tank (UST) and one 2,000-gallon gasoline UST were removed from the site on March 11, 1997. The tank pit was over-excavated and soil samples were collected. Sidewall and bottom samples collected from the excavation contained concentrations of Total Petroleum Hydrocarbons as Gasoline (TPH-G), as high as 380 milligrams per kilogram (mg/kg), and Total Petroleum Hydrocarbons

as Diesel (TPH-D), as high as 21 mg/kg. Concentrations of Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), ranged from 0.010 to 48 mg/kg. Methyl Tertiary Butyl Ether (MTBE) concentrations ranged from 0.041 to 9.15 mg/kg. Groundwater samples were not collected (Caltrans, 1999).

On April 6 and 7, 1999, Borings B1 through B6 were drilled at the site. All of the borings were converted to 1.3-centimeter (cm) (0.5-inch) inside diameter temporary groundwater monitoring wells. Soil samples were collected from each boring at depths of 1.5, 3, and 4.6 meters (5, 10, and 15 feet) below ground surface (bgs).

Soil samples were analyzed for TPH-G, TPH-D, and Volatile Organic Compounds (VOCs), by EPA Method 8260. TPH-G was detected in one soil sample (B6-10) at 13 mg/kg. None of the soil samples contained detectable concentrations of TPH-D. MTBE was the only VOC detected in the soil samples analyzed, and was only detected in one sample (B5-1.5 meters) at 0.16 mg/kg. No other soil sample contained a detectable concentration of MTBE (PSI, 1999).

TPH-G was detected in groundwater samples from temporary Wells WB3 (520 µg/l) and WB4 (520 µg/l). No other groundwater samples contained detectable concentrations of TPH-G. No TPH-D was detected in any of the groundwater samples. Benzene was detected in the water sample from Well WB3 (6.3 µg/l). MTBE was detected in the samples from Well WB5 (6,600 µg/l) and WB6 (24 µg/l). Concentrations of other gasoline related compounds were detected in samples from Wells WB1, WB3, WB4, and WB5. Chloroform was detected in water samples from Wells WB4 (2.4 µg/l) and WB6 (2.7 µg/l). Tetrachloroethene (synonym Perchloroethene [PCE]) was detected in the water sample from Well WB6 (12 µg/l) (PSI, 1999).

On August 13, 1999, Borings B7 through B9 were drilled at the site. The borings were drilled on the property boundary. The results of the sampling indicated the following:

- TPH-G concentrations were detected in one soil sample [B9-15 (0.54 mg/kg)] at the site.
- TPH-D was detected in one groundwater sample [WB7 (0.73 mg/l)]
- MTBE was detected in grab groundwater samples WB7 (5,600 µg/l) and WB8 (9.0 µg/l). The downgradient extent of MTBE has not been established.

In June and July 2000, PSI completed a supplemental investigation, which included the installation of four monitoring wells at the site (Figure 2). The conclusions and recommendations of the investigation follows:

- None of the soil samples contained detectable concentrations of TPH-G, while TPH-D was detected in two soil samples at concentrations below regulatory concern.
- None of the soil samples contained detectable concentrations of VOCs with the exception of MTBE. The highest MTBE concentration detected was 0.52 mg/kg in soil sample B3-10. All of the MTBE concentrations detected were below first groundwater.
- None of the groundwater samples contained detectable concentrations of TPH-D, while TPH-G was detected in two groundwater samples at a maximum concentration of 2.7 mg/l.
- Numerous VOCs were detected in the groundwater with only Benzene and MTBE being at concentrations greater than the State of California Primary Drinking Water Standard (PDWS) or Secondary Drinking Water Standard (SDWS). Based on the concentrations detected, MTBE appears to be the primary contaminant of concern (COC). The lateral extent of MTBE has not been defined.
- The report recommended continued groundwater monitoring and the installation of additional monitoring wells down gradient of monitoring well MW-3. Additionally, as TPH-D was not detected in the groundwater sample from monitoring well MW-3, the report recommended that the analyses for TPH-D in this well be eliminated.

This investigation is designed to determine whether MTBE has migrated down gradient on to the All-Aboard Mini Storage site and perform two quarters of groundwater monitoring.

2.0 PRE-FIELD ACTIVITIES

Prior to initiation of field activities, PSI marked the drilling locations with white paint and contacted Underground Service Alert a minimum of 48-hours prior to beginning work to locate any potential buried utilities. Additionally, PSI obtained boring permits from the Alameda County Department of Environmental Health prior to drilling.

A site-specific Health and Safety Plan (HSP) was developed in compliance with 29 CFR 1910.120, under the supervision of a Certified Industrial Hygienist. The HSP was designed to address the potential hazardous materials that may be encountered during field activities at the site and to minimize the exposure to potentially hazardous materials and unsafe working conditions to on-site personnel.

Prior to field activities, PSI completed a Workplan for Caltrans. The purpose of the Workplan was to define the scope of work and to describe the methodology to be utilized to complete the scope of work.

3.0 SUBSURFACE INVESTIGATION

3.1 SOIL BORINGS

On August 24, 2001, Borings B10 through B12 were drilled at the All-Aboard Mini [REDACTED]age. The boring locations are presented in Figure 2. Soil borings were advanced using a direct-push drill rig. V&W Drilling of Rio Vista, California provided drilling services. Boring B10 was advanced to a depth of approximately 7.5 meters (25 feet) below ground surface (bgs), while borings B11 and B12 were advanced to a depth of approximately 1.8 meters (6 feet). Soil samples were collected at approximately 1-meter (3 foot) intervals. Soil samples were collected according to the protocol presented in Appendix A. After completion, the borings were backfilled with neat cement grout to existing grade.

Soil borings were logged according to the "Soil and Rock Logging Classification Manual" of the State of California, Department of Transportation, which is consistent with the Unified Soil Classification System. Boring logs are presented in Appendix B. The subsurface materials observed during drilling activities consisted primarily of interbedded gravel, sand, silt and clay. Groundwater was encountered at approximately 3.6 meters bgs (12 feet) bgs.

A Flame Ionization Detector (FID) was used to field screen soil samples for Volatile Organic Compounds (VOCs). VOCs were not detected during field screening above the meter detection limit of 1 part per million (ppm).

Soil samples were logged on chain-of-custody records and submitted to a California Department of Health Services certified hazardous materials testing laboratory, in accordance with chain-of-custody protocol. The analytical results are described in Section 5.

3.2 GROUNDWATER SAMPLING

A groundwater sample was collected from each of the borings. The samples were obtained using hydropunch technology. The water samples were collected using disposable polyethylene tubing equipped with a check valve lowered through the drill stem.

Groundwater samples were logged on chain-of-custody records and submitted to a California Department of Health Services certified hazardous materials testing laboratory, in accordance with chain-of-custody protocol. The analytical results are described in Section 5.

4.0 GROUNDWATER MONITORING ACTIVITIES

4.1 GROUNDWATER ELEVATION AND HYDRAULIC GRADIENT

On August 24, static groundwater elevations were measured in wells MW-1 through MW-4 using a groundwater interface probe. Based on the groundwater data, the inferred groundwater flow direction beneath the site is to the southwest (Figure 2) with a hydraulic gradient of 0.000.

4.2 GROUNDWATER SAMPLING

Groundwater samples were collected from monitoring wells MW-1 through MW-4. Prior to the collection of groundwater samples, the monitoring wells were purged of a minimum of three well volumes of water until pH, conductivity, and temperature stabilized. The wells were allowed to recover to at least 80 percent of their original static groundwater levels prior to sampling.

The following procedures for well monitoring, well purging, and water sampling were implemented while sampling the wells:

1. All equipment was washed prior to entering the well with an Alconox solution, followed by two tap water rinses and a deionized water rinse.
2. Prior to purging the wells, depth-to-water was measured using an Solinst groundwater interface probe to an accuracy of approximately 0.01 foot. The measurements were made to the top of the well casing on the north side.
3. Monitoring wells at the site were prepared for sampling by purging the well of approximately 3 well volumes of water using disposable Teflon bailers.
4. Water samples were collected with a single-use Teflon bailer after the well had been purged and water in the well had equilibrated to approximately 80 percent of the static water level. The water collected was immediately decanted into laboratory-supplied vials and bottles. The containers were overfilled, capped, labeled, and placed in a chilled cooler prior to delivery to the laboratory for analysis.
5. Chain-of-custody procedures, including chain-of-custody forms, were used to document water sample handling and transport from collection to delivery to the laboratory for analyses.

6. Groundwater samples were delivered to the State-certified hazardous waste laboratory within approximately 48-hours of collection.
7. Purged water was contained in a DOT approved 55-gallon drum. The drum was labeled with the contents, date, well number, client name, and project number.

The groundwater monitoring purge logs are presented in Appendix C.

5.0 LABORATORY RESULTS

The soil and groundwater samples were submitted to Sevren Trent Laboratories, Inc., a State of California Department of Health Services certified hazardous-waste laboratory. A summary of the analytical results is presented in Tables 1 and 2. A copy of the laboratory reports and chain-of-custody records are included in Appendix D.

5.1 LABORATORY ANALYTICAL RESULTS - SOIL

The soil analytical results are presented in Table 1. Total petroleum hydrocarbons as gasoline (TPH-G) and volatile organic compounds (VOCs) were not detected in any of the soil samples above laboratory detection limits.

5.2 LABORATORY ANALYTICAL RESULTS - GROUNDWATER

The groundwater analytical results are presented in Table 2. TPH-G was detected in the groundwater sample collected from monitoring well MW-1 (1.7 mg/l). TPH-G concentrations were consistent with the previous quarter sampling event.

Numerous VOCs were detected in the groundwater samples with the highest concentrations detected in the groundwater sample collected from monitoring well [REDACTED]-3. The compounds detected are common constituents of gasoline. The compound with the highest concentration was MTBE at 2,800 micrograms per liter ($\mu\text{g/l}$). MTBE concentrations were generally consistent with concentrations detected in the previous quarter's sampling event.

5.3 COMPARISON OF GROUNDWATER RESULTS WITH REGULATORY CRITERIA

The concentrations of contaminants reported by the analytical laboratory were compared to PDWS or SDWS. The following samples were above their respective PDWS or SDWS.

- MTBE concentrations detected in groundwater samples MW-1 (520 $\mu\text{g/l}$), MW-2 (36 $\mu\text{g/l}$), and MW-3 (2,800 $\mu\text{g/l}$).

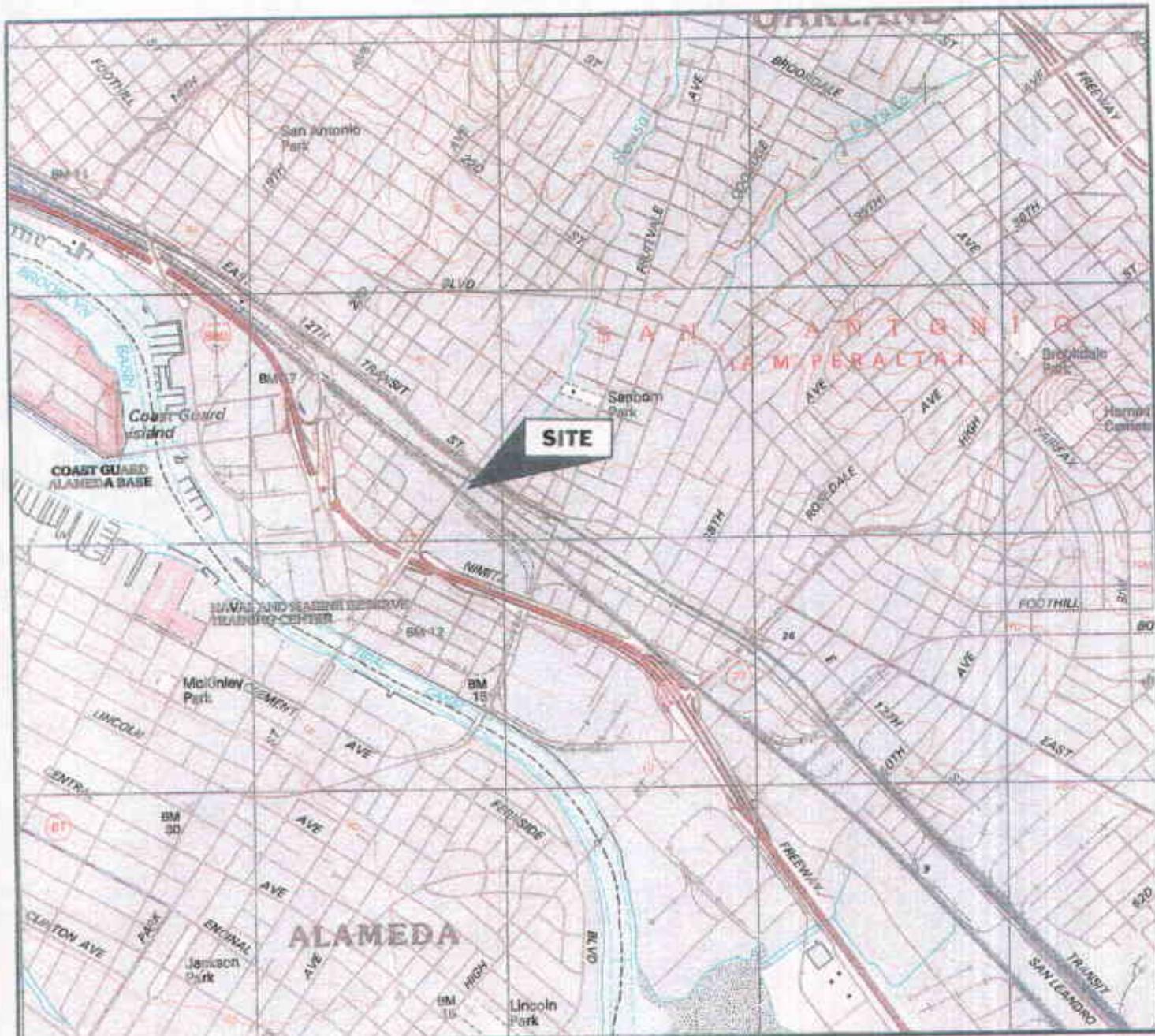
Based on the concentrations detected in the groundwater at the site, the primary COC is MTBE. The concentrations of MTBE in each of the monitoring wells and borings B10 through B12 are presented in Figure 4. This figure indicates that the highest concentrations of MTBE were encountered in the groundwater samples collected in the monitoring well (MW-3) directly down gradient of the former USTs and in the well adjacent (MW-1) to the former USTs. The results of the groundwater sampling conducted at the All-Aboard Mini-Storage indicates that MTBE impacted groundwater above the PDWS has not migrated down gradient onto the All-Aboard Mini-Storage site.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the information presented in this report, the following conclusions have been reached:

- TPH-G and VOC were not detected in any of the soil samples above laboratory detection limits.
- TPH-G was detected in the groundwater samples collected from monitoring well MW-1 (1.7 mg/l).
- Numerous VOCs were detected in the groundwater samples from the site. However, only MTBE was detected in concentrations greater than the PDWS. Based on the concentrations detected in the groundwater at the site, the primary COC appears to be MTBE.
- The results of the groundwater sampling conducted at the All-Aboard Mini-Storage indicates that MTBE impacted groundwater above the PDWS has not migrated down gradient onto the All-Aboard Mini-Storage site.

Based on the results of the soil and groundwater sample analyses, PSI recommends no further down-gradient investigation of the South Oakland Maintenance Station.

