

MISSION VALLEY / ROCK COMPANY ASPHALT COMPANY READY MIX COMPANY

7999 ATHENOUR WAY SUNOL, CA 94586 (925) 862-2257

November 20, 2001

Mr. Scott Seery
Alameda County Health Care Services
1131 Harbor Bay Parkway Suite 250
Alameda, CA 94502-6577

NOV 27 2001

Dear Mr. Seery:

Submitted herewith is the third quarter prepared by Mission Valley Rock Company's consultant Tait Environmental Management Inc (T.E.M.). If you require further information or clarification please direct your correspondence to T.E.M with a copy to Mission Valley Rock Company at the above address.

Thank You,
MISSION VALLEY ROCK CO.


W.M. Calvert

NOV 8 7 2001

**Groundwater Monitoring Report
Third Quarter 2001**

Mission Valley Rock Company
7999 Athenour Way
Sunol, California

Prepared by:
Tait Environmental Management, Inc.

October 30, 2001

October 30, 2001

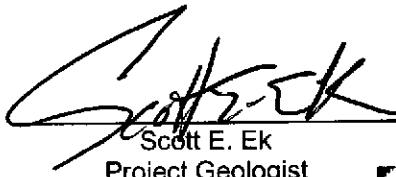
**Groundwater Monitoring Report
Third Quarter 2001**

Mission Valley Rock Company
7999 Athenour Way
Sunol, California

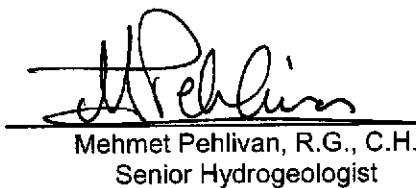
Prepared for:

Mr. Mort Calvert
Mission Valley Rock Company
7999 Athenour Way
Sunol, California 94586

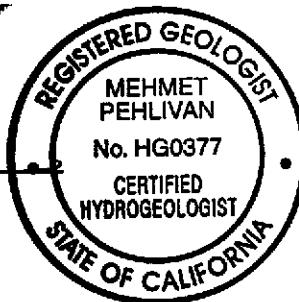
Prepared by:



Scott E. Ek
Project Geologist



Mehmet Pehlivan, R.G., C.H.
Senior Hydrogeologist



Tait Environmental Management
701 North Parkcenter Drive
Santa Ana, California 92705

Project No. EM-5009

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	WORK CONDUCTED DURING PRESENT QUARTER.....	1
3.0	GROUNDWATER MONITORING ACTIVITIES.....	1
3.1	GROUNDWATER ELEVATION MONITORING	1
3.2	GROUNDWATER SAMPLING.....	1
4.0	LABORATORY ANALYSES	2
4.1	GROUNDWATER ANALYTICAL RESULTS.....	2
5.0	SUMMARY	2
6.0	RECOMMENDATIONS	3
7.0	QUALITY ASSURANCE/QUALITY CONTROL	3
8.0	LIMITATIONS.....	3

FIGURES

1. Site Vicinity Map
2. Site Plan with Select Analytical Concentrations and Groundwater Elevations (September 21, 2001)

TABLES

1. Well Construction and Groundwater Elevation Data (September 21, 2001)
2. Groundwater Analysis Summary (September 21, 2001)
3. Historical Summary of Groundwater Data
4. Historical Summary of Groundwater Sample Analytical Results

APPENDICES

- A. Charts
- B. Well Sampling Field Data Sheets
- C. Analytical Laboratory Reports

GROUNDWATER MONITORING REPORT - THIRD QUARTER 2001
MISSION VALLEY ROCK COMPANY
SUNOL, CALIFORNIA

1.0 INTRODUCTION

Tait Environmental Management, Inc. (TEM) is pleased to submit this Third Quarter 2001 Groundwater Monitoring Report for environmental services conducted at Mission Valley Rock Company (MVR) located at 7999 Athenour Way in Sunol, California (Site, see Figure 1). This report has been prepared by or under the direct supervision of a California Registered Geologist. The groundwater monitoring activities were conducted by TEM in accordance with the Alameda County Health Care Services Agency (ACHCSA) guidelines.

2.0 WORK CONDUCTED DURING PRESENT QUARTER

Work conducted by TEM during the Third Quarter of 2001 included:

- Submitted to the client, *Groundwater Monitoring Report, Second Quarter 2001*.
- Measured depth-to-groundwater in monitoring wells for evaluation of groundwater flow direction.
- Collected groundwater samples from each well for analysis of total petroleum hydrocarbons as diesel and gasoline (TPHd and TPHg, respectively); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl-tert-butyl ether (MTBE).

3.0 GROUNDWATER MONITORING ACTIVITIES

3.1 *Groundwater Elevation Monitoring*

On September 21, 2001, TEM measured and recorded static groundwater levels in three (3) groundwater monitoring wells using a product/water interface meter. The meter was decontaminated prior to use at each well using a mild detergent solution and two (2) de-ionized water rinses.

Water levels were measured from the top of the well casings representing the well-head survey points. Light non-aqueous phase liquid (LNAPL) was observed in monitoring well MW-2. No LNAPL or free-phase product was observed in monitoring wells MW-1 and MW-3.

Based on the data, the depth to groundwater measured at the Site averaged 7 feet below ground surface (bgs). The apparent groundwater flow direction is to the east-southeast with a groundwater gradient of approximately 0.01 ft/ft. Groundwater elevation data is summarized in Table 1 and shown on Figure 2. A historical summary of groundwater elevation data is summarized in Table 3 and shown in Chart 1 (Appendix A).

3.2 *Groundwater Sampling*

Prior to collecting samples, groundwater was purged using a 12-volt DC submersible pump for each well. The polyethylene tubing for the pump discharge was discarded and replaced for each well. The pump was decontaminated prior to pumping each well, with a detergent bath followed by two (2) de-ionized water rinses.

A minimum of three (3) casing volumes of water were purged from each of the monitoring wells until measurements of temperature, pH, electrical conductivity, turbidity, dissolved oxygen, and oxygen reduction potential stabilized. Groundwater was allowed to recharge to at least 80 percent of the static level prior to collecting the groundwater samples. Copies of the well sampling field data sheets are presented in Appendix B.

Groundwater samples were collected using a new disposable bailer for each well. The groundwater samples were placed in chilled coolers and hand delivered to the laboratory using chain-of-custody procedures.

The purged groundwater and decontamination water was stored onsite in one (1) Department of Transportation (DOT) approved 55-gallon steel drum pending the results of the laboratory analysis.

4.0 LABORATORY ANALYSES

Groundwater samples collected from the groundwater monitoring wells were analyzed for:

- BTEX and MTBE using Method No. 8260B; and
- TPHd and TPHg using Method 8015B.

4.1 *Groundwater Analytical Results*

Laboratory analyses of the groundwater samples were conducted by Severn Trent Laboratories, Inc. (STL), a State-Certified laboratory located in Santa Ana, California. Third Quarter 2001 groundwater sample analytical results are summarized in Table 2 and shown in Figure 2. Laboratory reports are presented in Appendix C. A historical summary of groundwater sample analytical results is summarized in Table 4. Charts 2A, 2B, and 2C present historic measurements of TPHd, TPHg and MTBE, respectively (Appendix A).

5.0 SUMMARY

Based upon the data presented in this report, previous investigations, current regulatory guidelines, and the judgment of TEM, the following summary of findings and conclusions are presented:

- Groundwater samples were collected from groundwater monitoring wells MW-1 and MW-2. The samples were submitted to STL under chain of custody protocol.
- Based on the data, the depth to groundwater measured at the Site averaged 7 feet bgs. The groundwater flow direction is to the east-southeast with a groundwater gradient of approximately 0.01 ft/ft.
- LNAPL (0.34') was observed in monitoring well MW-2.
- The highest TPHd and TPHg concentrations were detected in the groundwater sample collected from well MW-2. The TPHd concentration was 530 milligrams per Liter (mg/L), and the TPHg concentration was 7.0 mg/L.
- Benzene concentrations were only reported in the groundwater sample collected from well MW-1 at 1.4 micrograms per Liter ($\mu\text{g}/\text{L}$).
- The only MTBE concentration was reported in the sample collected from well MW-3 at a concentration of 45 $\mu\text{g}/\text{L}$; and

- Interpretation of Charts 2A, 2B, and 2C would indicate that TPHd, TPHg, and MTBE have shown an overall decrease since groundwater sampling began in June 1998.

6.0 RECOMMENDATIONS

Based on the data obtained, current regulatory guidelines, and the professional judgment of TEM, the following recommendations are presented for your consideration:

- Recommend additional assessment to determine the extent of free product found in MW-2.
- Continue monitoring all wells for all free-phase product, and record field observations and measurements.

7.0 QUALITY ASSURANCE/QUALITY CONTROL

To increase the confidence levels in the data obtained and minimize the likelihood that judgments were made from potentially erroneous data, a quality assurance/quality control (QA/QC) program was implemented. QA refers to management of actions designed to maintain precision, accuracy, completeness, and representativeness of the data developed from the project. QC refers to accepted formal procedures and activities specifically designed for the purpose of collecting data that are intended to be reliable and consistent for the Site conditions.