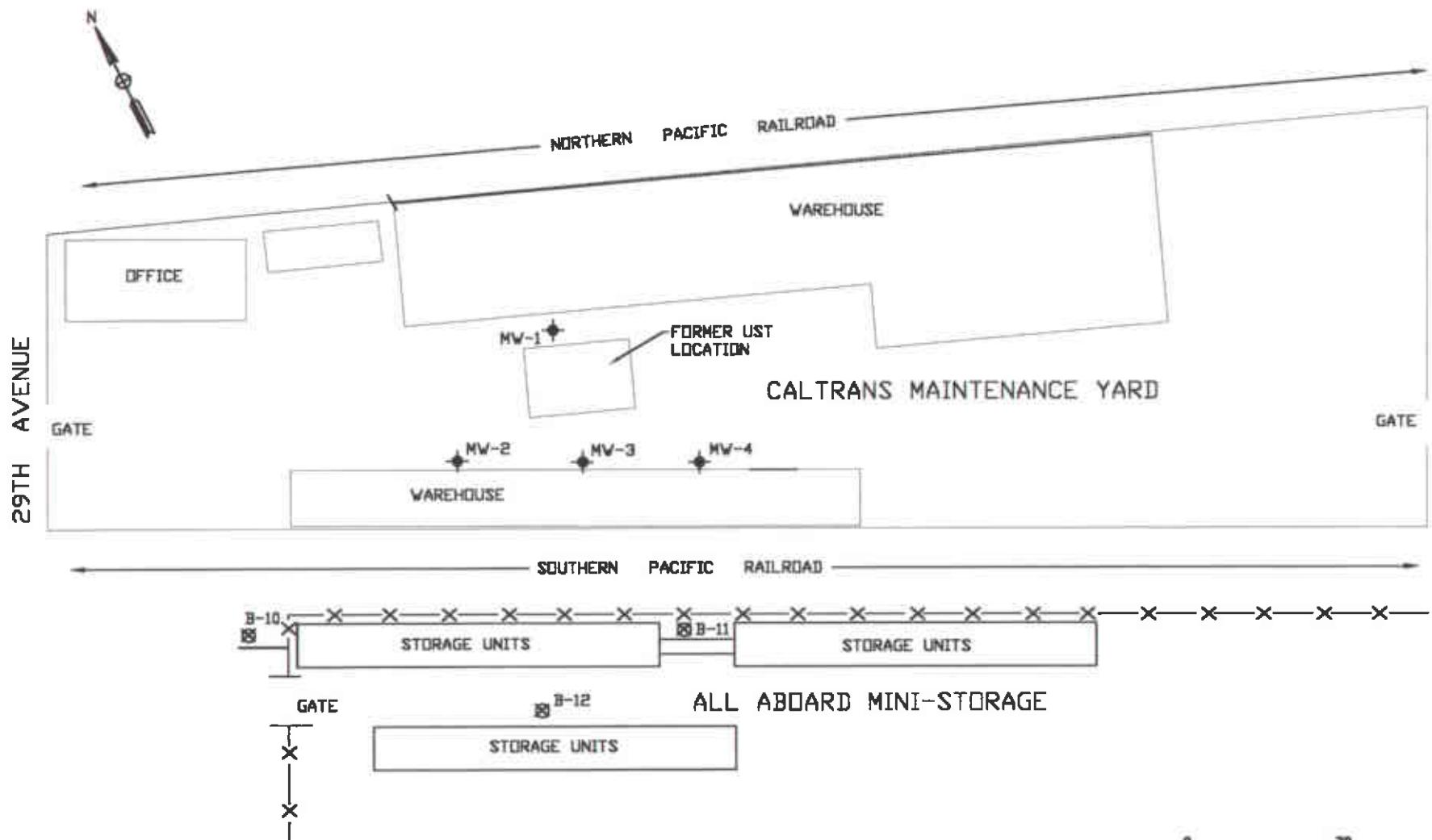


NORTH

0 1/2 1 MILE
SCALE

REFERENCE:
U.S.G.S. OAKLAND EAST, CALIFORNIA, 1997

ENVIRONMENTAL GEOTECHNICAL CONSTRUCTION <small>CONSULTANT • ENGINEERING • TESTING</small>	
SITE LOCATION CALTRANS MAINTENANCE STATION 1112 29TH AVENUE OAKLAND, CALIFORNIA PROJECT NUMBER: 575-9G014	
DATE: 3/23/99	CKD'D BY: [Signature]
FILE NO.: 9G014-1	FIGURE NO.: 1
DRAWN BY: S. BOWERS	



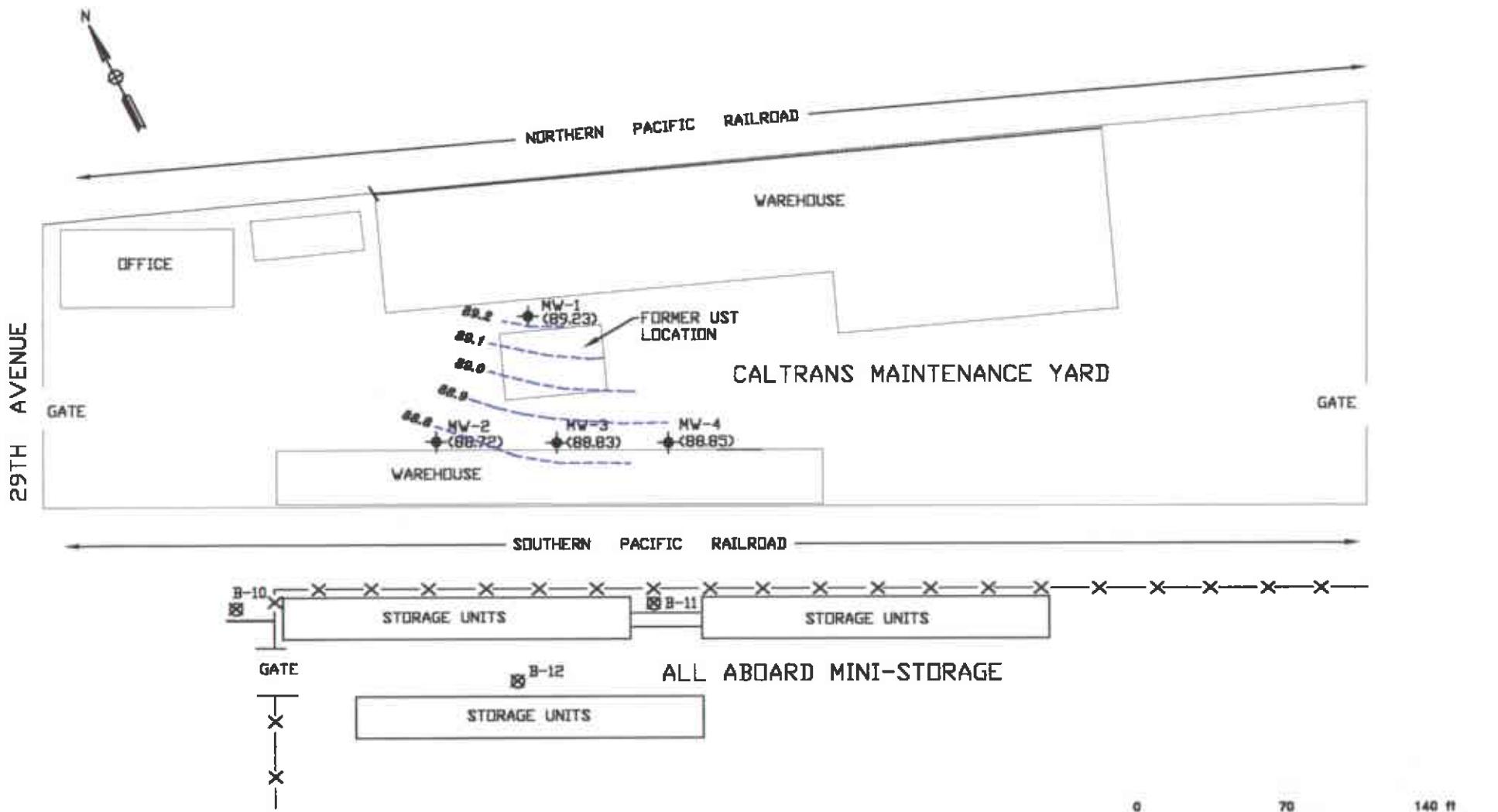
LEGEND

- MW-4 MONITORING WELL LOCATION
- B-12 DRILLING LOCATIONS

PSI Information
To Build On
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Project Name CALTRANS MAINTENANCE STATION 1112 29TH AVENUE, OAKLAND, CALIFORNIA	Drawn By B.W.B.	Date 8/01	File No. OC019-08	Figure No. 2
Title DRILLING LOCATIONS	Approved By P.P.	Project No. 575-OC019		



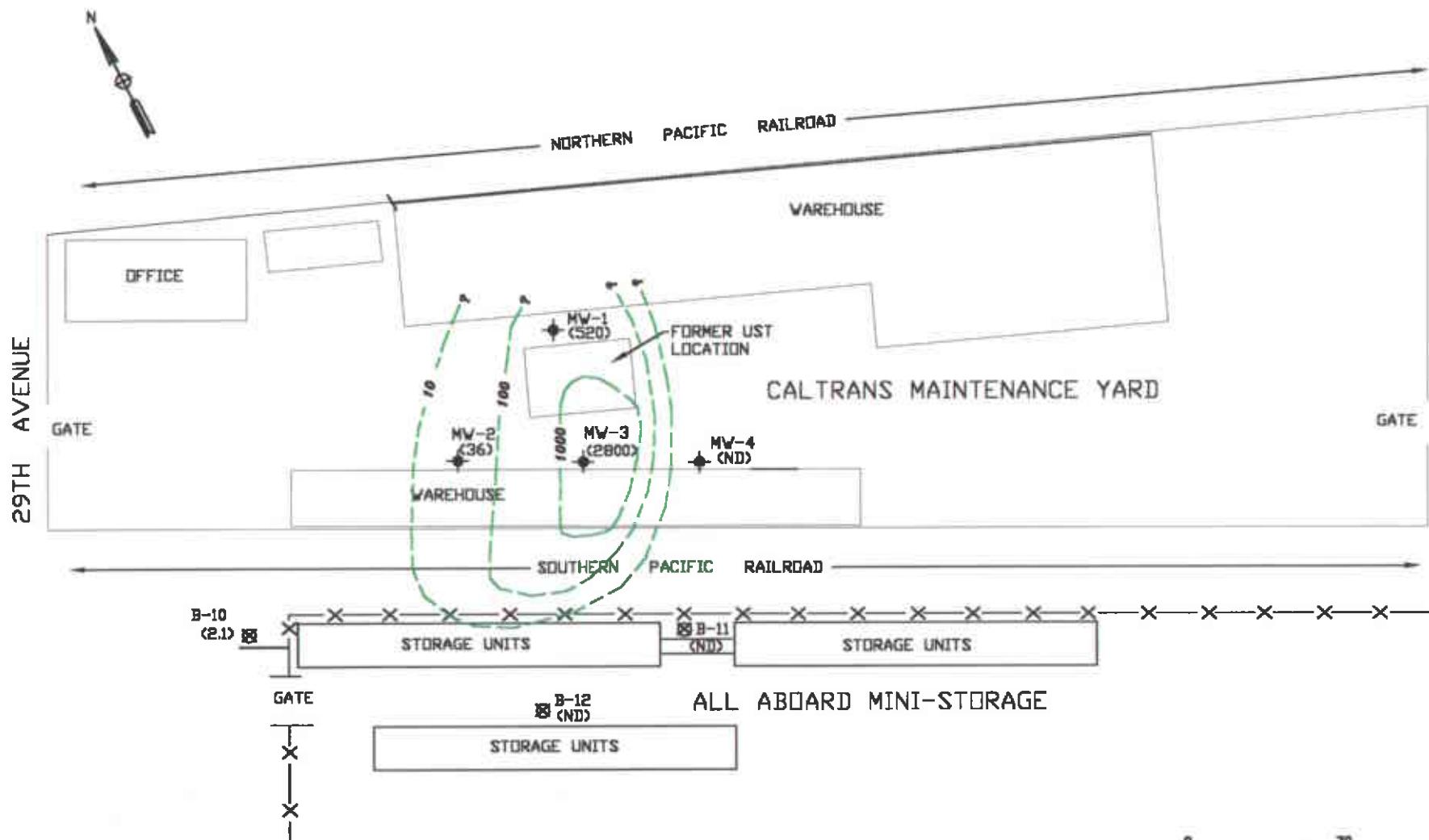
LEGEND

- MW-4 (88.85) - MONITORING WELL LOCATION AND GROUNDWATER ELEVATION (ft. MSL) MEASURED 8/24/01.
- B-12 ----- - GROUNDWATER ELEVATION CONTOUR (ft. MSL)
- X B-12 - DRILLING LOCATIONS

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Project Name	Drawn By	Date	File No.	Figure No.
CALTRANS MAINTENANCE STATION 1112 29TH AVENUE, OAKLAND, CALIFORNIA	E.W.B.	8/01	00019-08	3
GROUNDWATER ELEVATION CONTOUR MAP - AUGUST 24, 2001	F.P.	Approved By:	Project No.: 575-0C019	



LEGEND

- MW-3 (2800) - MONITORING WELL LOCATION AND MTBE CONCENTRATION (ug/L) SAMPLED 8/24/01
- 10 --- - MTBE ISO-CONCENTRATION CONTOUR (ug/l)
- ☒ B-12 - DRILLING LOCATIONS
- NOTE: - "ND" INDICATES ANALYSIS RESULTS LESS THAN THE LABORATORY REPORTING LIMIT OF 1.0 ug/L.

Information To Build On <i>Engineering • Consulting • Testing</i>		4703 Tidewater Avenue, Suite B Oakland, California 94601 (510) 434-9200				
Project Name	CALTRANS MAINTENANCE STATION 1112 29TH AVENUE, OAKLAND, CALIFORNIA			Drawn By	Date	File No.
B.W.H.				S/01	00019-10	
Title		MTBE CONCENTRATIONS IN GROUNDWATER - AUGUST 24, 2001			Approved By	Project No.
					F.P.	575-0G019
						4

TABLE 1
ANALYTICAL RESULTS FOR SOIL SAMPLES
SOUTH OAKLAND MAINTENANCE STATION
SOUTH OAKLAND, CALIFORNIA

Boring	Depth	TPH-G	MTBE	tert-Butanol (TBA)	tert-Amyl Methyl Ether (TAME)	Benzene	Toluene	Ethyl-benzene	Total Xylenes
B-10	5	<1,000	<10	<250	<10	<10	<10	<10	<15
	10	<1,000	<10	<250	<10	<10	<10	<10	<15
	15	<1,000	<10	<250	<10	<10	<10	<10	<15
	20	<1,000	<10	<250	<10	<10	<10	<10	<15
	25	<1,000	<10	<250	<10	<10	<10	<10	<15
B-11	5	<1,000	<10	<250	<10	<10	<10	<10	<15
	10	<1,000	<10	<250	<10	<10	<10	<10	<15
	15	<1,000	<10	<250	<10	<10	<10	<10	<15
B-12	5	<1,000	<10	<250	<10	<10	<10	<10	<15
	10	<1,000	<10	<250	<10	<10	<10	<10	<15
	15	<1,000	<10	<250	<10	<10	<10	<10	<15

<5.0 <.01 <250

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel by EPA Method 8015M.

TPH-G = Total Petroleum Hydrocarbons as Gasoline by EPA Method 8015M.

MTBE = Methyl Tertiary Butyl Ether

All results presented in mg/kg = milligrams per kilogram

TABLE 2
 ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
 SOUTH OAKLAND MAINTENANCE STATION
 SOUTH OAKLAND, CALIFORNIA

Sample I.D.	Date	TPH-G mg/l	TPH-D mg/l	MTBE µg/l	tert- Butanol (TBA) ug/l	tert-Amyl Methyl Ether (TAME) ug/l	Benzene µg/l	Toluene µg/l	Ethyl- benzene µg/l	Total Xylenes µg/l
MW-1	6/27/00	0.85	---	880	<50	<5	20	<1.0	<1.0	19
	9/11/00	0.92	---	860	190	<5	14	<1.0	1.6	3.6
	11/28/00	<0.5	---	610	<250	<25	3.6	<2.5	<2.5	<7.5
	8/24/01	<0.5	---	520	<1,200	<50	<25	<25	<25	<75
MW-2	6/27/00	<0.5	---	86	<50	<5	<1.0	<1.0	<1.0	<3.0
	9/11/00	<0.5	---	110	<50	<5	<1.0	<1.0	<1.0	<3.0
	11/28/00	<0.5	---	130	<50	<5	<1.0	<1.0	<1.0	<3.0
	8/24/01	<0.5	---	36	<100	<4	<2.0	<2.0	<2.0	<6.0
MW-3	6/27/00	2.7	<0.4	5,000	1,500	11	73	1.7	1.2	4.6
	9/11/00	1.9	---	2,700	310	10	19	<1.0	<1.0	<3.0
	11/28/00	1.7	---	2,500	<1,000	<100	27	92	<10	<30
	8/24/01	1.7	---	2,800	<5,000	<200	<100	<100	<100	<300
MW-4	6/27/00	<0.5	---	18	<50	<5	<1.0	<1.0	<1.0	<3.0
	9/11/00	<0.5	---	<1.0	<50	<5	<1.0	<1.0	<1.0	<3.0
	11/28/00	<0.5	---	<1.0	<50	<5	<0.5	<0.5	<0.5	<1.5
	8/24/01	<0.5	---	<2	<100	<4	<1.0	<1.0	<1.0	<3.0
B10-W	8/24/01	<0.5	---	2.1	<100	<4	<1.0	<1.0	<1.0	<3.0
B11-W	8/24/01	<0.5	---	<2	<100	<4	<1.0	<1.0	<1.0	<3.0
B12-W	8/24/01	<0.5	---	<2	<100	<4	<1.0	<1.0	<1.0	<3.0

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel by EPA Method 8015M.

TPH-G = Total Petroleum Hydrocarbons as Gasoline by EPA Method 8015M.

MTBE = Methyl Tertiary Butyl Ether

mg/l = milligrams per liter

ug/l = micrograms per liter

APPENDIX A
PSI FIELD PROCEDURES

FIELD PROCEDURES

I. ADVANCING OF SOIL BORINGS AND COLLECTION OF SOIL SAMPLES

The following procedures were used for advancing soil borings and collecting soil samples at the site:

1. Prior to the commencement of soil boring activities at the site, soil-boring locations were marked with white paint. Underground Service Alert (USA) was contacted to identify underground utilities in the vicinity of the soil borings.
2. A licensed State of California drilling company conducted soil boring and sampling activities. The soil borings were advanced using Geoprobe direct push method. Flush-threaded rods with a stainless steel sampler were advanced into the ground using a hydraulic press and percussion hammer. The opening of the sampler was sealed with a drive tip held in place by a threaded pin.
3. Soil samples were collected using a .45 meter (1.5-foot) long, 0.02 meter (1-inch) inside diameter macro-core stainless steel sampler. Soil samplers were washed between sampling intervals with Alconox soap followed by two deionized water rinses. The sampler was lined with clean brass, stainless steel, or acetate sleeves. When the boring was advanced to the desired sampling depth the threaded pin was removed allowing the drive tip to retract as the sampler was advanced 0.45 meter (1.5-foot) long into native soil using a percussion hammer.
4. After the sampler was retrieved, the sleeves were extracted from the sampler without disturbing the sample. The sample for analyses was collected from the lowest tube in the sampler. The ends of the sample were covered with Teflon™ sheets and capped with polyethylene end caps. The sample was labeled and placed in a zip-lock bag in a chilled cooler prior to delivery to the laboratory for analyses.
5. Soil samples were assigned identification numbers such as B1-5, where B1 indicates the boring designation and -5 indicates that the sample was collected from 5 meters bgs. The samples were labeled with the project number, date and time of sample collection, sampling depth, and client name.
6. Chain-of-custody procedures using chain-of-custody records were implemented during handling and transportation of the samples to the laboratory for analyses.
7. Boring logs were prepared for the soil borings under the supervision of a California-Registered Geologist. Soil from each sample was described in accordance with Unified Soil Classification System by a PSI geologist and recorded on a field-boring log. The data recorded on the logs were based on examination of soil samples

retrieved in the tubes, and drilling conditions observed in the field. Boring logs include information regarding the location of each boring, geologic descriptions of materials encountered, occurrence of groundwater (if applicable) and organic vapor analyzer (OVA) measurements in the soil samples collected.

8. No soil cuttings were generated during drilling, due to the use of a Geoprobe drill rig.

II. BACKFILL OF SOIL BORINGS

The following procedures were used to backfill the soil borings at the site:

1. Soil borings were backfilled to grade with Portland grout slurry. The slurry consisted of neat cement and 5% bentonite powder.

III. FIELD DOCUMENTATION OF SAMPLING PROCEDURES

The following outline describes the procedures followed by PSI for proper sampling documentation.

1. Sampling procedures will be documented in field notes that contain:

1. Sample collection procedures
2. Date and time of collection
3. Date of shipping
4. Sample collection location
5. Sample identification number(s)
6. Intended analysis
7. Quality control samples
8. Sample preservation
9. Name of sampler
10. Any pertinent observations

2. Samples will be labeled with the following information:

1. Sample designation number
2. Date and time sample was collected
3. Sampler's name
4. Sample preservatives (if required)
5. Project Name

3. The following is the sample designation system for the site:

For Borings the samples will be labeled B-(Boring Number)-(Depth) (i.e. sample collected from boring 4 at 5 meters would be B4-5).

4. Handling of the samples will be recorded on a chain of custody form, which shall include:

1. Project name
2. Site location
3. Signature of collector
4. Date and time of collection
5. Sample identification number
6. Number of containers in sample set
7. Description of sample and container
8. Name and signature of persons, and the companies or agencies they represent, who are involved in the chain of possession
9. Inclusive dates and times of possession
10. Analyses to be completed

APPENDIX B
BORING LOGS

OIL BORING LOG

BORING NO: B10

SHEET 1 OF 1

PROJECT NAME: CALTRANS SOUTH OAKLAND

PROJECT NUMBER: 1G026

DATE: 8/24/01

DRILLING COMPANY: V&W

DRILLING METHOD: DP

BORING DIAMETER: 2" DEPTH: 28 FEET

GROUNDWATER LEVELS

DATE

COMMENTS

DEPTH BGS

8/24/01

GROUNDWATER ENCOUNTERED

15.5 FEET

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
1								
2								
3								
4								
5	810-5.0				SANDY CLAY: WELL GRADED MEDIUM SAND WITH CLAY. BROWN, MOIST	E.S		TRACE COARSE FRACTION
6								
7								
8								
9	810-10.0				CLAYEY GRAVELLY SAND: WELL GRADED FINE TO COARSE SAND WITH FINE GRAVEL & CLAY. BROWN MATRIX MULTICOLORED GRAVEL.			DEBRIS & BRICK IN SAMPLE.
10								
11								
12								
13								
14	810-15.0				CLAYEY SILT: BROWN, MOIST			CLAY LESSENS DOWN SAMPLE.
15								
16								
17								
18								
19					CLAYEY SANDY GRAVEL: WELL GRADED FINE TO COARSE SAND AND FINE GRAVEL WITH CLAY, MOIST, GRADING TO SLIGHT MOIST, BROWN.			CLAY IN TOP HALF
20								

viewed By:

LOGGED BY: CHRIS MERRITT

SOIL BORING LOG

BORING NO: B10

SHEET 2 OF 2

PROJECT NAME: CALTRANS SOUTH OAKLAND

PROJECT NUMBER: 1G026

DATE: 8/24/01

DRILLING COMPANY: V&W

DRILLING METHOD: DP

BORING DIAMETER: 2" DEPTH: 28 FEET

GROUNDWATER LEVELS

DATE

COMMENTS

DEPTH BGS

8/24/01

GROUNDWATER ENCOUNTERED

15.5 FEET

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
1					SEE SHEET 1			
2								
3								
4					SAND: WELL GRADED FINE TO MEDIUM			TRACE COARSE POOR H2O ZONE,
5					SAND BROWN, WET, SOME CLAY			HYDRO PUNCHING TO ~28'
6					SOME GRAVEL			
7								
8								
9								GROUNDWATER OBTAINED.
10								TOTAL DEPTH 28 FEET.
11								BORING COMPLETED TO DEPTH
12								SUFFICIENT FOR INVESTIGATION.
13								BORING GROUTED WITH NEAT CEMENT.
14								
15								
16								
17								
18								
19								
20								
Viewed By:				LOGGED BY:				

SOIL BORING LOG

BORING NO: B11

SHEET 1 OF 1

PROJECT NAME: CALTRANS SOUTH OAKLAND

PROJECT NUMBER: 1G026 DATE: 8/24/01

DRILLING COMPANY: V&W

DRILLING METHOD: DP

BORING DIAMETER: 2" DEPTH:

GROUNDWATER LEVELS

DATE	COMMENTS	DEPTH BGS
8/24/01	GROUNDWATER ENCOUNTERED	-15 FEET

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
2								
4								
5.0	B11-5.0				SANDY CLAY; WELL GRADED <-M SAND W/CLAY.			TRACE COARSE SAND
					BROWN MOIST			OCCASIONAL GRAVEL
6								
9								
10	B11-10				CLAYEY GRAVELLY SAND: WELL GRADED FINE TO COARSE			
					SAND WITH GRAVEL AND CLAY, BROWN, MOIST.			
11								
13								
15	B11-15				AS ABOVE			H2O @ 1034.
								HYDROPUCHED TO 24.
								GROUNDWATER OBTAINED.
								BORING COMPLETED TO DEPTH
								SUFFICIENT FOR INVESTIGATION.
								BORING GROUTED WITH NEAT CEMENT.
16								
17								
18								
19								
20								

Reviewed By:

LOGGED BY: CHRIS MERRITT

SOIL BORING LOG

BORING NO: B12

SHEET 1 OF 1

PROJECT NAME: CALTRANS SOUTH OAKLAND

PROJECT NUMBER: 1G026

DATE: 8/24/01

DRILLING COMPANY: V&W

DRILLING METHOD: DP

BORING DIAMETER: 2" DEPTH:

GROUNDWATER LEVELS

DATE	COMMENTS	DEPTH BGS
8/24/01	GROUNDWATER ENCOUNTERED	~15 FEET

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
1								
2								
3								
4								
B12-5.0					SILTY GRAVELLY SAND: WELL GRADED FINE TO MEDIUM SAND WITH FINE GRAVEL AND CLAY BROWN, MOIST.			1 IN AC ALSO SOME CLAY
5								
6								
B12-10.0					SANDY SILT: SILT WITH POORLY GRADED FINE SAND, BROWN, MOIST, TRACE MEDIUM COARSE, CLAY			
7								
8								
9								
10								
11								
B12-15.0					SANDY GRAVEL: WELL GRADED FINE COARSE GRAVEL FINE COARSE SAND			APPROXIMATE FIRST WET AREA.
12								
13								
14								
15								
16								
17								HYDROPUNCHED TO 24. GROUNDWATER OBTAINED.
18								BORING COMPLETED TO DEPTH.
19								SUFFICIENT FOR INVESTIGATION.
20								BORING GROUTED WITH NEAT CEMENT.

Reviewed By:

LOGGED BY:

APPENDIX C
GROUNDWATER PURGE LOGS

FLUID MEASUREMENT FIELD DATA

SHEET: 1 OF 1

DATE: 4/24/01	PROJECT NAME: CALTRANS S, OAKLAND	PROJECT NO: 1G026						
WATER LEVEL MEASUREMENT INSTRUMENT: SOLINST	SERIAL NO:							
PRODUCT DETECTION INSTRUMENT:	SERIAL NO:							
EQUIP. DECON: <input checked="" type="checkbox"/> ALCONOX WASH <input type="checkbox"/> DIST/DEION 1 RINSE <input type="checkbox"/> ISOPROPANOL <input type="checkbox"/> ANALYTE FREE FINAL RINSE <input type="checkbox"/> TAP WATER FINAL RINSE <input type="checkbox"/> TAP WATER WASH <input type="checkbox"/> LIQUINOX WASH <input checked="" type="checkbox"/> DIST/DEION 2 RINSE <input type="checkbox"/> OTHER SOLVENT <input type="checkbox"/> DIST/DEION FINAL RINSE <input type="checkbox"/> AIR DRY								
WELL NUMBER	GROUND SURFACE ELEVATION	TOP OF CASING ELEVATION	DEPTH TO PRODUCT BELOW TOC	DEPTH TO WATER BELOW TOC	WELL DEPTH BELOW TOC	PRODUCT THICKNESS	WATER TABLE ELEVATION	ACTUAL TIME
MW-1				10.34'	25.18'			1156
MW-2				10.19'	19.48'			
MW-3			10.16'	10.14'	24.39'	20.20'		
MW-4				10.15'	20.20'			
				10.14	24.39			
REMEMBER TO CORRECT PRODUCT THICKNESS FOR DENSITY BEFORE CALCULATING WATER TABLE ELEVATION						PREPARED BY:		

WELL PURGING AND SAMPLING DATA

WELL NO: MW-1

DATE: 8/24/01	PROJECT NAME: CALTRANS S. OAKLAND		PROJECT NO: 1G026					
WEATHER CONDITIONS: SUNNY, WARM								
WELL DIAMETER (IN.) <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> OTHER _____								
SAMPLE TYPE: <input checked="" type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SURFACE WATER <input type="checkbox"/> OTHER								
WELL DEPTH (TOC) 25.18 FT.		DEPTH TO WATER BEFORE PURGING (TOC) 10.34 FT.						
LENGTH OF WATER 14.84 FT.		CALCULATED ONE WELL VOLUME ¹ : 2.52 GAL.						
PURGING DEVICE: <input type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED								
SAMPLING DEVICE: <input type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED								
EQUIP. DECON. <input type="checkbox"/> TAP WATER WASH <input type="checkbox"/> ISOPROPANOL <input type="checkbox"/> ANALYTE FREE FINAL RINSE <input checked="" type="checkbox"/> ALCONOX WASH <input type="checkbox"/> DIST/DEION 1 RINSE <input type="checkbox"/> OTHER SOLVENT <input type="checkbox"/> DIST/DEION FINAL RINSE <input type="checkbox"/> LIQUINOX WASH <input checked="" type="checkbox"/> DIST/DEION 2 RINSE <input type="checkbox"/> TAP WATER FINAL RINSE <input type="checkbox"/> AIR DRY								
CONTAINER PRESERVATION: <input checked="" type="checkbox"/> LAB PRESERVED <input type="checkbox"/> FIELD PRESERVED								
WATER ANALYZER MODEL & SERIAL NO: MYRON L 602155								
ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP <input type="checkbox"/> °F <input checked="" type="checkbox"/> °C	SPECIFIC CONDUCT. <i>us</i>	pH	DISS. OXYGEN	TURBIDITY (NTUs)	WATER APPEAR CL=CLEAR CO=CLOUDY TU=TURBID	REMARKS (EVIDENT ODOR, COLOR, PID)
1222	INITIAL	21.6	501	8.75			CL CO	
1227	2.50	21.7	486	8.40				
1231	5.0	21.1	540	8.22				
1238	7.5	21.1	473	8.18				
DEPTH TO WATER AFTER PURGING (TOC)				FT.	SAMPLE FILTERED <input type="checkbox"/> YES <input type="checkbox"/> NO SIZE _____			
NOTES:				SAMPLE TIME: 1240 ID# MW-1				
				DUPLICATE <input type="checkbox"/> TIME: ID#:				
				EQUIP. BLANK: <input type="checkbox"/> TIME: ID#:				
				PREPARED BY: CHRIS MERRITT				

¹A 1 FOOT LENGTH OF WATER = 0.05 GAL IN 1" DIA. PIPE 0.17 GAL IN 2" DIA PIPE 0.65 GAL IN 4" DIA PIPE 1.5 GAL IN 6" DIA PIPE

WELL PURGING AND SAMPLING DATA

								WELL NO: MW-2
DATE: 8/24/01	PROJECT NAME: CALTRANS S. OAKLAND			PROJECT NO: 1G026				
WEATHER CONDITIONS: SUNNY, WARM								
WELL DIAMETER (IN.)	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 4	<input type="checkbox"/> 6	<input type="checkbox"/> OTHER			
SAMPLE TYPE:	<input checked="" type="checkbox"/> GROUNDWATER		<input type="checkbox"/> WASTEWATER	<input type="checkbox"/> SURFACE WATER	<input type="checkbox"/> OTHER			
WELL DEPTH (TOC)	19.48		FT.	DEPTH TO WATER BEFORE PURGING (TOC) 10.19 FT.				
LENGTH OF WATER	4.29		FT.	CALCULATED ONE WELL VOLUME ¹ : 1.57 GAL.				
PURGING DEVICE:	<input type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED							
SAMPLING DEVICE:	<input type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED							
EQUIP. DECON.	<input type="checkbox"/> TAP WATER WASH			<input type="checkbox"/> ISOPROPANOL	<input type="checkbox"/> ANALYTE FREE FINAL RINSE			
	<input checked="" type="checkbox"/> ALCONOX WASH			<input type="checkbox"/> OTHER SOLVENT	<input type="checkbox"/> DIST/DEION FINAL RINSE			
	<input type="checkbox"/> LIQUINOX WASH			<input checked="" type="checkbox"/> DIST/DEION 2 RINSE	<input type="checkbox"/> TAP WATER FINAL RINSE	<input type="checkbox"/> AIR DRY		
CONTAINER PRESERVATION:	<input checked="" type="checkbox"/> LAB PRESERVED <input type="checkbox"/> FIELD PRESERVED							
WATER ANALYZER MODEL & SERIAL NO: MYRON L 602155								
ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP <input type="checkbox"/> °F <input checked="" type="checkbox"/> °C	SPECIFIC CONDUCT.	pH	DISS. OXYGEN	TURBIDITY (NTUs)	WATER APPEARANCE CL=CLEAR CO=CLOUDY TU=TURBID	REMARKS (EVIDENT ODOR, COLOR, PID)
1257	INITIAL	22	549	8.50			SLT CO	
1302	1.5	20.4	550	8.36				
1305	3.0	20.3	560	8.39				
1308	4.15	19.9	563	8.35				
DEPTH TO WATER AFTER PURGING (TOC)				FT.	SAMPLE FILTERED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SIZE _____			
NOTES:				SAMPLE TIME: ~1315 ID# MW-2				
				DUPLICATE <input type="checkbox"/> TIME: ID#:				
				EQUIP. BLANK: <input type="checkbox"/> TIME: ID#:				
				PREPARED BY: CHRIS MERRITT				