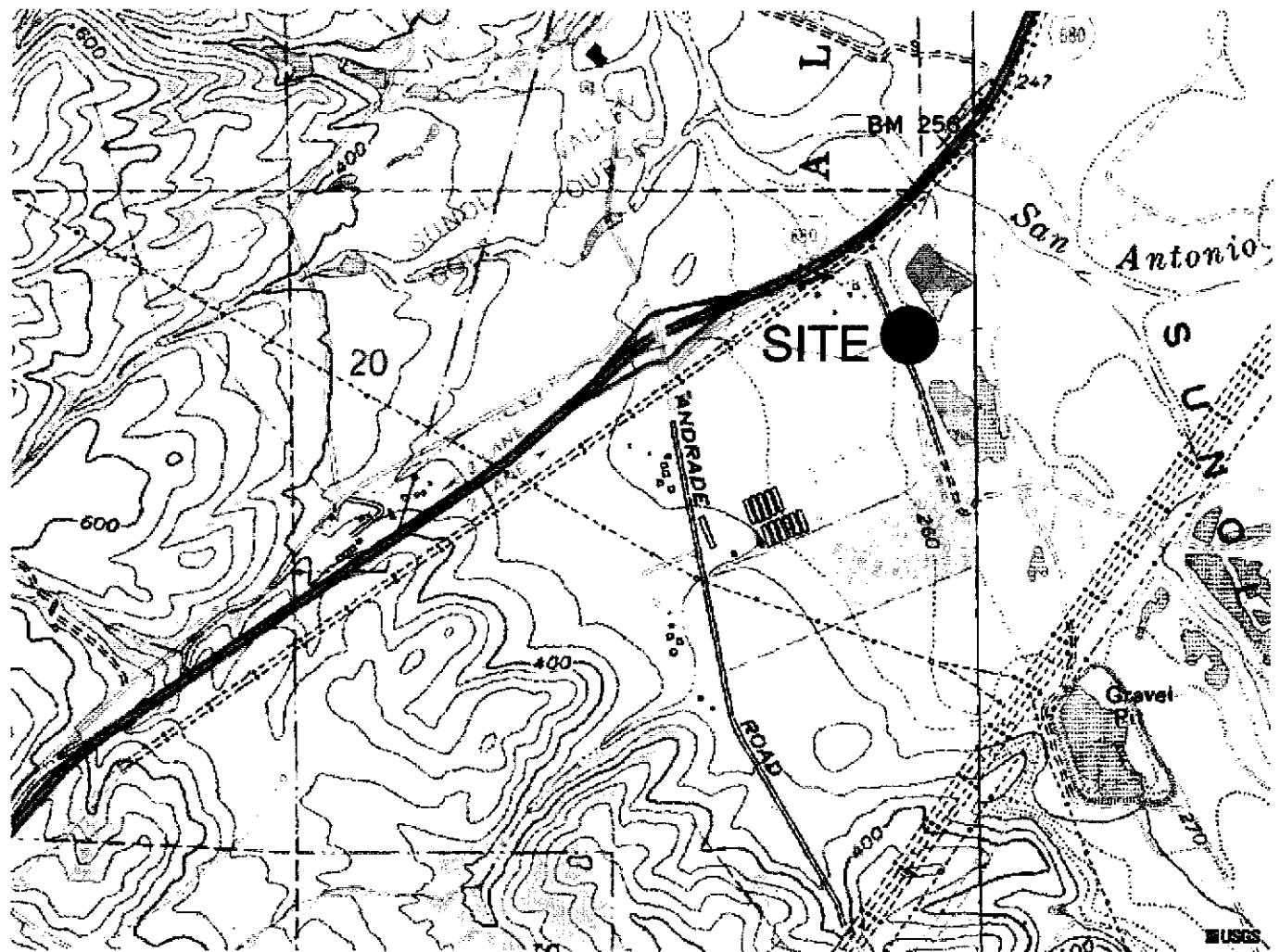
The laboratory reported all of the sample results to be within acceptable percent recoveries with no results exceeding the laboratory-established quality control parameters. The percent recoveries on the laboratory control sample (LCS) were well within the laboratories published QA/QC criteria. The results of the matrix spike (MS) and matrix spike duplicate (MSD) were also with acceptable limits. The samples arrived at the laboratory within the normal acceptable temperature range (4°C +/- 2°C) and were extracted and analyzed within acceptable holding times for each method and each sample.

Several of the laboratories reporting limits exceeded cleanup criteria in groundwater appropriate for this site. In all instances this was because of sample dilution and elevated concentrations of hydrocarbons were detected in the samples that were affected. The QA/QC objectives for this project have been met.

8.0 LIMITATIONS

No investigation is considered thorough enough to exclude the presence of hazardous materials at a given site. Any opinions and/or recommendations presented apply to site conditions existing at the time of the performance of services.

TEM is unable to report on or accurately predict events which may impact the site following conduct of the described services, whether occurring naturally or caused by external forces. TEM assumes no responsibility for conditions that we were not authorized to investigate or conditions not generally recognized as environmentally unacceptable at the time services were performed. Services hereunder were performed in accordance with our agreement and understanding with, and solely for the use of, Mission Valley Rock Company. We are not responsible for the subsequent separation, detachment or partial use of this document. Any reliance on this report by a third party shall be at such party's sole risk.



NORTH

0
2000
1" = 2000'

NOTES:

BASE MAP TAKEN FROM TERRASERVER.COM, UNITED STATES GEOLOGICAL SURVEY (USGS), FREEMONT QUADRANGLE, ALAMEDA COUNTY, CALIFORNIA. PRINTED JULY 1, 1989.