¹A 1 FOOT LENGTH OF WATER = 0.05 GAL IN 1" DIA. PIPE 0.17 GAL IN 2" DIA PIPE 0.65 GAL IN 4" DIA PIPE 1.5 GAL IN 6" DIA PIPE

WELL PURGING AND SAMPLING DATA

								WELL NO: MW-3	
DATE: 8/24/01	PROJECT NAME: CALTRANS S. OAKLAND							PROJECT NO: 16026	
WEATHER CONDITIONS: SUNNY, WARM									
WELL DIAMETER (IN.) <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> OTHER _____									
SAMPLE TYPE: <input checked="" type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SURFACE WATER <input type="checkbox"/> OTHER									
WELL DEPTH (TOC) 20.20		FT.		DEPTH TO WATER BEFORE PURGING (TOC) 10.15		FT.			
LENGTH OF WATER 10.05		FT.		CALCULATED ONE WELL VOLUME ¹ : 1.70		GAL.			
PURGING DEVICE: <input type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED									
SAMPLING DEVICE: <input type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED									
EQUIP. DECON.		<input type="checkbox"/> TAP WATER WASH		<input type="checkbox"/> ISOPROPANOL		<input type="checkbox"/> ANALYTE FREE FINAL RINSE			
<input checked="" type="checkbox"/> ALCONOX WASH		<input type="checkbox"/> DIST/DEION 1 RINSE		<input type="checkbox"/> OTHER SOLVENT		<input type="checkbox"/> DIST/DEION FINAL RINSE			
<input type="checkbox"/> LIQUINOX WASH		<input checked="" type="checkbox"/> DIST/DEION 2 RINSE		<input type="checkbox"/> TAP WATER FINAL RINSE		<input type="checkbox"/> AIR DRY			
CONTAINER PRESERVATION: <input checked="" type="checkbox"/> LAB PRESERVED <input type="checkbox"/> FIELD PRESERVED									
WATER ANALYZER MODEL & SERIAL NO: MYRON L 602155									
ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP <input type="checkbox"/> °F <input checked="" type="checkbox"/> °C	SPECIFIC CONDUCT. 15	pH	DISS. OXYGEN	TURBIDITY (NTUs)	WATER APPEAR CL=CLEAR CO=CLOUDY TU=TURBID	REMARKS (EVIDENT ODOR, COLOR, PID)	
1325	INITIAL	21.7	544	4.64			SLT CO		
1330	1.70	20.8	535	8.35					
1335	3.40	20.6	553	8.35					
1340	5.10	20.2	554	9.27			Y		
DEPTH TO WATER AFTER PURGING (TOC)				FT.	SAMPLE FILTERED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SIZE _____				
NOTES:				SAMPLE TIME: 1344 ID# MW-3					
				DUPLICATE <input type="checkbox"/> TIME: ID#:					
				EQUIP. BLANK: <input type="checkbox"/> TIME: ID#:					
				PREPARED BY: CHRIS MERRITT					

¹A 1 FOOT LENGTH OF WATER = 0.05 GAL IN 1" DIA. PIPE 0.17 GAL IN 2" DIA PIPE 0.65 GAL IN 4" DIA PIPE 1.5 GAL IN 6" DIA PIPE

WELL PURGING AND SAMPLING DATA

DATE: 8/24/01		PROJECT NAME: CALTRANS S. OAKLAND		WELL NO: MW-4				
WEATHER CONDITIONS: SUNNY, WARM				PROJECT NO: 1G026				
WELL DIAMETER (IN.)		<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 4	<input type="checkbox"/> 6			
SAMPLE TYPE:		<input checked="" type="checkbox"/> GROUNDWATER	<input type="checkbox"/> WASTEWATER	<input type="checkbox"/> SURFACE WATER	<input type="checkbox"/> OTHER			
WELL DEPTH (TOC)		24.39	FT.	DEPTH TO WATER BEFORE PURGING (TOC) 10.19 FT.				
LENGTH OF WATER		14.12	FT.	CALCULATED ONE WELL VOLUME ¹ : 2.41 GAL.				
PURGING DEVICE:		<input type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED						
SAMPLING DEVICE:		<input type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED						
EQUIP. DECON.		<input type="checkbox"/> TAP WATER WASH	<input type="checkbox"/> ISOPROPANOL	<input type="checkbox"/> ANALYTE FREE FINAL RINSE				
<input checked="" type="checkbox"/> ALCONOX WASH		<input type="checkbox"/> DIST/DEION 1 RINSE	<input type="checkbox"/> OTHER SOLVENT	<input type="checkbox"/> DIST/DEION FINAL RINSE				
<input type="checkbox"/> LIQUINOX WASH		<input checked="" type="checkbox"/> DIST/DEION 2 RINSE	<input type="checkbox"/> TAP WATER FINAL RINSE	<input type="checkbox"/> AIR DRY				
CONTAINER PRESERVATION:		<input checked="" type="checkbox"/> LAB PRESERVED	<input type="checkbox"/> FIELD PRESERVED					
WATER ANALYZER MODEL & SERIAL NO:		MYRON L 602155						
ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP <input type="checkbox"/> °F <input type="checkbox"/> °C	SPECIFIC CONDUCT.	pH	DISS. OXYGEN	TURBIDITY (NTU's)	WATER APPEAR CL=CLEAR CO=CLOUDY TU=TURBID	REMARKS (EVIDENT ODOR, COLOR, PID)
1352	INITIAL	21.3	461	8.31			SLT CO	
1356	241	21.5	458	8.31			↓	
1401	4.82	21.3	456	8.18			↓	
1405	7.23	21.3	458	8.18				
DEPTH TO WATER AFTER PURGING (TOC)		FT.	SAMPLE FILTERED <input type="checkbox"/> YES <input type="checkbox"/> NO				SIZE	
NOTES:				SAMPLE TIME: 1405 ID# MW-4				
				DUPLICATE <input type="checkbox"/> TIME: ID#:				
				EQUIP. BLANK: <input type="checkbox"/> TIME: ID#:				
				PREPARED BY: CHRIS MERRITT				

¹A 1 FOOT LENGTH OF WATER = 0.05 GAL IN 1" DIA. PIPE 0.17 GAL IN 2" DIA PIPE 0.65 GAL IN 4" DIA PIPE 1.5 GAL IN 6" DIA PIPE

FIELD ACTIVITY DAILY LOG

DATE	8	26	01
NO.			
SHEET		OF	

PROJECT NAME: CALTRANS

PROJECT NO. 16026

FIELD ACTIVITY SUBJECT:

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

MW-2

TIME	VOLUME	TEMP	COND	PH	APPEAR	CALC VOL
1257	INIT	22	549	8.50		19.48
1302	1.5	20.8	550	8.36		10.19
1305	3.0	20.3	5600	8.39		9.29
1308	4.5	19.9	563	8.35		

SAMPLE MW-2

TIME

MW-3

TIME	VOLUME	TEMP	COND	PH	CALC VOL
1330	INIT	21.7	544	8.58	
1330	1.70	20.8	535	8.35	20.20
1335	3.40	20.6	553	8.35	10.15

1.70

10.05

MW-3

1344

MW-4

TIME	VOLUME	TEMP	COND	PH	CALC VOL
1352	INIT	21.3	461	8.27	
1356	2.41	21.5	458	8.31	24.39
1401	4.82	21.3	FB6	8.18	10.19
1405	7.23	21.3	458	8.18	2.41

14.2

MW-4

1405

VISITORS ON SITE:

CHANGES FROM PLANS AND SPECIFICATIONS, AND
OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS.

WEATHER CONDITIONS:

IMPORTANT TELEPHONE CALLS:

PERSONNEL ON SITE:

SIGNATURE

DATE:

APPENDIX D

LABORATORY RESULTS AND CHAIN-OF-CUSTODY RECORDS

**S E V E R N
T R E N T
S E R V I C E S**

September 25, 2001

**STL SACRAMENTO PROJECT NUMBER: G1H250192
PO/CONTRACT: 575**

STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500

Tel: 916 373 5600
Fax: 916 371 8420
www.stl-inc.com

Frank Poss
PSI Inc
4703 Tidewater Avenue
Suite B
Oakland, CA 94601

Dear Mr. Poss,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on August 25, 2001. These samples are associated with your Caltrans South Oakland Task Order number 1G026 project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

Preliminary results were sent via facsimile on September 10, 2001.

If you have any questions, please feel free to call me at (916) 374-4344.

Sincerely,

Josie Tellers
Josie Tellers
Project Manager

TABLE OF CONTENTS

STL SACRAMENTO PROJECT NUMBER G1H250192

Case Narrative

STL Sacramento Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

WATER,8015M (CA LUFT), TPH-Gas

Samples: 12, 13, 14, 15, 16, 17, and 18

 Sample Data Sheets

 Method Blank Reports

 Laboratory QC Reports

SOLID,8015M (CA LUFT),TPH-Gas, Low

Samples: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11

 Sample Data Sheets

 Method Blank Reports

 Laboratory QC Reports

SOLID, 8015M (CA LUFT), TPH-Gas, Medium

Samples: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11

 Sample Data Sheets

 Method Blank Reports

 Laboratory QC Reports

WATER, 8260B, Volatile Organics, GC/MS

Samples: 12, 13, 14, 15, 16, 17, and 18

 Sample Data Sheets

 Method Blank Reports

 Laboratory QC Reports

TABLE OF CONTENTS

STL SACRAMENTO PROJECT NUMBER G1H250192

SOLID, 8260B, Volatile Organics, GC/MS
Samples: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11

Sample Data Sheets
Method Blank Reports
Laboratory QC Reports

CASE NARRATIVE

STL SACRAMENTO PROJECT NUMBER G1H250192

General Comments:

All of the samples were received at 6 degrees Celsius. Two out of four vials received for sample ID number BIO-W, had head space.

Solid, 8015M (CA LUFT), TPH-GAS:

Please note that the following samples were analyzed past the recommended holding times due to laboratory capacity issues:

B10-5.0
B10-10.0
B10-15.0
B10-20.0
B10-25.0
B11-5.0
B11-10.0
B11-15.0
B12-5.0
B12-10.0
B12-15.0

We apologize for any inconvenience this may have caused you. As requested by Mr. Merritt on 9/7/01, a portion of the samples were split off and preserved with methanol within the recommended holding time. Both the preserved and unpreserved samples were analyzed for this analysis. The preserved portion were analyzed under the TPH-Gas medium level criteria that have a reporting limit of 5000 ug/kg while the unpreserved portion were analyzed under the TPH-Gas low level criteria that have a reporting limit of 1000 ug/L. All samples have results of ND for both levels and have been included in your report.

Sample ID: B10-5.0 and B12-5.0 had surrogate recoveries outside the limits for TPH-Gas low level, which were indicative of matrix effects. The surrogate recoveries for associated MB and LCS were within QC limits.

There were no other anomalies associated with this project.

STL Sacramento
Quality Control Definitions

QC Parameter	Definition
QC Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Duplicate Control Sample (DCS)	Consist of a pair of LCSs analyzed within the same QC batch to monitor precision and accuracy independent of sample matrix effects. This QC is performed only if required by client or when insufficient sample is available to perform MS/MSD.
Duplicate Sample (DU)	A second aliquot of an environmental sample, taken from the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative of the precision for other samples in the batch.
Laboratory Control Sample (LCS)	A volume of reagent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. An LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MSs/MSDs are carried through the entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank (MB)	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate Spike	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.

Source: STL Sacramento Laboratory Quality Manual

STL Sacramento Certifications:

Alaska (UST-055), Arizona (#AZ00616), Arkansas, California (NELAP # 01119CA) (ELAP #I-2439), Connecticut (#PH-0691), Florida (E87570), Hawaii, Louisiana (AI # 30612), New Jersey (Lab ID 44005), Nevada (#CA 044), New York (LAB ID 11666 serial # 107407), Oregon (LAB ID CA 044), South Carolina (LAB ID 87014, Cert. # 870140), Utah (E-168), Virginia (#00178), Washington (# C087), West Virginia (# 9930C), Wisconsin (Lab 998204680), USNAVY, USACE, USDA Foreign Plant (Permit # 37-82605), USDA Foreign Soil (Permit # S-46613)..

Sample Summary

G1H250192

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
EJLC7	1	B10-5.0	8/24/01 07:25 AM	8/25/01 09:50 AM
EJLC8	2	B10-10.0	8/24/01 07:32 AM	8/25/01 09:50 AM
EJLC9	3	B10-15.0	8/24/01 07:40 AM	8/25/01 09:50 AM
EJLDA	4	B10-20.0	8/24/01 07:50 AM	8/25/01 09:50 AM
EJLDC	5	B10-25.0	8/24/01 08:06 AM	8/25/01 09:50 AM
EJLDD	6	B11-5.0	8/24/01 09:13 AM	8/25/01 09:50 AM
EJLDE	7	B11-10.0	8/24/01 09:20 AM	8/25/01 09:50 AM
EJLDF	8	B11-15.0	8/24/01 09:34 AM	8/25/01 09:50 AM
EJLDG	9	B12-5.0	8/24/01 10:10 AM	8/25/01 09:50 AM
EJLDH	10	B12-10.0	8/24/01 10:16 AM	8/25/01 09:50 AM
EJLDJ	11	B12-15.0	8/24/01 10:26 AM	8/25/01 09:50 AM
EJLDK	12	B10-W	8/24/01 08:30 AM	8/25/01 09:50 AM
EJLDL	13	B11-W	8/24/01 09:42 AM	8/25/01 09:50 AM
EJLDM	14	B12-W	8/24/01 10:34 AM	8/25/01 09:50 AM
EJLDN	15	MW-1	8/24/01 12:40 PM	8/25/01 09:50 AM
EJLDP	16	MW-2	8/24/01 01:17 PM	8/25/01 09:50 AM
EJLDQ	17	MW-3	8/24/01 01:44 PM	8/25/01 09:50 AM
EJLDR	18	MW-4	8/24/01 02:05 PM	8/25/01 09:50 AM

Notes(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 weigh

**Chain of
Custody Record**

STL-4124 (Rev.0)

**SEVERN
TRENT
SERVICES**

Severn Trent Laboratories, Inc.

Client PSI		Project Manager FRANK POSS		Date 8/24/01	Chain of Custody Number 0015098								
Address #103 TIDEWATER AVE STE B		Telephone Number (Area Code)/Fax Number (510)434-9200 (510)434-7676		Lab Number									
City OAKLAND		State CA	Zip Code 94601	Site Contact CHRIS MERRITT	Lab Contact NILU LIGA	Analysis (Attach list if more space is needed)							
Project Name and Location (State) CALTRANS SOUTH OAKLAND 16026		Carrier/Waybill Number 8291-6565-0116				Special Instructions/ Conditions of Receipt							
Contract/Purchase Order/Quote No.		Matrix		Containers & Preservatives									
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date	Time	Aliquots	Sed.	Soil	Unspec.	H2SO4	HNO3	HCl	NaOH	ZnAc	NaOH
B10-5.0		8/24/01	0725							X	X		
B10-10.0			0732							X	X		
B10-15.0			0740							X	X		
B10-20.0			0750							X	X		
B10-25.0			0806							X	X		
B11-5.0			0913							X	X		
B11-10.0			0920							X	X		
B11-15.0			0934							X	X		
B12-5.0			1010							X	X		
B12-10.0			1016							X	X		
B12-15.0			1026							X	X		
B10-W			0830							X	X		
Possible Hazard Identification		Sample Disposal		(A fee may be assessed if samples are retained longer than 3 months)									
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Turn Around Time Required				QC Requirements (Specify)									
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input checked="" type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____													
1 Reinquished By CHRIS MERRITT		Date 8/24/01	Time 700	1. Received By Cliff Hart		Date 8/25/01	Time 1230						
2. Relinquished By		Date	Time	2. Received By		Date	Time						
3. Relinquished By		Date	Time	3. Received By		Date	Time						
Comments													

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

G1H250192

STL - Sacramento (916) 373 - 5600

** TOTAL PAGE .02 # 4 of 117

**Chain of
Custody Record**

STL-4124 (07E0)

Client
PSI

Address **4703 TIDEWATER DR STE B**

City **OAKLAND** State **CA** Zip Code **94601**

Project Name and Location (State)
CALTRANS SOUTH OAKLAND 16026

Contract/Purchase Order/Quota No.

Project Manager

FRANK POSS

Telephone Number (Area Code)/Fax Number

(510) 434-9200 / 510-434-7676

**SEVERN
TRENT
SERVICES**

Severn Trent Laboratories, Inc.

Date
8/24/01

Lab Number

Chain of Custody Number
0015098

Page **2** of **2**

Site Contact
CHRIS MERRITT

Lab Contact
NILO LIGI

Carrier/Waybill Number

Analysis (Attach list if
more space is needed)

X THg

X 8260 w/OXYGENATES

Special Instructions/
Conditions of Receipt

2 trials with headspace
Aug 25

**RESENSED IN CDR CONL
UNDER COC**

AUG 25 2001

IN!

10

Sample I.D. No. and Description
(Containers for each sample may be combined on one line)

Date

Time

Matrix

Containers &
Preservatives

Unspst

HNO3

HNO2

HCl

NaOH

ZnAc2

NaOH

B11-W

8/24/01

B12-W

1034

MW-1

1240

MW-2

1313

MW-3

1344

MW-4

1405

Possible Hazard Identification

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal

Return To Client

Disposal By Lab

Archive For

(A fee may be assessed if samples are retained
for longer than 3 months)

Turn Around Time Required

24 Hours 48 Hours 7 Days 14 Days 21 Days Other

QC Requirements (Specify)

1 Relinquished By

CHRIS MERRITT

Date

8/24/01

Time

1700

Date

8/25/01

Time

1230

2 Relinquished By

3 Relinquished By

1. Received By

Cliff HFK

2. Received By

3. Received By

Comments

**WATER
TPH-GAS
8015M (CA LUFT)**

PSI INC

Client Sample ID: B10-W

GC Volatiles

Lot-Sample #....: G1H250192-012 Work Order #....: EJLDK1AC Matrix.....: WATER
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/05/01 Analysis Date...: 09/05/01
Prep Batch #....: 1249467
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	97	(70 - 130)	

PSI INC

Client Sample ID: B11-W

GC Volatiles

Lot-Sample #....: G1H250192-013 Work Order #....: EJLDL1AC Matrix.....: WATER
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/05/01 Analysis Date...: 09/06/01
Prep Batch #....: 1249467
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	90	(70 - 130)	

PSI INC

Client Sample ID: B12-W

GC Volatiles

Lot-Sample #....: GLH250192-014 Work Order #....: EJLDM1AC Matrix.....: WATER
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/05/01 Analysis Date...: 09/06/01
Prep Batch #....: 1249467
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	92	(70 - 130)	

PSI INC

Client Sample ID: MW-1

GC Volatiles

Lot-Sample #....: G1H250192-015 Work Order #....: EJLDN1AC Matrix.....: WATER
Date Sampled...: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/05/01 Analysis Date...: 09/06/01
Prep Batch #....: 1249467
Dilution Factor: 1 Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene	92	(70 - 130)	

PSI INC

Client Sample ID: MN-2

GC Volatiles

Lot-Sample #....: G1H250192-016 Work Order #....: EJLDP1AC Matrix.....: WATER
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/05/01 Analysis Date...: 09/06/01
Prep Batch #....: 1249467
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	92	(70 - 130)	

PSI INC

Client Sample ID: MW-3

GC Volatiles

Lot-Sample #....: G1H250192-017 Work Order #....: EJLDQ1AC Matrix.....: WATER
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/05/01 Analysis Date...: 09/06/01
Prep Batch #....: 1249467
Dilution Factor: 1 Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	60	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene	90	(70 - 130)	

NOTE(S) :

The gasoline pattern appears degraded.

PSI INC

Client Sample ID: MW-4

GC Volatiles

Lot-Sample #....: G1H250192-018 Work Order #....: EJLDR1AC Matrix.....: WATER
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/05/01 Analysis Date...: 09/06/01
Prep Batch #....: 1249467
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	89	(70 - 130)	

QC DATA ASSOCIATION SUMMARY

G1H250192

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>
012	WATER	DHS CA LUFT		1249467	
013	WATER	DHS CA LUFT		1249467	
014	WATER	DHS CA LUFT		1249467	
015	WATER	DHS CA LUFT		1249467	
016	WATER	DHS CA LUFT		1249467	
017	WATER	DHS CA LUFT		1249467	
018	WATER	DHS CA LUFT		1249467	

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G1H250192 Work Order #...: EJ5WT1AA Matrix.....: WATER
MB Lot-Sample #: G1I060000-467
Analysis Date.: 09/05/01 Prep Date.....: 09/05/01
Dilution Factor: 1 Prep Batch #: 1249467

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
TPH (as Gasoline)	ND	50	ug/L	DHS CA LUFT
Unknown Hydrocarbon	ND	50	ug/L	DHS CA LUFT
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		
4-Bromofluorobenzene	92	(70 - 130)		

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: G1H250192 Work Order #....: EJ5WT1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G1I060000-467 EJ5WT1AD-LCSD
Prep Date.....: 09/05/01 Analysis Date..: 09/05/01
Prep Batch #....: 1249467
Dilution Factor: 1

PARAMETER	SPIKE	MEASURED		PERCENT	RPD	METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY		
TPH (as Gasoline)	1000	916	ug/L	92		DHS CA LUFT
	1000	985	ug/L	98	7.2	DHS CA LUFT

SURROGATE	SPIKE	PERCENT	RECOVERY
	AMOUNT	RECOVERY	LIMITS
4-Bromofluorobenzene		99	(70 - 130)
		96	(70 - 130)

NOTE (S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: G1H250192 Work Order #...: EJ5WT1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G11060000-467 EJ5WT1AD-LCSD
Prep Date.....: 09/05/01 Analysis Date...: 09/05/01
Prep Batch #...: 1249467
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	LIMITS	METHOD
TPH (as Gasoline)	92	(70 - 130)			DHS CA LUFT
	98	(70 - 130)	7.2	(0-35)	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	99	(70 - 130)
	96	(70 - 130)

NOTE (S) :

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

Bold print denotes control parameters

**SOLID
TPH-GAS (LOW)
8015M (CA LUFT)**

PSI INC

Client Sample ID: B10-5.0

GC Volatiles

Lot-Sample #....: G1H250192-001 Work Order #....: EJLC71AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
4-Bromofluorobenzene	88	(70 - 130)	

PSI INC

Client Sample ID: B10-10.0

GC Volatiles

Lot-Sample #....: G1H250192-002 Work Order #....: EJLC81AC Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	67 *	(70 - 130)	

NOTE(S) :

* Surrogate recovery is outside stated control limits.

PSI INC

Client Sample ID: B10-15.0

GC Volatiles

Lot-Sample #....: G1H250192-003 Work Order #....: EJLC91AC Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	81	(70 - 130)	

PSI INC

Client Sample ID: B10-20.0

GC Volatiles

Lot-Sample #....: G1H250192-004 Work Order #....: EJLDA1AC Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	75	(70 - 130)	

PSI INC

Client Sample ID: B10-25.0

GC Volatiles

Lot-Sample #....: G1H250192-005 Work Order #....: EJLDC1AC Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	84	(70 - 130)	

PSI INC

Client Sample ID: B11-5.0

GC Volatiles

Lot-Sample #....: G1H250192-006 Work Order #....: EJLDD1AC Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	94	(70 - 130)

PSI INC

Client Sample ID: B11-10.0

GC Volatiles

Lot-Sample #....: G1H250192-007 Work Order #....: EJLDE1AC Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
4-Bromofluorobenzene	91	(70 - 130)	

PSI INC

Client Sample ID: B11-15.0

GC Volatiles

Lot-Sample #....: G1H250192-008 Work Order #....: EJLDF1AC Matrix.....: SOLID
Date Sampled...: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	74	(70 - 130)	

PSI INC

Client Sample ID: B12-5.0

GC Volatiles

Lot-Sample #....: G1H250192-009 Work Order #....: EJLDG1AC Matrix.....: SOLID
Date Sampled...: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene	29 *	(70 - 130)	

NOTE(S) :

* Surrogate recovery is outside stated control limits.

PSI INC

Client Sample ID: B12-10.0

GC Volatiles

Lot-Sample #....: G1H250192-010 Work Order #....: EJLDH1AC Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/11/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	81	(70 - 130)	

PSI INC

Client Sample ID: B12-15.0

GC Volatiles

Lot-Sample #....: G1H250192-011 Work Order #....: EJLDJ1AC Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/10/01 Analysis Date...: 09/11/01
Prep Batch #....: 1255336
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	1000	ug/kg
Unknown Hydrocarbon	ND	1000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	79		(70 - 130)

QC DATA ASSOCIATION SUMMARY

G1H250192

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	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
002	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
003	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
004	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
005	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
006	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
007	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
008	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
009	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
010	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
011	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
012	WATER	DHS CA LUFT		1249467	
013	WATER	DHS CA LUFT		1249467	
014	WATER	DHS CA LUFT		1249467	
015	WATER	DHS CA LUFT		1249467	
016	WATER	DHS CA LUFT		1249467	

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

G1H250192

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>
017	WATER	DHS CA LUFT		1249467	
018	WATER	DHS CA LUFT		1249467	

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G1H250192
MB Lot-Sample #: G1I120000-336

Work Order #...: EKD211AA

Matrix.....: SOLID

Analysis Date...: 09/10/01
Dilution Factor: 1

Prep Date.....: 09/10/01
Prep Batch #...: 1255336

PARAMETER	RESULT	REPORTING	METHOD
TPH (as Gasoline)	ND	1000 ug/kg	DHS CA LUFT
Unknown Hydrocarbon	ND	1000 ug/kg	DHS CA LUFT

SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene	RECOVERY	(70 - 130)	
	92		

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: G1H250192 Work Order #....: EKD211AC Matrix.....: SOLID
LCS Lot-Sample#: G1I120000-336
Prep Date.....: 09/10/01 Analysis Date...: 09/11/01
Prep Batch #....: 1255336
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	PERCENT <u>RECOVERY</u>	METHOD
TPH (as Gasoline)	1000	1080	108	DHS CA LUFT
SURROGATE		PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	
4-Bromofluorobenzene		98	(70 - 130)	

NOTE (S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: G1H250192 Work Order #....: EKD211AC Matrix.....: SOLID
LCS Lot-Sample#: G1I120000-336
Prep Date.....: 09/10/01 Analysis Date...: 09/11/01
Prep Batch #....: 1255336
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	108	(70 - 130)	DHS CA LUFT
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	98	(70 - 130)	

NOTE (S) :

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: G1H250192 Work Order #...: EJLDH1AE-MS Matrix.....: SOLID
 MS Lot-Sample #: G1H250192-010 EJLDH1AF-MSD
 Date Sampled...: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/10/01 Analysis Date...: 09/11/01
 Prep Batch #...: 1255336
 Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	
TPH (as Gasoline)			1000	952	ug/kg	95	DHS CA LUFT
			1000	763	ug/kg	76	22 DHS CA LUFT
SURROGATE			PERCENT			RECOVERY	
4-Bromofluorobenzene			RECOVERY			LIMITS	
			91			(70 - 130)	
			64 *			(70 - 130)	

NOTE (S) :

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

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: G1H250192 Work Order #...: EJLDH1AE-MS Matrix.....: SOLID
MS Lot-Sample #: G1H250192-010 **EJLDH1AF-MSD**
 Date Sampled...: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/10/01 Analysis Date...: 09/11/01
 Prep Batch #...: 1255336
 Dilution Factor: 1

PARAMETER	PERCENT	RECOVERY	RPD	RPD	METHOD
	<u>RECOVERY</u>	<u>LIMITS</u>		<u>LIMITS</u>	
TPH (as Gasoline)	95	(70 - 130)			DHS CA LUFT
	76	(70 - 130)	22	(0-35)	DHS CA LUFT
SURROGATE	PERCENT	RECOVERY		RECOVERY	
4-Bromofluorobenzene	<u>RECOVERY</u>	<u>LIMITS</u>		<u>LIMITS</u>	
	91	(70 - 130)		(70 - 130)	
	64 *	(70 - 130)		(70 - 130)	

NOTE (S) :

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

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

**SOLID
TPH-GAS (MED)
8015M (CA LUFT)**

PSI INC

Client Sample ID: B10-5.0

GC Volatiles

Lot-Sample #....: G1H250192-001 Work Order #....: EJLC71AE Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	109	(70 - 130)	

PSI INC

Client Sample ID: B10-10.0

GC Volatiles

Lot-Sample #....: G1H250192-002 Work Order #....: EJLC81AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	102	(70 - 130)	

PSI INC

Client Sample ID: B10-15.0

GC Volatiles

Lot-Sample #....: G1H250192-003 Work Order #....: EJLC91AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	98	(70 - 130)	

PSI INC

Client Sample ID: B10-20.0

GC Volatiles

Lot-Sample #....: G1H250192-004 Work Order #....: EJLDALAD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	95	(70 - 130)	

PSI INC

Client Sample ID: B10-25.0

GC Volatiles

Lot-Sample #....: GLH250192-005 Work Order #....: EJLDC1AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
SURROGATE	PERCENT	RECOVERY	
	RECOVERY	LIMITS	
4-Bromofluorobenzene	89	(70 - 130)	

PSI INC

Client Sample ID: B11-5.0

GC Volatiles

Lot-Sample #....: G1H250192-006 Work Order #....: EJLDD1AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	104	(70 - 130)	

PSI INC

Client Sample ID: B11-10.0

GC Volatiles

Lot-Sample #....: G1H250192-007 Work Order #....: EJLDE1AD Matrix.....: SOLID
Date Sampled...: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
Prep Batch #...: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	101	(70 - 130)	

PSI INC

Client Sample ID: B11-15.0

GC Volatiles

Lot-Sample #....: G1H250192-008 Work Order #....: EJLDF1AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/11/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	101	(70 - 130)	

PSI INC

Client Sample ID: B12-5.0

GC Volatiles

Lot-Sample #....: G1H250192-009 Work Order #....: EJLDG1AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/11/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
TPH (as Gasoline)	ND	5000 ug/kg	
Unknown Hydrocarbon	ND	5000 ug/kg	
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
4-Bromofluorobenzene	98	(70 - 130)	

PSI INC

Client Sample ID: B12-10.0

GC Volatiles

Lot-Sample #....: G1H250192-010 Work Order #...: EJLDH1AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received..: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/11/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
SURROGATE	PERCENT	RECOVERY	LIMITS
	RECOVERY		(70 - 130)
4-Bromofluorobenzene	96		

PSI INC

Client Sample ID: B12-15.0

GC Volatiles

Lot-Sample #....: G1H250192-011 Work Order #....: EJLDJ1AD Matrix.....: SOLID
Date Sampled....: 08/24/01 Date Received...: 08/25/01
Prep Date.....: 09/07/01 Analysis Date...: 09/11/01
Prep Batch #....: 1255340
Dilution Factor: 1 Method.....: DHS CA LUFT

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
TPH (as Gasoline)	ND	5000	ug/kg
Unknown Hydrocarbon	ND	5000	ug/kg
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene	92	(70 - 130)	

QC DATA ASSOCIATION SUMMARY

G1H250192

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	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
002	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
003	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
004	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
005	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
006	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
007	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
008	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
009	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
010	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
011	SOLID	DHS CA LUFT		1255336	1255148
	SOLID	DHS CA LUFT		1255340	
012	WATER	DHS CA LUFT		1249467	
013	WATER	DHS CA LUFT		1249467	
014	WATER	DHS CA LUFT		1249467	
015	WATER	DHS CA LUFT		1249467	
016	WATER	DHS CA LUFT		1249467	

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

G1H250192

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>
017	WATER	DHS CA LUFT		1249467	
018	WATER	DHS CA LUFT		1249467	