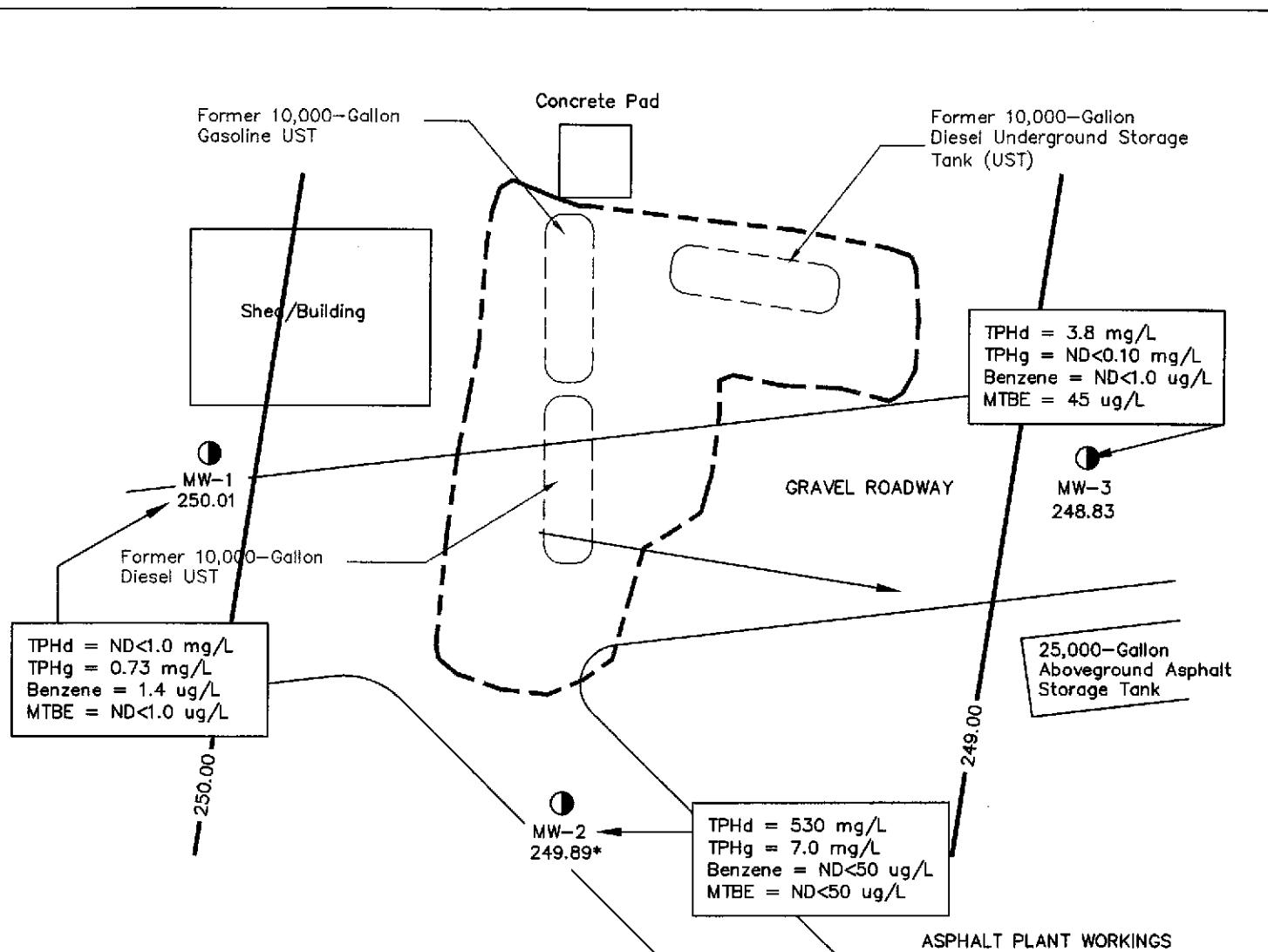


701 NORTH PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200
(714) 560-8235 FAX
ENVIRONMENTAL MANAGEMENT, INC.

SITE VICINITY MAP
MISSION VALLEY ROCK CO.
7999 ATHENOUR WAY
SUNOL, CALIFORNIA

PROJECT NO. EM-5009

FIGURE 1



LEGEND:

BASE MAP REFERENCED FROM TANK PROTECT ENGINEERING

ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

ND = NOT DETECTED ABOVE CORRESPONDING REPORTING LIMIT

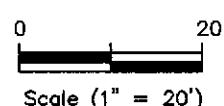
NM = NOT MEASURED - WELL WAS INACCESSIBLE

mg/L = MILLIGRAMS PER LITER (PARTS PER MILLION)

ug/L = MICROGRAMS PER LITER (PARTS PER BILLION)

TPHd/TPHg = TOTAL PETROLEUM HYDROCARBONS AS DIESEL/GASOLINE

MTBE = METHY-TERT-BUTYL ETHER



- **MW-1** GROUNDWATER MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
- 250.01 — GROUNDWATER CONTOUR WITH ELEVATION IN FEET ABOVE MSL
- GENERAL DIRECTION OF GROUNDWATER FLOW
- - - - LIMITS OF FORMER UST EXCAVATION
- 249.96* CORRECTED GROUNDWATER ELEVATION



701 NORTH PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200
(714) 560-8235 FAX
ENVIRONMENTAL MANAGEMENT, INC.

SITE PLAN WITH SELECT ANALYTICAL CONCENTRATIONS AND GROUNDWATER ELEVATIONS (SEPTEMBER 21, 2001)

MISSION VALLEY ROCK CO.
7999 ATHENOUR WAY
SUNOL, CALIFORNIA

PROJECT NO. EM-5009

FIGURE 2

Table 1
Well Construction and Groundwater Elevation Data
Third Quarter 2001
Mission Valley Rock Company
Sunol, California

Well ID	Casing Diameter	Depth to LNAPE	Depth to Water	Total Depth	Screened Interval	Measuring Point Elevation	Groundwater Elevation	Comments
MW-1	2	Not Detected	6.50	16.11	5.0 - 20.0	256.51	250.01	Well in good condition. Well cover missing 1 bolt
MW-2	2	0.34	7.08	19.15	5.0 - 20.0	256.70	249.89*	Well in good condition. Well cover damaged.
MW-3	2	Not Detected	7.89	17.40	5.0 - 20.0	256.72	248.83	Well in good condition. Steel plate covering well box.

Screened intervals are approximated. Screened interval in wells is lower than total depth due to silting in bottom of wells.

The measurement point for the above eleven wells is the north side of the top of casing.

Depth to water and total depth measurements taken by Tait Environmental Management, Inc. personnel on September 21, 2001.

Casing diameter reported in inches (in); depth to LPH, depth to water, and total depths reported in feet below measuring point (ft-bmp); screened interval reported in feet; measuring point elevation and groundwater elevations reported in feet above mean sea level (ft-msl).

Total depth and depth to water measurements taken by Tait Environmental Management from designated measurement point.

* Adjusted groundwater elevation = Measurement Point Elevation - Depth to Water + (LPH Thickness*0.8)

Table 2
Groundwater Analysis Summary
Third Quarter 2001
Mission Valley Rock Company
Sunol, California

Well	Date	TPHd (mg/L)	TPHg (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)
MW-1	09/21/2001	ND<1.0	0.73	1.4	ND<1.0	7.6	1.2	ND<1.0
MW-2	09/21/2001	530	7.0	ND<50 [†]	ND<50 [†]	ND<50 [†]	ND<50 [†]	ND<50 [†]
MW-3	09/21/2001	3.8	ND<0.10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	45

Notes:

Analyses for Total Petroleum Hydrocarbons as Gasoline and Diesel (TPHg and TPHd, respectively) were performed using EPA Method No. 8015B.