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: G1H250192 Work Order #....: EKD3D1AA Matrix.....: SOLID
MB Lot-Sample #: G1I120000-340
Prep Date.....: 09/07/01
Analysis Date..: 09/10/01 Prep Batch #....: 1255340
Dilution Factor: 1

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
TPH (as Gasoline)	ND	5000	ug/kg	DHS CA LUFT
Unknown Hydrocarbon	ND	5000	ug/kg	DHS CA LUFT
SURROGATE	PERCENT RECOVERY	RECOVERY		LIMITS
		(70 - 130)		
4-Bromofluorobenzene	103			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: G1H250192 Work Order #....: EKD3D1AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: G1I120000-340 EKD3D1AD-LCSD
 Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
 Prep Batch #....: 1255340
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>		<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>		
TPH Quantitated as Gasoline (C7-C12)	50000	47900	ug/kg	96		DHS CA LUFT
	50000	47100	ug/kg	94	1.7	DHS CA LUFT

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	105	(70 - 130)
	103	(70 - 130)

NOTE (S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: G1H250192 Work Order #....: EKD3D1AC-LCS Matrix.....: SOLID
LCS Lot-Sample#: G1I120000-340 EKD3D1AD-LCSD
Prep Date.....: 09/07/01 Analysis Date...: 09/10/01
Prep Batch #....: 1255340
Dilution Factor: 1

PARAMETER	PERCENT	RECOVERY	RPD	METHOD
	RECOVERY	LIMITS		
TPH Quantitated as Gasoline (C7-C12)	96	(70 - 130)		DHS CA LUFT
	94	(70 - 130)	1.7	(0-35) DHS CA LUFT

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
4-Bromofluorobenzene	105	(70 - 130)
	103	(70 - 130)

NOTE (S) :

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

Bold print denotes control parameters

**WATER
VOLATILE ORGANICS
8260B**

PSI INC

Client Sample ID: B10-W

GC/MS Volatiles

Lot-Sample #....: G1H250192-012 Work Order #....: EJLDK1AA Matrix.....: WATER
 Date Sampled...: 08/24/01 Date Received..: 08/25/01
 Prep Date.....: 09/04/01 Analysis Date..: 09/04/01
 Prep Batch #....: 1248411
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acetone	ND	10	ug/L
Carbon disulfide	ND	2.0	ug/L
2-Butanone (MEK)	ND	2.0	ug/L
2-Hexanone	ND	2.0	ug/L
1,2-Dibromoethane	ND	2.0	ug/L
4-Methyl-2-pentanone (MIBK)	ND	2.0	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	ug/L
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L
Chloromethane	4.4	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	50	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L

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PSI INC

Client Sample ID: B10-W

GC/MS Volatiles

Lot-Sample #....: G1H250192-012 Work Order #....: EJLDK1AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L
1,2,4-Trichlorobenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Isopropyl ether	ND	2.0	ug/L
t-Butanol	ND	50	ug/L
Methyl tert-butyl ether (MTBE)	2.1	2.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	108	(76 - 112)	
1,2-Dichloroethane-d4	114	(76 - 118)	
Toluene-d8	103	(79 - 115)	

PSI INC

Client Sample ID: B11-W

GC/MS Volatiles

Lot-Sample #....: G1H250192-013 Work Order #....: EJLDL1AA Matrix.....: WATER
 Date Sampled...: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/04/01 Analysis Date...: 09/04/01
 Prep Batch #....: 1248411
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acetone	ND	10	ug/L
Carbon disulfide	ND	2.0	ug/L
2-Butanone (MEK)	ND	2.0	ug/L
2-Hexanone	ND	2.0	ug/L
1,2-Dibromoethane	ND	2.0	ug/L
4-Methyl-2-pentanone (MIBK)	ND	2.0	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	ug/L
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	50	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Chloroform	1.0	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L

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PSI INC

Client Sample ID: B11-W

GC/MS Volatiles

Lot-Sample #....: G1H250192-013 Work Order #....: EJLDL1AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L
1,2,4-Trichlorobenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Isopropyl ether	ND	2.0	ug/L
t-Butanol	ND	50	ug/L
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	95	(76 - 112)	
1,2-Dichloroethane-d4	103	(76 - 118)	
Toluene-d8	94	(79 - 115)	

PSI INC

Client Sample ID: B12-W

GC/MS Volatiles

Lot-Sample #....: G1H250192-014 Work Order #....: EJLDM2AA Matrix.....: WATER
 Date Sampled...: 08/24/01 Date Received..: 08/25/01
 Prep Date.....: 09/05/01 Analysis Date..: 09/05/01
 Prep Batch #....: 1249469
 Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	10	ug/L
Carbon disulfide	ND	2.0	ug/L
2-Butanone (MEK)	ND	2.0	ug/L
2-Hexanone	ND	2.0	ug/L
1,2-Dibromoethane	ND	2.0	ug/L
4-Methyl-2-pentanone (MIBK)	ND	2.0	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	ug/L
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L
Chloromethane	1.9	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	50	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
1,3-Dichloropropene	ND	1.0	ug/L

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PSI INC

Client Sample ID: B12-W

GC/MS Volatiles

Lot-Sample #....: G1H250192-014 Work Order #....: EJLDM2AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L
1,2,4-Trichlorobenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Isopropyl ether	ND	2.0	ug/L
t-Butanol	ND	50	ug/L
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	91	(76 - 112)	
1,2-Dichloroethane-d4	86	(76 - 118)	
Toluene-d8	92	(79 - 115)	

PSI INC

Client Sample ID: MW-1

GC/MS Volatiles

Lot-Sample #....: G1H250192-015 Work Order #....: EJLDN1AA Matrix.....: WATER
 Date Sampled...: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/04/01 Analysis Date...: 09/04/01
 Prep Batch #....: 1248411
 Dilution Factor: 25 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND Q	250	ug/L
Carbon disulfide	ND	50	ug/L
2-Butanone (MEK)	ND	50	ug/L
2-Hexanone	ND	50	ug/L
1,2-Dibromoethane	ND	50	ug/L
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	ug/L
Dichlorodifluoromethane (Freon 12)	ND	25	ug/L
Trichlorofluoromethane (Freon 11)	ND	25	ug/L
Chloromethane	ND	25	ug/L
Vinyl chloride	ND	25	ug/L
Bromomethane	ND	25	ug/L
Chloroethane	ND	25	ug/L
1,1-Dichloroethene	ND	25	ug/L
Methylene chloride	ND	1200	ug/L
trans-1,2-Dichloroethene	ND	25	ug/L
1,1-Dichloroethane	ND	25	ug/L
2,2-Dichloropropane	ND	25	ug/L
Bromochloromethane	ND	25	ug/L
Chloroform	ND	25	ug/L
1,1,1-Trichloroethane	ND	25	ug/L
Carbon tetrachloride	ND	25	ug/L
1,1-Dichloropropene	ND	25	ug/L
Benzene	ND	25	ug/L
1,2-Dichloroethane	ND	25	ug/L
Trichloroethene	ND	25	ug/L
1,2-Dichloropropane	ND	25	ug/L
Dibromomethane	ND	25	ug/L
Bromodichloromethane	ND	25	ug/L
cis-1,3-Dichloropropene	ND	25	ug/L
Toluene	ND	25	ug/L
trans-1,3-Dichloropropene	ND	25	ug/L
1,1,2-Trichloroethane	ND	25	ug/L
Tetrachloroethene	ND	25	ug/L
1,3-Dichloropropane	ND	25	ug/L

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PSI INC

Client Sample ID: MW-1

GC/MS Volatiles

Lot-Sample #....: G1H250192-015 Work Order #....: EJLDN1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dibromochloromethane	ND	25	ug/L
Chlorobenzene	ND	25	ug/L
1,1,1,2-Tetrachloroethane	ND	25	ug/L
Ethylbenzene	ND	25	ug/L
m-Xylene & p-Xylene	ND	25	ug/L
o-Xylene	ND	25	ug/L
Styrene	ND	25	ug/L
Bromoform	ND	25	ug/L
Isopropylbenzene	ND	25	ug/L
Bromobenzene	ND	25	ug/L
1,1,2,2-Tetrachloroethane	ND	25	ug/L
1,2,3-Trichloropropane	ND	25	ug/L
n-Propylbenzene	ND	25	ug/L
2-Chlorotoluene	ND	25	ug/L
4-Chlorotoluene	ND	25	ug/L
1,3,5-Trimethylbenzene	ND	25	ug/L
tert-Butylbenzene	ND	25	ug/L
1,2,4-Trimethylbenzene	ND	25	ug/L
sec-Butylbenzene	ND	25	ug/L
1,3-Dichlorobenzene	ND	25	ug/L
p-Isopropyltoluene	ND	25	ug/L
1,4-Dichlorobenzene	ND	25	ug/L
1,2-Dichlorobenzene	ND	25	ug/L
n-Butylbenzene	ND	25	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	ug/L
1,2,4-Trichlorobenzene	ND	25	ug/L
Hexachlorobutadiene	ND	25	ug/L
Naphthalene	ND	25	ug/L
1,2,3-Trichlorobenzene	ND	25	ug/L
cis-1,2-Dichloroethene	ND	25	ug/L
Isopropyl ether	ND	50	ug/L
t-Butanol	ND	1200	ug/L
Methyl tert-butyl ether (MTBE)	520	50	ug/L
Tert-amyl methyl ether	ND	50	ug/L
Tert-butyl ethyl ether	ND	50	ug/L
<u>SURROGATE</u>		PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	99	(76 - 112)	
1,2-Dichloroethane-d4	109	(76 - 118)	
Toluene-d8	98	(79 - 115)	

NOTE(S) :

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

PSI INC

Client Sample ID: MW-2

GC/MS Volatiles

Lot-Sample #....: G1H250192-016 Work Order #....: EJLDP2AA Matrix.....: WATER
 Date Sampled...: 08/24/01 Date Received..: 08/25/01
 Prep Date.....: 09/05/01 Analysis Date..: 09/05/01
 Prep Batch #...: 1249469
 Dilution Factor: 2 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND Q	20	ug/L
Carbon disulfide	ND	4.0	ug/L
2-Butanone (MEK)	ND	4.0	ug/L
2-Hexanone	ND	4.0	ug/L
1,2-Dibromoethane	ND	4.0	ug/L
4-Methyl-2-pentanone (MIBK)	ND	4.0	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	ug/L
Dichlorodifluoromethane (Freon 12)	ND	2.0	ug/L
Trichlorofluoromethane (Freon 11)	ND	2.0	ug/L
Chloromethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
1,1-Dichloroethene	ND	2.0	ug/L
Methylene chloride	ND	100	ug/L
trans-1,2-Dichloroethene	ND	2.0	ug/L
1,1-Dichloroethane	ND	2.0	ug/L
2,2-Dichloropropane	ND	2.0	ug/L
Bromochloromethane	ND	2.0	ug/L
Chloroform	ND	2.0	ug/L
1,1,1-Trichloroethane	ND	2.0	ug/L
Carbon tetrachloride	ND	2.0	ug/L
1,1-Dichloropropene	ND	2.0	ug/L
Benzene	ND	2.0	ug/L
1,2-Dichloroethane	ND	2.0	ug/L
Trichloroethene	ND	2.0	ug/L
1,2-Dichloropropene	ND	2.0	ug/L
Dibromomethane	ND	2.0	ug/L
Bromodichloromethane	ND	2.0	ug/L
cis-1,3-Dichloropropene	ND	2.0	ug/L
Toluene	ND	2.0	ug/L
trans-1,3-Dichloropropene	ND	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
Tetrachloroethene	ND	2.0	ug/L
1,3-Dichloropropene	ND	2.0	ug/L

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PSI INC

Client Sample ID: MW-2

GC/MS Volatiles

Lot-Sample #....: G1H250192-016 Work Order #....: EJLDP2AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dibromochloromethane	ND	2.0	ug/L
Chlorobenzene	ND	2.0	ug/L
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L
Ethylbenzene	ND	2.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
Bromoform	ND	2.0	ug/L
Isopropylbenzene	ND	2.0	ug/L
Bromobenzene	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	2.0	ug/L
n-Propylbenzene	ND	2.0	ug/L
2-Chlorotoluene	ND	2.0	ug/L
4-Chlorotoluene	ND	2.0	ug/L
1,3,5-Trimethylbenzene	ND	2.0	ug/L
tert-Butylbenzene	ND	2.0	ug/L
1,2,4-Trimethylbenzene	ND	2.0	ug/L
sec-Butylbenzene	ND	2.0	ug/L
1,3-Dichlorobenzene	ND	2.0	ug/L
p-Isopropyltoluene	ND	2.0	ug/L
1,4-Dichlorobenzene	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	2.0	ug/L
n-Butylbenzene	ND	2.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	4.0	ug/L
1,2,4-Trichlorobenzene	ND	2.0	ug/L
Hexachlorobutadiene	ND	2.0	ug/L
Naphthalene	ND	2.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
cis-1,2-Dichloroethene	ND	2.0	ug/L
Isopropyl ether	ND	4.0	ug/L
t-Butanol	ND	100	ug/L
Methyl tert-butyl ether (MTBE)	36	4.0	ug/L
Tert-amyl methyl ether	ND	4.0	ug/L
Tert-butyl ethyl ether	ND	4.0	ug/L
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	98	(76 - 112)	
1,2-Dichloroethane-d4	94	(76 - 118)	
Toluene-d8	94	(79 - 115)	

NOTE(S):

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

PSI INC

Client Sample ID: MW-3

GC/MS Volatiles

Lot-Sample #....: G1H250192-017 Work Order #....: EJLDQ2AA Matrix.....: WATER
 Date Sampled....: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/05/01 Analysis Date...: 09/05/01
 Prep Batch #....: 1249469
 Dilution Factor: 100 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND Q	1000	ug/L
Carbon disulfide	ND	200	ug/L
2-Butanone (MEK)	ND	200	ug/L
2-Hexanone	ND	200	ug/L
1,2-Dibromoethane	ND	200	ug/L
4-Methyl-2-pentanone (MIBK)	ND	200	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	200	ug/L
Dichlorodifluoromethane (Freon 12)	ND	100	ug/L
Trichlorofluoromethane (Freon 11)	ND	100	ug/L
Chloromethane	ND	100	ug/L
Vinyl chloride	ND	100	ug/L
Bromomethane	ND	100	ug/L
Chloroethane	ND	100	ug/L
1,1-Dichloroethene	ND	100	ug/L
Methylene chloride	ND	5000	ug/L
trans-1,2-Dichloroethene	ND	100	ug/L
1,1-Dichloroethane	ND	100	ug/L
2,2-Dichloropropane	ND	100	ug/L
Bromochloromethane	ND	100	ug/L
Chloroform	ND	100	ug/L
1,1,1-Trichloroethane	ND	100	ug/L
Carbon tetrachloride	ND	100	ug/L
1,1-Dichloropropene	ND	100	ug/L
Benzene	ND	100	ug/L
1,2-Dichloroethane	ND	100	ug/L
Trichloroethene	ND	100	ug/L
1,2-Dichloropropane	ND	100	ug/L
Dibromomethane	ND	100	ug/L
Bromodichloromethane	ND	100	ug/L
cis-1,3-Dichloropropene	ND	100	ug/L
Toluene	ND	100	ug/L
trans-1,3-Dichloropropene	ND	100	ug/L
1,1,2-Trichloroethane	ND	100	ug/L
Tetrachloroethene	ND	100	ug/L
1,3-Dichloropropane	ND	100	ug/L

(Continued on next page)

PSI INC

Client Sample ID: MW-3

GC/MS Volatiles

Lot-Sample #...: G1H250192-017 Work Order #...: EJLDQ2AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dibromochloromethane	ND	100	ug/L
Chlorobenzene	ND	100	ug/L
1,1,1,2-Tetrachloroethane	ND	100	ug/L
Ethylbenzene	ND	100	ug/L
m-Xylene & p-Xylene	ND	100	ug/L
o-Xylene	ND	100	ug/L
Styrene	ND	100	ug/L
Bromoform	ND	100	ug/L
Isopropylbenzene	ND	100	ug/L
Bromobenzene	ND	100	ug/L
1,1,2,2-Tetrachloroethane	ND	100	ug/L
1,2,3-Trichloropropane	ND	100	ug/L
n-Propylbenzene	ND	100	ug/L
2-Chlorotoluene	ND	100	ug/L
4-Chlorotoluene	ND	100	ug/L
1,3,5-Trimethylbenzene	ND	100	ug/L
tert-Butylbenzene	ND	100	ug/L
1,2,4-Trimethylbenzene	ND	100	ug/L
sec-Butylbenzene	ND	100	ug/L
1,3-Dichlorobenzene	ND	100	ug/L
p-Isopropyltoluene	ND	100	ug/L
1,4-Dichlorobenzene	ND	100	ug/L
1,2-Dichlorobenzene	ND	100	ug/L
n-Butylbenzene	ND	100	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	200	ug/L
1,2,4-Trichlorobenzene	ND	100	ug/L
Hexachlorobutadiene	ND	100	ug/L
Naphthalene	ND	100	ug/L
1,2,3-Trichlorobenzene	ND	100	ug/L
cis-1,2-Dichloroethene	ND	100	ug/L
Isopropyl ether	ND	200	ug/L
t-Butanol	ND	5000	ug/L
Methyl tert-butyl ether (MTBE)	2800	200	ug/L
Tert-amyl methyl ether	ND	200	ug/L
Tert-butyl ethyl ether	ND	200	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	109	(76 - 112)	
1,2-Dichloroethane-d4	117	(76 - 118)	
Toluene-d8	105	(79 - 115)	

NOTE(S) :

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

PSI INC

Client Sample ID: MW-4

GC/MS Volatiles

Lot-Sample #....: G1H250192-018 Work Order #....: EJLDR2AA Matrix.....: WATER
 Date Sampled...: 08/24/01 Date Received..: 08/25/01
 Prep Date.....: 09/05/01 Analysis Date..: 09/05/01
 Prep Batch #....: 1249469
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acetone	ND	10	ug/L
Carbon disulfide	ND	2.0	ug/L
2-Butanone (MEK)	ND	2.0	ug/L
2-Hexanone	ND	2.0	ug/L
1,2-Dibromoethane	ND	2.0	ug/L
4-Methyl-2-pentanone (MIBK)	ND	2.0	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	ug/L
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	50	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Chloroform	5.3	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L

(Continued on next page)

PSI INC

Client Sample ID: MW-4

GC/MS Volatiles

Lot-Sample #....: G1H250192-018 Work Order #....: EJLDR2AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L
1,2,4-Trichlorobenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Isopropyl ether	ND	2.0	ug/L
t-Butanol	ND	50	ug/L
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	97	(76 - 112)	
1,2-Dichloroethane-d4	91	(76 - 118)	
Toluene-d8	97	(79 - 115)	

QC DATA ASSOCIATION SUMMARY

G1H250192

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 8260B		1248216	
002	SOLID	SW846 8260B		1248216	
003	SOLID	SW846 8260B		1248216	
004	SOLID	SW846 8260B		1248216	
005	SOLID	SW846 8260B		1248216	
006	SOLID	SW846 8260B		1248210	
007	SOLID	SW846 8260B		1248210	
008	SOLID	SW846 8260B		1248491	
009	SOLID	SW846 8260B		1248210	
010	SOLID	SW846 8260B		1248210	
011	SOLID	SW846 8260B		1248491	
012	WATER	SW846 8260B		1248411	
013	WATER	SW846 8260B		1248411	
014	WATER	SW846 8260B		1249469	
015	WATER	SW846 8260B		1248411	
016	WATER	SW846 8260B		1249469	
017	WATER	SW846 8260B		1249469	
018	WATER	SW846 8260B		1249469	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G1H250192 Work Order #....: EJ3NF1AA Matrix.....: WATER
 MB Lot-Sample #: G1I050000-411 Prep Date.....: 09/04/01
 Analysis Date...: 09/04/01 Prep Batch #....: 1248411
 Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2-Dibromoethane	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
2-Butanone (MEK)	ND	2.0	ug/L	SW846 8260B
4-Methyl-2-pentanone (MIBK)	ND	2.0	ug/L	SW846 8260B
Carbon disulfide	ND	2.0	ug/L	SW846 8260B
2-Hexanone	ND	2.0	ug/L	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	ug/L	SW846 8260B
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: G1H250192

Work Order #....: EJ3NF1AA

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,2,4-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Isopropyl ether	ND	2.0	ug/L	SW846 8260B
t-Butanol	ND	50	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	SW846 8260B
Tert-amyl methyl ether	ND	2.0	ug/L	SW846 8260B
Tert-butyl ethyl ether	ND	2.0	ug/L	SW846 8260B
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	100	(76 - 112)		
1,2-Dichloroethane-d4	118	(76 - 118)		
Toluene-d8	95	(79 - 115)		

NOTE(S) :

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G1H250192
MB Lot-Sample #: G1I060000-469

Work Order #...: EJ5WV1AA

Matrix.....: WATER

Analysis Date..: 09/05/01
Dilution Factor: 1

Prep Date.....: 09/05/01
Prep Batch #...: 1249469

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Acetone	2.0	10	ug/L	SW846 8260B	
Carbon disulfide	ND	2.0	ug/L	SW846 8260B	
1,2-Dibromoethane	ND	2.0	ug/L	SW846 8260B	
2-Hexanone	ND	2.0	ug/L	SW846 8260B	
2-Butanone (MEK)	ND	2.0	ug/L	SW846 8260B	
4-Methyl-2-pentanone (MIBK)	ND	2.0	ug/L	SW846 8260B	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	ug/L	SW846 8260B	
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L	SW846 8260B	
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
Bromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
Dibromomethane	ND	1.0	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G1H250192

Work Order #...: EJ5WV1AA

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,2,4-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Isopropyl ether	ND	2.0	ug/L	SW846 8260B
t-Butanol	ND	50	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	SW846 8260B
Tert-amyl methyl ether	ND	2.0	ug/L	SW846 8260B
Tert-butyl ethyl ether	ND	2.0	ug/L	SW846 8260B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	112		(76 - 112)	
1,2-Dichloroethane-d4	118		(76 - 118)	
Toluene-d8	108		(79 - 115)	

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 #....: G1H250192 **Work Order #....:** EJ3NF1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G1I050000-411 **EJ3NF1AD-LCSD**
Prep Date.....: 09/04/01 **Analysis Date...:** 09/04/01
Prep Batch #....: 1248411
Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>		<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>		
1,1-Dichloroethene	10.0	9.77	ug/L	98		SW846 8260B
	10.0	8.57	ug/L	86	13	SW846 8260B
Benzene	10.0	9.22	ug/L	92		SW846 8260B
	10.0	9.50	ug/L	95	2.9	SW846 8260B
Trichloroethene	10.0	9.46	ug/L	95		SW846 8260B
	10.0	10.0	ug/L	100	5.8	SW846 8260B
Toluene	10.0	9.64	ug/L	96		SW846 8260B
	10.0	9.71	ug/L	97	0.70	SW846 8260B
Chlorobenzene	10.0	9.69	ug/L	97		SW846 8260B
	10.0	9.93	ug/L	99	2.5	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	106	(76 - 112)
	109	(76 - 112)
1,2-Dichloroethane-d4	115	(76 - 118)
	118	(76 - 118)
Toluene-d8	100	(79 - 115)
	103	(79 - 115)

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 #....: G1H250192 Work Order #....: EJ3NF1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: G1I050000-411 EJ3NF1AD-LCSD
 Prep Date.....: 09/04/01 Analysis Date...: 09/04/01
 Prep Batch #....: 1248411
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	98	(79 - 115)	13	(0-26)	SW846 8260B
	86	(79 - 115)			SW846 8260B
Benzene	92	(85 - 120)	2.9	(0-14)	SW846 8260B
	95	(85 - 120)			SW846 8260B
Trichloroethene	95	(78 - 118)	5.8	(0-20)	SW846 8260B
	100	(78 - 118)			SW846 8260B
Toluene	96	(82 - 121)	0.70	(0-30)	SW846 8260B
	97	(82 - 121)			SW846 8260B
Chlorobenzene	97	(86 - 117)	2.5	(0-15)	SW846 8260B
	99	(86 - 117)			SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	106	(76 - 112)
	109	(76 - 112)
1,2-Dichloroethane-d4	115	(76 - 118)
	118	(76 - 118)
Toluene-d8	100	(79 - 115)
	103	(79 - 115)

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 #....: G1H250192 Work Order #....: EJ5WV1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: G1I060000-469 EJ5WV1AD-LCSD
 Prep Date.....: 09/05/01 Analysis Date...: 09/05/01
 Prep Batch #:....: 1249469
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
1,1-Dichloroethene	10.0	9.85	ug/L	99		SW846 8260B
	10.0	9.18	ug/L	92	7.0	SW846 8260B
Benzene	10.0	10.0	ug/L	100		SW846 8260B
	10.0	9.59	ug/L	96	4.6	SW846 8260B
Trichloroethene	10.0	10.5	ug/L	105		SW846 8260B
	10.0	9.99	ug/L	100	5.3	SW846 8260B
Toluene	10.0	10.2	ug/L	102		SW846 8260B
	10.0	9.76	ug/L	98	4.5	SW846 8260B
Chlorobenzene	10.0	10.6	ug/L	106		SW846 8260B
	10.0	10.1	ug/L	101	4.7	SW846 8260B
<u>SURROGATE</u>				<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene				110	(76 - 112)	
				107	(76 - 112)	
1,2-Dichloroethane-d4				114	(76 - 118)	
				113	(76 - 118)	
Toluene-d8				103	(79 - 115)	
				102	(79 - 115)	

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 #....: G1H250192 Work Order #....: EJ5WV1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: G1I060000-469 EJ5WV1AD-LCSD
 Prep Date.....: 09/05/01 Analysis Date...: 09/05/01
 Prep Batch #....: 1249469
 Dilution Factor: 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>
1,1-Dichloroethene	99	(79 - 115)			SW846 8260B
	92	(79 - 115)	7.0	(0-26)	SW846 8260B
Benzene	100	(85 - 120)			SW846 8260B
	96	(85 - 120)	4.6	(0-14)	SW846 8260B
Trichloroethene	105	(78 - 118)			SW846 8260B
	100	(78 - 118)	5.3	(0-20)	SW846 8260B
Toluene	102	(82 - 121)			SW846 8260B
	98	(82 - 121)	4.5	(0-30)	SW846 8260B
Chlorobenzene	106	(86 - 117)			SW846 8260B
	101	(86 - 117)	4.7	(0-15)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
4-Bromofluorobenzene	110	(76 - 112)
	107	(76 - 112)
1,2-Dichloroethane-d4	114	(76 - 118)
	113	(76 - 118)
Toluene-d8	103	(79 - 115)
	102	(79 - 115)

NOTE(S) :

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

Bold print denotes control parameters

**SOLID
VOLATILE ORGANICS
8260B**

PSI INC

Client Sample ID: B10-5.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-001 Work Order #....: EJLC71AC Matrix.....: SOLID
 Date Sampled...: 08/24/01 Date Received..: 08/25/01
 Prep Date.....: 08/31/01 Analysis Date..: 08/31/01
 Prep Batch #....: 1248216
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropene	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B10-5.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-001 Work Order #....: EJLC71AC Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	90	(83 - 113)
1,2-Dichloroethane-d4	91	(82 - 127)
Toluene-d8	95	(84 - 115)

PSI INC

Client Sample ID: B10-10.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-002 Work Order #....: BJLC81AA Matrix.....: SOLID
 Date Sampled....: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 08/31/01 Analysis Date...: 08/31/01
 Prep Batch #....: 1248216
 Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B10-10.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-002 Work Order #....: EJLC81AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	90	(83 - 113)
1,2-Dichloroethane-d4	95	(82 - 127)
Toluene-d8	93	(84 - 115)

PSI INC

Client Sample ID: B10-15.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-003 Work Order #....: BJLC91AA Matrix.....: SOLID
 Date Sampled...: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 08/31/01 Analysis Date...: 08/31/01
 Prep Batch #....: 1248216
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B10-15.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-003 Work Order #....: EJLC91AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	89	(83 - 113)
1,2-Dichloroethane-d4	95	(82 - 127)
Toluene-d8	97	(84 - 115)

PSI INC

Client Sample ID: B10-20.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-004 Work Order #....: EJLDALAA Matrix.....: SOLID
 Date Sampled...: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 08/31/01 Analysis Date...: 08/31/01
 Prep Batch #....: 1248216
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B10-20.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-004 Work Order #....: EJLDA1AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	87	(83 - 113)
1,2-Dichloroethane-d4	92	(82 - 127)
Toluene-d8	96	(84 - 115)

PSI INC

Client Sample ID: B10-25.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-005 Work Order #....: EJLDC1AA Matrix.....: SOLID
 Date Sampled...: 08/24/01 Date Received..: 08/25/01
 Prep Date.....: 08/31/01 Analysis Date...: 08/31/01
 Prep Batch #....: 1248216
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B10-25.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-005 Work Order #....: EJLDC1AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	89	(83 - 113)
1,2-Dichloroethane-d4	99	(82 - 127)
Toluene-d8	96	(84 - 115)

PSI INC

Client Sample ID: B11-5.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-006 Work Order #....: EJLDD1AA Matrix.....: SOLID
 Date Sampled...: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/01/01 Analysis Date...: 09/01/01
 Prep Batch #....: 1248210
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B11-5.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-006 Work Order #....: EJLDD1AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
séc-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	93	(83 - 113)
1,2-Dichloroethane-d4	97	(82 - 127)
Toluene-d8	101	(84 - 115)

PSI INC

Client Sample ID: B11-10.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-007 Work Order #....: EJLDE1AA Matrix.....: SOLID
 Date Sampled....: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/01/01 Analysis Date...: 09/01/01
 Prep Batch #....: 1248210
 Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B11-10.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-007 Work Order #....: EJLDE1AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	88	(83 - 113)
1,2-Dichloroethane-d4	89	(82 - 127)
Toluene-d8	94	(84 - 115)

PSI INC

Client Sample ID: B11-15.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-008 Work Order #....: EJLDF1AA Matrix.....: SOLID
 Date Sampled...: 08/24/01 Date Received..: 08/25/01
 Prep Date.....: 09/04/01 Analysis Date..: 09/04/01
 Prep Batch #....: 1248491
 Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B11-15.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-008 Work Order #....: EJLDF1AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene	87	(83 - 113)	
1,2-Dichloroethane-d4	93	(82 - 127)	
Toluene-d8	91	(84 - 115)	

PSI INC

Client Sample ID: B12-5.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-009 Work Order #....: EJLDG1AA Matrix.....: SOLID
 Date Sampled....: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/01/01 Analysis Date...: 09/01/01
 Prep Batch #....: 1248210
 Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B12-5.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-009 Work Order #....: EJLDG1AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	86	(83 - 113)
1,2-Dichloroethane-d4	90	(82 - 127)
Toluene-d8	95	(84 - 115)

PSI INC

Client Sample ID: B12-10.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-010 Work Order #....: EJLDH1AA Matrix.....: SOLID
 Date Sampled...: 08/24/01 Date Received...: 08/25/01
 Prep Date.....: 09/01/01 Analysis Date...: 09/01/01
 Prep Batch #....: 1248210
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromoform	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B12-10.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-010 Work Order #....: EJLDH1AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	92	(83 - 113)
1,2-Dichloroethane-d4	92	(82 - 127)
Toluene-d8	98	(84 - 115)

PSI INC

Client Sample ID: B12-15.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-011 Work Order #....: EJLDJ1AA Matrix.....: SOLID
 Date Sampled...: 08/24/01 Date Received..: 08/25/01
 Prep Date.....: 09/04/01 Analysis Date..: 09/04/01
 Prep Batch #....: 1248491
 Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
Methylene chloride	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromoethane (EDB)	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg

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PSI INC

Client Sample ID: B12-15.0

GC/MS Volatiles

Lot-Sample #....: G1H250192-011 Work Order #....: EJLDJ1AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg
1,2,4-Trichlorobenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
Isopropyl ether	ND	10	ug/kg
t-Butanol	ND	250	ug/kg
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg
Tert-amyl methyl ether	ND	10	ug/kg
Tert-butyl ethyl ether	ND	10	ug/kg
Acetone	ND	20	ug/kg
Carbon disulfide	ND	10	ug/kg
2-Hexanone	ND	10	ug/kg
2-Butanone (MEK)	ND	10	ug/kg
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	89	(83 - 113)
1,2-Dichloroethane-d4	94	(82 - 127)
Toluene-d8	95	(84 - 115)