Analyses for benzene, toluene, ethylbenzene, total xylenes, and methyl-tert-butyl ether (MTBE) were performed using EPA Method No. 8260B.

Total xylene concentrations were determined by adding m,p-xylene and o-xylene from laboratory report.

[†] = Elevated reporting limit due to matrix interference (see analytical reports Appendix C).

Table 3
Historical Summary of Groundwater Data
Third Quarter 2001
Mission Valley Rock Company
Sunol, California

MW-1	Jun-98	1.32	255.19
	Jan-99	2.28	254.23
	Mar-99	1.88	254.63
	Jun-99	3.35	253.16
	Sep-99	3.66	252.85
	Dec-99	2.94	253.57
	Mar-00	2.72	253.79
	Jun-00	4.01	252.50
	Sep-00	5.11	251.40
	Dec-00	4.95	251.56
	Mar-01	2.28	254.23
	Jun-01	3.60	252.91
	Sep-01	6.50	250.01
			ND
MW-2	Jun-98	1.72	254.98
	Jan-99	2.69	254.01
	Mar-99	2.50	254.20
	Jun-99	4.00	252.70
	Sep-99	4.54	252.16
	Dec-99	3.85	252.85
	Mar-00	3.20	253.50
	Jun-00	4.62	252.08
	Sep-00	5.95	250.75
	Dec-00	5.65	251.05
	Mar-01	3.21	253.39*
	Jun-01	3.31	250.14*
	Sep-01	7.08	249.89*
			0.005
MW-3	Jun-98	2.66	254.06
	Jan-99	4.47	252.25
	Mar-99	3.96	252.76
	Jun-99	5.54	251.18
	Sep-99	6.18	250.54
	Dec-99	5.52	251.20
	Mar-00	4.61	252.11
	Jun-00	6.35	250.37
	Sep-00	7.30	249.42
	Dec-00	7.29	249.43
	Mar-01	4.73	251.99
	Jun-01	NM	NM
	Sep-01	7.89	248.83
			ND

Depth to water and liquid phase hydrocarbon (LPH) thickness reported in feet below measurement point.

Groundwater elevations reported in feet above mean sea level.

* Adjusted groundwater elevation = Measurement Point Elevation - Depth to Water + (LPH Thickness*.8)

NM = Not Measured

Table 4
Historical Summary of Groundwater Sample Analytical Results
Third Quarter 2001
Mission Valley Rock Company
Sunol, California

Well	Date	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-1	Jun-98	ND<50	3100	19	2.3	91	48	110
	Oct-98	ND<50	2300	3.1	4.2	5	15	ND<0.5
	Dec-98	350	ND<50	12	7.5	20	6.2	ND<0.5
	Mar-99	190	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Jun-99	210	1800	1.2	0.9	1.5	4.6	ND<0.5
	Sep-99	62	180	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Dec-99	290	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Mar-00	86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Jun-00	70	450	2.1	ND<0.5	2.1	1.4	7.6
	Sep-00	ND<50	850	5.4	ND<0.5	9.4	2.6	9.8
	Dec-00	ND<1.0	0.37	5.3	ND<1.0	2.7	ND<3.0	55
	Mar-01	ND<1.0	0.7	ND<1.0	ND<1.0	1.4	ND<1.0	ND<1.0
	Jun-01	ND<1.0	0.17	ND<1.0	ND<1.0	1.2	ND<1.0	ND<1.0
	Sep-01	ND<1.0	0.73	1.4	ND<1.0	7.6	1.2	ND<1.0
MW-2	Jun-98	12000	2500	0.68	ND<0.5	1.2	0.57	14
	Oct-98	4300	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Dec-98	38000	ND<5000	ND<50	ND<50	51	190	ND<500
	Mar-99	580	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Jun-99	4500	24000	38	27	41	98	ND<0.5
	Sep-99	24000	1400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	27
	Dec-99	2300	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Mar-00	620	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Jun-00	1700	270	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17
	Sep-00	5800	130	ND<0.5	ND<0.5	ND<0.5	0.94	12
	Dec-00	19	7.1	ND<50	ND<50	ND<50	ND<150	ND<250
	Mar-01	610	3.3	ND<1.0	ND<1.0	ND<1.0	ND<1.0	9
	Jun-01	8.8	1.8	ND<1.0	ND<1.0	ND<1.0	ND<1.0	6.7
	Sep-01	530	7.0	ND<50	ND<50	ND<50	ND<50	ND<50
MW-3	Jun-98	12000	300	0.8	ND<0.5	ND<0.5	ND<0.5	150
	Oct-98	6400	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Dec-98	5600	ND<100	1.6	1.4	ND<1	ND<1	110
	Mar-99	150	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Jun-99	620	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Sep-99	1500	230	ND<0.5	ND<0.5	ND<0.5	ND<0.5	89
	Dec-99	58	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Mar-00	94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	Jun-00	240	170	ND<0.5	0.52	ND<0.5	ND<0.5	100
	Sep-00	850	170	0.81	ND<0.5	ND<0.5	ND<0.5	68
	Dec-00	1.6	0.23	ND<1.0	ND<1.0	ND<1.0	ND<3.0	80
	Mar-01	1.1	0.14	ND<1.0	ND<1.0	ND<1.0	ND<1.0	83
	Jun-01	NS	NS	NS	NS	NS	NS	NS
	Sep-01	3.8	ND<0.10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	45

TPHd = Total petroleum hydrocarbons as diesel reported in milligrams per Liter (mg/L)

TPHg = Total petroleum hydrocarbons as gasoline reported in mg/L

All other concentrations reported in micrograms per Liter (ug/L).