QC DATA ASSOCIATION SUMMARY

G1H250192

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 8260B		1248216	
002	SOLID	SW846 8260B		1248216	
003	SOLID	SW846 8260B		1248216	
004	SOLID	SW846 8260B		1248216	
005	SOLID	SW846 8260B		1248216	
006	SOLID	SW846 8260B		1248210	
007	SOLID	SW846 8260B		1248210	
008	SOLID	SW846 8260B		1248491	
009	SOLID	SW846 8260B		1248210	
010	SOLID	SW846 8260B		1248210	
011	SOLID	SW846 8260B		1248491	
012	WATER	SW846 8260B		1248411	
013	WATER	SW846 8260B		1248411	
014	WATER	SW846 8260B		1249469	
015	WATER	SW846 8260B		1248411	
016	WATER	SW846 8260B		1249469	
017	WATER	SW846 8260B		1249469	
018	WATER	SW846 8260B		1249469	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: G1H250192 Work Order #....: EJ2WA1AA Matrix.....: SOLID
 MB Lot-Sample #: G1I050000-216
 Analysis Date...: 08/31/01 Prep Date.....: 08/31/01
 Dilution Factor: 1 Prep Batch #: 1248216

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	10	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	10	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G1H250192

Work Order #...: EJ2WA1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B
1,2,4-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
Naphthalene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
t-Butanol	ND	250	ug/kg	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	10	ug/kg	SW846 8260B
2-Hexanone	ND	10	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	10	ug/kg	SW846 8260B
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg	SW846 8260B
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<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
4-Bromofluorobenzene	93	(83 - 113)		
1,2-Dichloroethane-d4	97	(82 - 127)		
Toluene-d8	100	(84 - 115)		

NOTE(S):

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: G1H250192 **Work Order #....:** EJ2V21AA **Matrix.....:** SOLID
MB Lot-Sample #: G1I050000-210 **Prep Date.....:** 09/01/01
Analysis Date...: 09/01/01 **Prep Batch #....:** 1248210
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	10	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	10	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: G1H250192

Work Order #....: EJ2V21AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B
1,2,4-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
Naphthalene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
t-Butanol	ND	250	ug/kg	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	10	ug/kg	SW846 8260B
2-Hexanone	ND	10	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	10	ug/kg	SW846 8260B
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
		(83 - 113)
4-Bromofluorobenzene	97	(83 - 113)
1,2-Dichloroethane-d4	93	(82 - 127)
Toluene-d8	101	(84 - 115)

NOTE(S):

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G1H250192 Work Order #...: EJ31N1AA Matrix.....: SOLID
 MB Lot-Sample #: G1I050000-491
 Analysis Date...: 09/04/01 Prep Date.....: 09/04/01
 Dilution Factor: 1 Prep Batch #...: 1248491

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Dichlorodifluoromethane (Freon 12)	ND	5.0	ug/kg		SW846 8260B
Trichlorofluoromethane (Freon 11)	ND	5.0	ug/kg		SW846 8260B
Chloromethane	ND	5.0	ug/kg		SW846 8260B
Vinyl chloride	ND	5.0	ug/kg		SW846 8260B
Bromomethane	ND	5.0	ug/kg		SW846 8260B
Chloroethane	ND	5.0	ug/kg		SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg		SW846 8260B
Methylene chloride	ND	10	ug/kg		SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg		SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg		SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg		SW846 8260B
Bromochloromethane	ND	5.0	ug/kg		SW846 8260B
Chloroform	ND	5.0	ug/kg		SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg		SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg		SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg		SW846 8260B
Benzene	ND	5.0	ug/kg		SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg		SW846 8260B
Trichloroethene	ND	5.0	ug/kg		SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg		SW846 8260B
Dibromomethane	ND	5.0	ug/kg		SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg		SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg		SW846 8260B
Toluene	ND	5.0	ug/kg		SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg		SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg		SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg		SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg		SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg		SW846 8260B
1,2-Dibromoethane (EDB)	ND	10	ug/kg		SW846 8260B
Chlorobenzene	ND	5.0	ug/kg		SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg		SW846 8260B
Ethylbenzene	ND	5.0	ug/kg		SW846 8260B
m-Xylene & p-Xylene	ND	5.0	ug/kg		SW846 8260B
o-Xylene	ND	5.0	ug/kg		SW846 8260B
Styrene	ND	5.0	ug/kg		SW846 8260B
Bromoform	ND	5.0	ug/kg		SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg		SW846 8260B
Bromobenzene	ND	5.0	ug/kg		SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G1H250192

Work Order #...: EJ31N1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B
1,2,4-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
Naphthalene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
t-Butanol	ND	250	ug/kg	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	10	ug/kg	SW846 8260B
2-Hexanone	ND	10	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	10	ug/kg	SW846 8260B
4-Methyl-2-pentanone (MIBK)	ND	10	ug/kg	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	93	(83 - 113)
1,2-Dichloroethane-d4	94	(82 - 127)
Toluene-d8	98	(84 - 115)

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 #....: G1H250192 Work Order #...: EJ2WAIAC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: G1I050000-216 EJ2WAIAD-LCSD
 Prep Date.....: 08/31/01 Analysis Date...: 08/31/01
 Prep Batch #....: 1248216
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>		<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>		
1,1-Dichloroethene	50.0	50.2	ug/kg	100		SW846 8260B
Benzene	50.0	49.5	ug/kg	99	1.3	SW846 8260B
Trichloroethene	50.0	48.2	ug/kg	96	5.0	SW846 8260B
Toluene	50.0	46.3	ug/kg	93		SW846 8260B
Chlorobenzene	50.0	49.1	ug/kg	98	5.9	SW846 8260B
	50.0	44.5	ug/kg	89		SW846 8260B
	50.0	47.8	ug/kg	96	7.3	SW846 8260B
	50.0	46.4	ug/kg	93		SW846 8260B
	50.0	48.5	ug/kg	97	4.4	SW846 8260B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>		<u>LIMITS</u>	
4-Bromofluorobenzene		99	(83 - 113)			
1,2-Dichloroethane-d4		104	(83 - 113)			
Toluene-d8		101	(82 - 127)			
		104	(82 - 127)			
		98	(84 - 115)			
		101	(84 - 115)			

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 #....: G1H250192 Work Order #....: EJ2WA1AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: G1I050000-216 EJ2WA1AD-LCSD
 Prep Date.....: 08/31/01 Analysis Date...: 08/31/01
 Prep Batch #....: 1248216
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>RPD</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	
1,1-Dichloroethene	100	(76 - 117)			SW846 8260B
	99	(76 - 117)	1.3	(0-19)	SW846 8260B
Benzene	92	(82 - 116)			SW846 8260B
	96	(82 - 116)	5.0	(0-21)	SW846 8260B
Trichloroethene	93	(80 - 118)			SW846 8260B
	98	(80 - 118)	5.9	(0-19)	SW846 8260B
Toluene	89	(79 - 116)			SW846 8260B
	96	(79 - 116)	7.3	(0-20)	SW846 8260B
Chlorobenzene	93	(85 - 111)			SW846 8260B
	97	(85 - 111)	4.4	(0-14)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	99	(83 - 113)
	104	(83 - 113)
1,2-Dichloroethane-d4	101	(82 - 127)
	104	(82 - 127)
Toluene-d8	98	(84 - 115)
	101	(84 - 115)

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 #....: G1H250192 Work Order #....: EJ2V21AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: G1I050000-210 EJ2V21AD-LCSD
 Prep Date.....: 09/01/01 Analysis Date...: 09/01/01
 Prep Batch #....: 1248210
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>		<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>		
1,1-Dichloroethene	50.0	44.6	ug/kg	89		SW846 8260B
	50.0	47.4	ug/kg	95	6.2	SW846 8260B
Benzene	50.0	45.7	ug/kg	91		SW846 8260B
	50.0	45.9	ug/kg	92	0.42	SW846 8260B
Trichloroethene	50.0	46.9	ug/kg	94		SW846 8260B
	50.0	48.6	ug/kg	97	3.5	SW846 8260B
Toluene	50.0	44.7	ug/kg	89		SW846 8260B
	50.0	47.8	ug/kg	96	6.8	SW846 8260B
Chlorobenzene	50.0	45.2	ug/kg	90		SW846 8260B
	50.0	47.8	ug/kg	96	5.6	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	96	(83 - 113)
	100	(83 - 113)
1,2-Dichloroethane-d4	97	(82 - 127)
	100	(82 - 127)
Toluene-d8	100	(84 - 115)
	103	(84 - 115)

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 #....: G1H250192 Work Order #....: EJ2V21AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: G1I050000-210 EJ2V21AD-LCSD
 Prep Date.....: 09/01/01 Analysis Date...: 09/01/01
 Prep Batch #....: 1248210
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>RPD</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	
1,1-Dichloroethene	89	(76 - 117)			SW846 8260B
	95	(76 - 117)	6.2	(0-19)	SW846 8260B
Benzene	91	(82 - 116)			SW846 8260B
	92	(82 - 116)	0.42	(0-21)	SW846 8260B
Trichloroethene	94	(80 - 118)			SW846 8260B
	97	(80 - 118)	3.5	(0-19)	SW846 8260B
Toluene	89	(79 - 116)			SW846 8260B
	96	(79 - 116)	6.8	(0-20)	SW846 8260B
Chlorobenzene	90	(85 - 111)			SW846 8260B
	96	(85 - 111)	5.6	(0-14)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	96	(83 - 113)
	100	(83 - 113)
1,2-Dichloroethane-d4	97	(82 - 127)
	100	(82 - 127)
Toluene-d8	100	(84 - 115)
	103	(84 - 115)

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 #....: G1H250192 Work Order #....: EJ31N1AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: G1I050000-491 EJ31N1AD-LCSD
 Prep Date.....: 09/04/01 Analysis Date...: 09/04/01
 Prep Batch #....: 1248491
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>		
1,1-Dichloroethene	50.0	44.3	ug/kg	89	SW846 8260B
	50.0	43.5	ug/kg	87	2.0 SW846 8260B
Benzene	50.0	44.6	ug/kg	89	SW846 8260B
	50.0	42.0	ug/kg	84	6.1 SW846 8260B
Trichloroethene	50.0	45.1	ug/kg	90	SW846 8260B
	50.0	43.1	ug/kg	86	4.5 SW846 8260B
Toluene	50.0	43.2	ug/kg	86	SW846 8260B
	50.0	41.8	ug/kg	84	3.3 SW846 8260B
Chlorobenzene	50.0	45.3	ug/kg	91	SW846 8260B
	50.0	42.7	ug/kg	85	5.9 SW846 8260B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene		RECOVERY		LIMITS	
		101	(83 - 113)		
		97	(83 - 113)		
1,2-Dichloroethane-d4		101	(82 - 127)		
		100	(82 - 127)		
Toluene-d8		101	(84 - 115)		
		101	(84 - 115)		

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 #....: G1H250192 Work Order #....: EJ31N1AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: G1I050000-491 EJ31N1AD-LCSD
 Prep Date.....: 09/04/01 Analysis Date..: 09/04/01
 Prep Batch #....: 1248491
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	89	(76 - 117)			SW846 8260B
	87	(76 - 117)	2.0	(0-19)	SW846 8260B
Benzene	89	(82 - 116)			SW846 8260B
	84	(82 - 116)	6.1	(0-21)	SW846 8260B
Trichloroethene	90	(80 - 118)			SW846 8260B
	86	(80 - 118)	4.5	(0-19)	SW846 8260B
Toluene	86	(79 - 116)			SW846 8260B
	84	(79 - 116)	3.3	(0-20)	SW846 8260B
Chlorobenzene	91	(85 - 111)			SW846 8260B
	85	(85 - 111)	5.9	(0-14)	SW846 8260B
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>			
4-Bromofluorobenzene	101	(83 - 113)			
	97	(83 - 113)			
1,2-Dichloroethane-d4	101	(82 - 127)			
	100	(82 - 127)			
Toluene-d8	101	(84 - 115)			
	101	(84 - 115)			

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 #....: G1H250192 Work Order #...: EJ3NF1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: G1I050000-411 EJ3NF1AD-LCSD
 Prep Date.....: 09/04/01 Analysis Date.: 09/04/01
 Prep Batch #....: 1248411
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>		
1,1-Dichloroethene	10.0	9.77	ug/L	98	SW846 8260B
	10.0	8.57	ug/L	86	SW846 8260B
Benzene	10.0	9.22	ug/L	92	SW846 8260B
	10.0	9.50	ug/L	95	SW846 8260B
Trichloroethene	10.0	9.46	ug/L	95	SW846 8260B
	10.0	10.0	ug/L	100	SW846 8260B
Toluene	10.0	9.64	ug/L	96	SW846 8260B
	10.0	9.71	ug/L	97	SW846 8260B
Chlorobenzene	10.0	9.69	ug/L	97	SW846 8260B
	10.0	9.93	ug/L	99	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	106	(76 - 112)
	109	(76 - 112)
1,2-Dichloroethane-d4	115	(76 - 118)
	118	(76 - 118)
Toluene-d8	100	(79 - 115)
	103	(79 - 115)

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 #....: G1H250192 Work Order #....: EJ3NFIAC-LCS Matrix.....: WATER
 LCS Lot-Sample#: G1I050000-411 EJ3NFIAD-LCSD
 Prep Date.....: 09/04/01 Analysis Date...: 09/04/01
 Prep Batch #....: 1248411
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>RPD</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	
1,1-Dichloroethene	98	(79 - 115)			SW846 8260B
	86	(79 - 115)	13	(0-26)	SW846 8260B
Benzene	92	(85 - 120)			SW846 8260B
	95	(85 - 120)	2.9	(0-14)	SW846 8260B
Trichloroethene	95	(78 - 118)			SW846 8260B
	100	(78 - 118)	5.8	(0-20)	SW846 8260B
Toluene	96	(82 - 121)			SW846 8260B
	97	(82 - 121)	0.70	(0-30)	SW846 8260B
Chlorobenzene	97	(86 - 117)			SW846 8260B
	99	(86 - 117)	2.5	(0-15)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	106	(76 - 112)
	109	(76 - 112)
1,2-Dichloroethane-d4	115	(76 - 118)
	118	(76 - 118)
Toluene-d8	100	(79 - 115)
	103	(79 - 115)

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 #....: G1H250192 Work Order #....: EJ5WV1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: G1I060000-469 EJ5WV1AD-LCSD
 Prep Date.....: 09/05/01 Analysis Date...: 09/05/01
 Prep Batch #....: 1249469
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
1,1-Dichloroethene	10.0	9.85	ug/L	99		SW846 8260B
	10.0	9.18	ug/L	92	7.0	SW846 8260B
Benzene	10.0	10.0	ug/L	100		SW846 8260B
	10.0	9.59	ug/L	96	4.6	SW846 8260B
Trichloroethene	10.0	10.5	ug/L	105		SW846 8260B
	10.0	9.99	ug/L	100	5.3	SW846 8260B
Toluene	10.0	10.2	ug/L	102		SW846 8260B
	10.0	9.76	ug/L	98	4.5	SW846 8260B
Chlorobenzene	10.0	10.6	ug/L	106		SW846 8260B
	10.0	10.1	ug/L	101	4.7	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	110	(76 - 112)
	107	(76 - 112)
1,2-Dichloroethane-d4	114	(76 - 118)
	113	(76 - 118)
Toluene-d8	103	(79 - 115)
	102	(79 - 115)

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 #....: G1H250192 Work Order #....: EJ5WV1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: G1I060000-469 EJ5WV1AD-LCSD
 Prep Date.....: 09/05/01 Analysis Date...: 09/05/01
 Prep Batch #....: 1249469
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>RPD</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>		<u>LIMITS</u>	
1,1-Dichloroethene	99	(79 - 115)			SW846 8260B
	92	(79 - 115)	7.0	(0-26)	SW846 8260B
Benzene	100	(85 - 120)			SW846 8260B
	96	(85 - 120)	4.6	(0-14)	SW846 8260B
Trichloroethene	105	(78 - 118)			SW846 8260B
	100	(78 - 118)	5.3	(0-20)	SW846 8260B
Toluene	102	(82 - 121)			SW846 8260B
	98	(82 - 121)	4.5	(0-30)	SW846 8260B
Chlorobenzene	106	(86 - 117)			SW846 8260B
	101	(86 - 117)	4.7	(0-15)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene	110	(76 - 112)
	107	(76 - 112)
1,2-Dichloroethane-d4	114	(76 - 118)
	113	(76 - 118)
Toluene-d8	103	(79 - 115)
	102	(79 - 115)

NOTE (S) :

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

Bold print denotes control parameters