MTBE = Methyl-tert-Butyl Ether

ND = Not detected at respective reporting limit

NS = Not Sampled

Chart 1
Historical Groundwater Elevations
Mission Valley Rock Company
Sunol, California

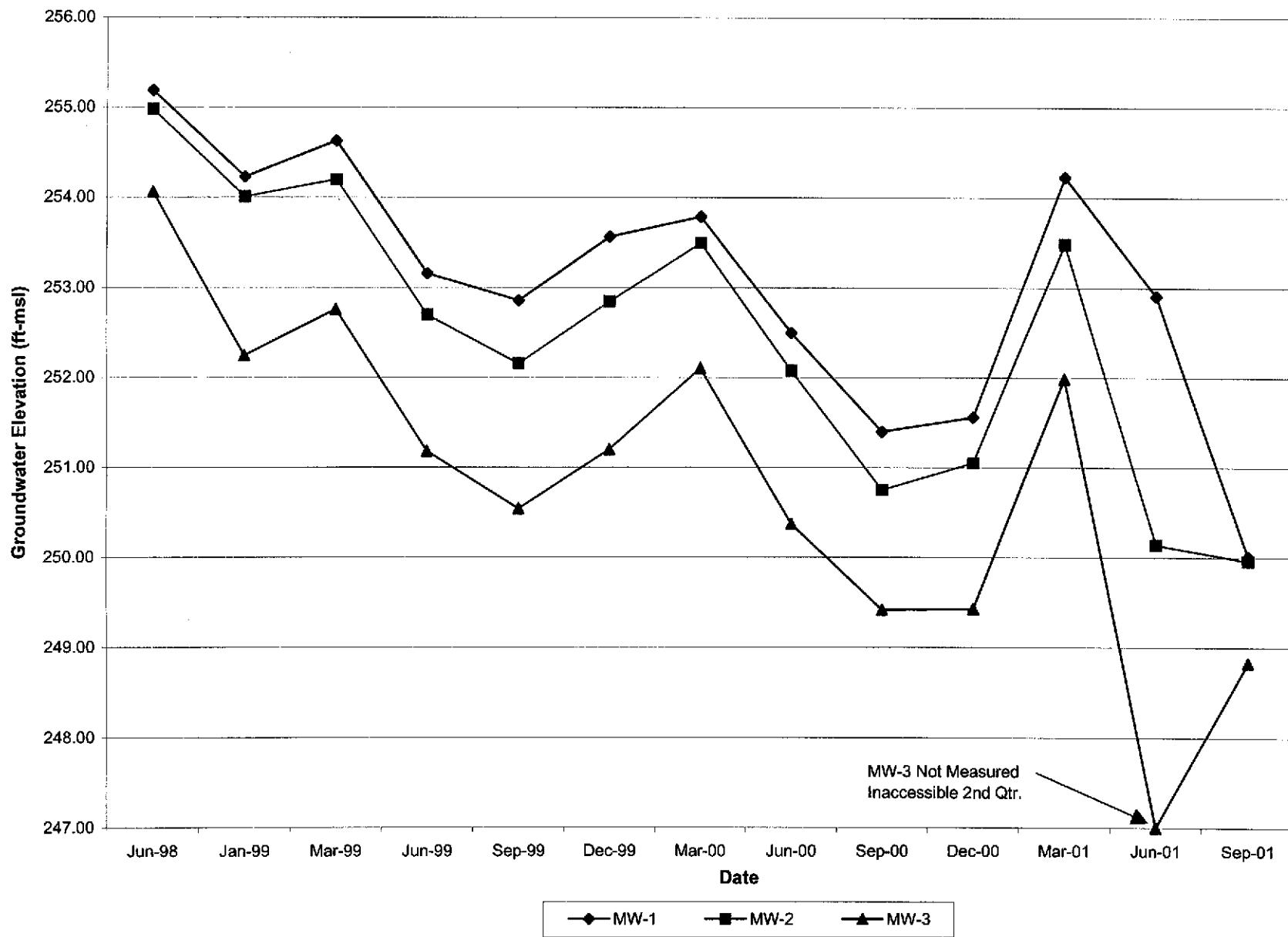


Chart 2A
Historical TPHd Concentrations in Groundwater
Mission Valley Rock Company
Sunol, California

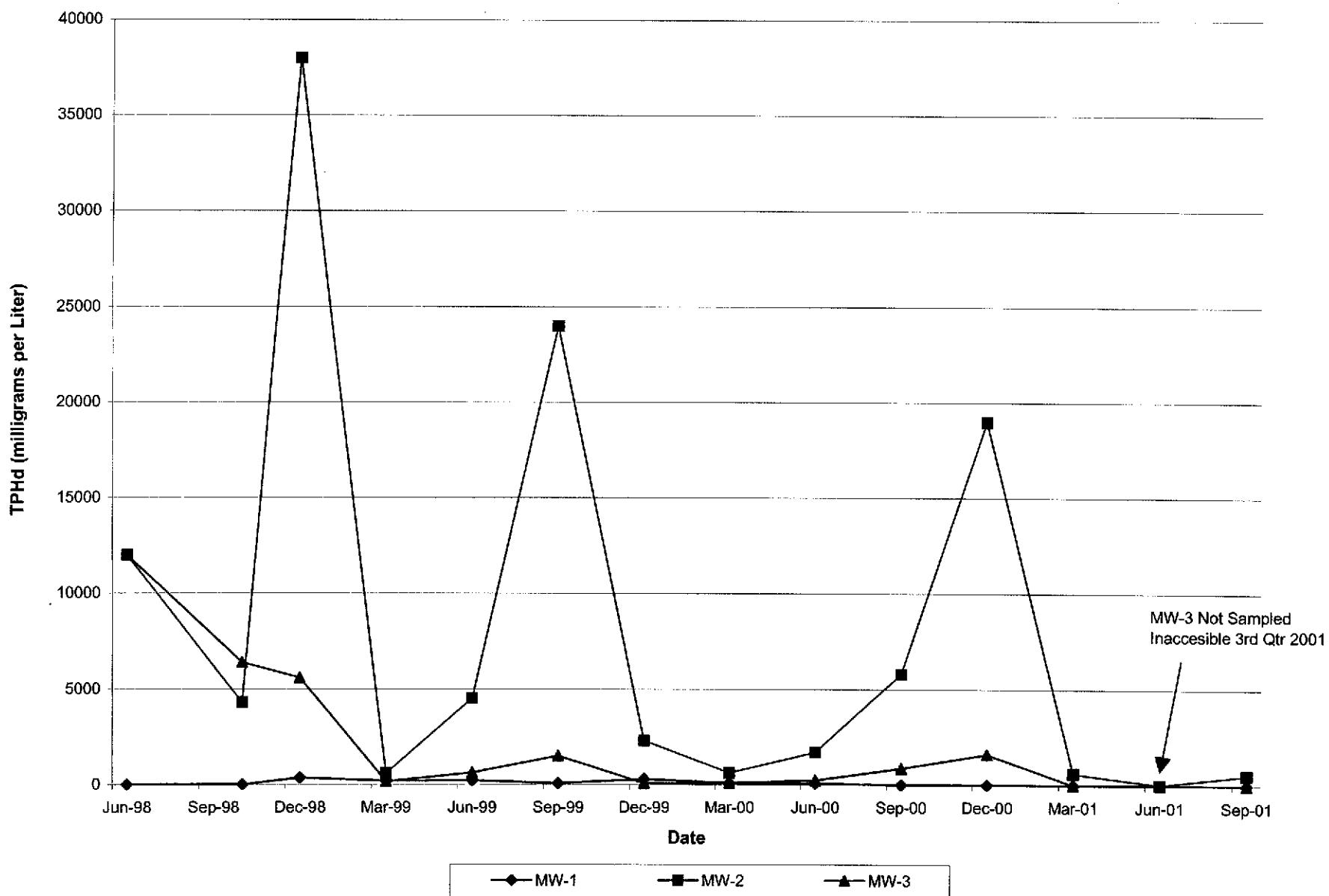


Chart 2B
Historical TPHg Concentrations in Groundwater
Mission Valley Rock Company
Sunol, California

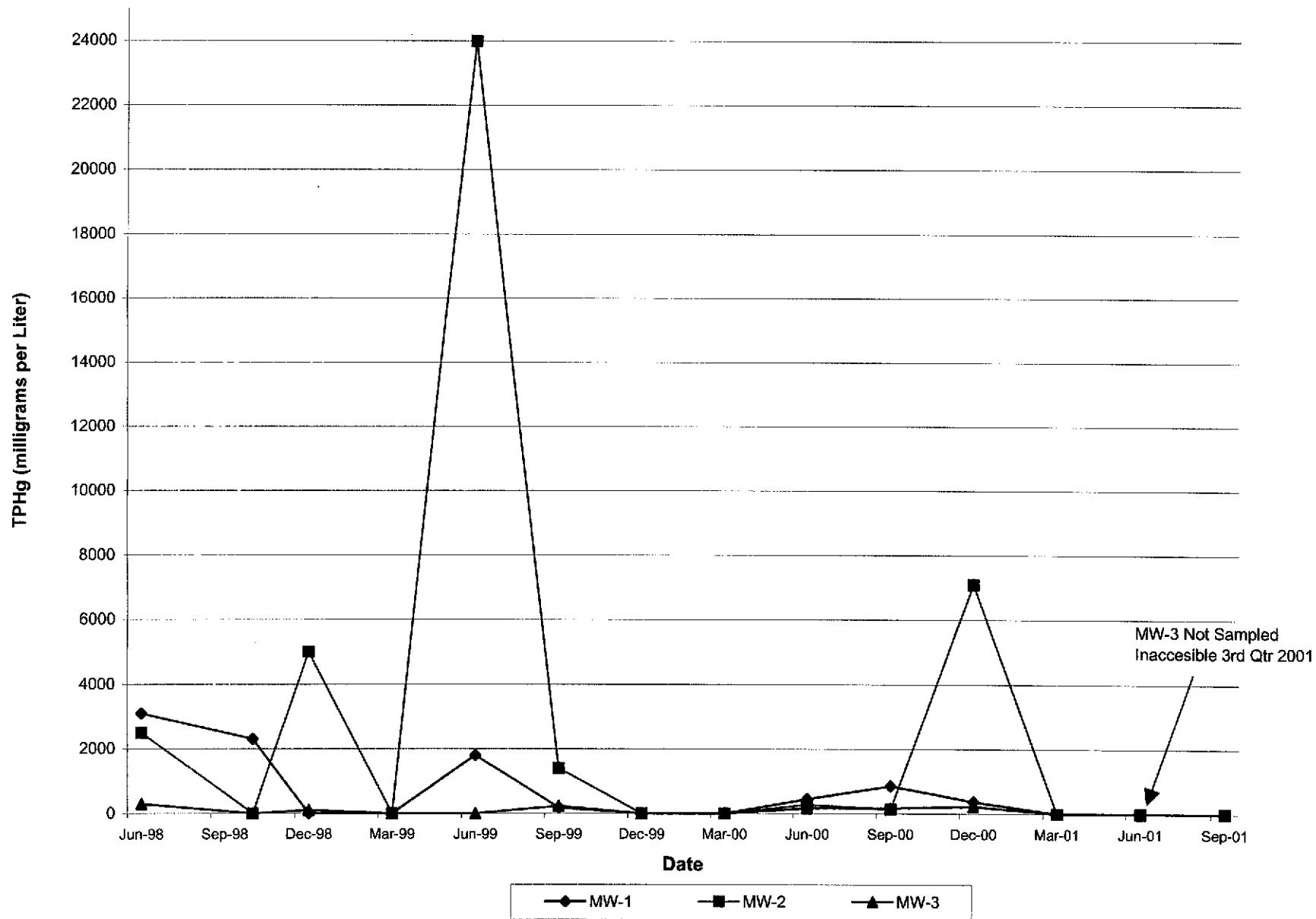
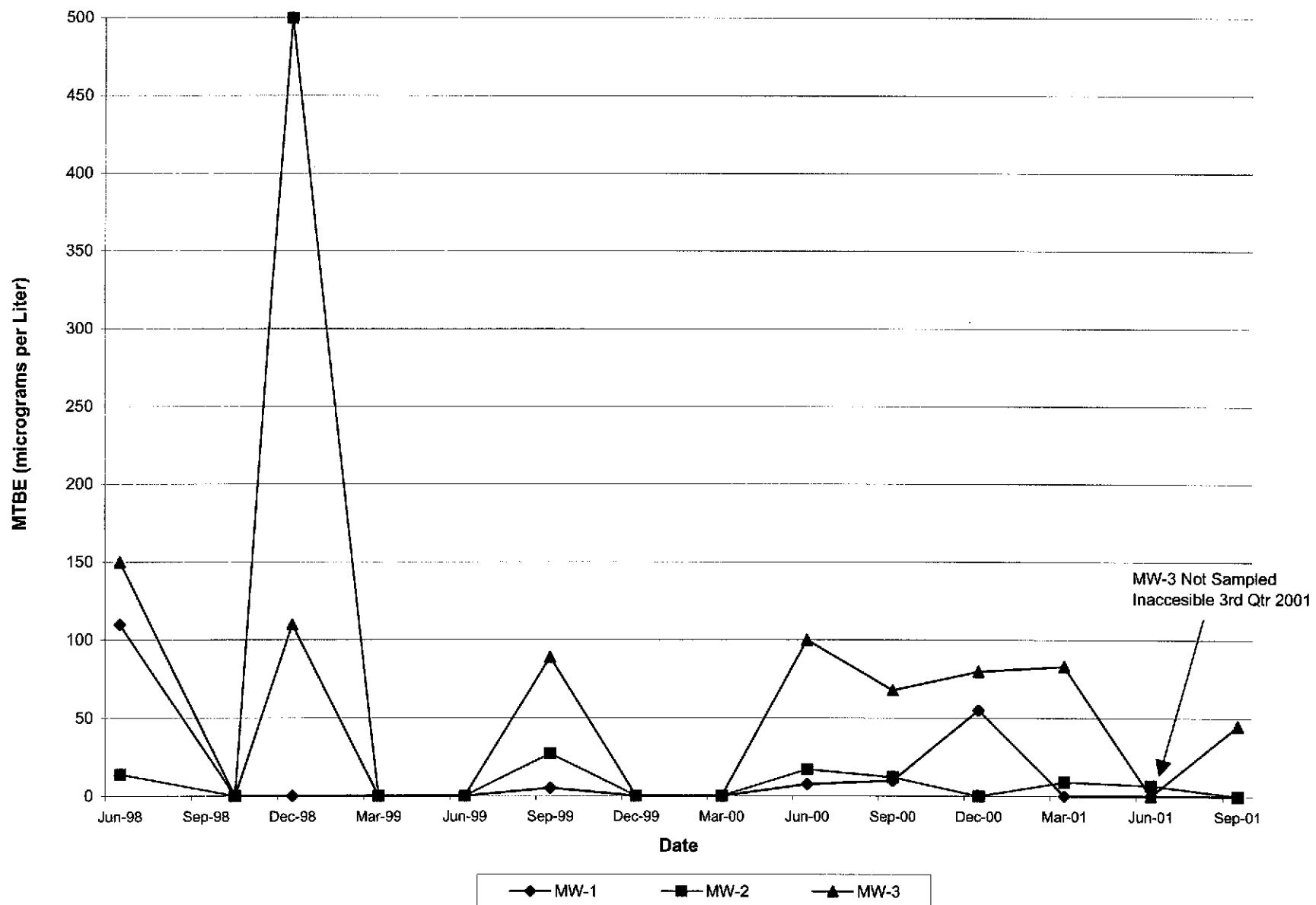


Chart 2C
Historical MTBE Concentrations in Groundwater
Mission Valley Rock Company
Sunol, California





TAIT Environmental Management, Inc

Groundwater Sampling Data Sheet

Page ___ of ___

Project Name: Mission Valley Rock Company				Date: 9/21/01							
Project No.: EM-5009				Prepared By: Richard Kinder							
Well Identification: MW-1				Weather: Clear							
Measurement Point Description: TOC - north side											
Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Depth to Sediment (ft-bmp)	Water Column Height (ft)	Top of Free Phase Chemicals (ft-bmp)	Bottom of Free Phase Chemicals (ft-bmp)	Free Phase Chemical Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)			
6.5	16.11		9.61				1.53	4.6			
Well Diameter (in)		Gallons/Foot			Field Equipment: Solinst Interface Meter, Horiba Water Quality Meter						
		0.75	2	4	6	Purge Method: Whale 12V submersible pump w/ disposable tubing					
0.75	2	4	6	0.02	0.16	0.65	1.47	Well Condition: OK			
Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	pH	Temperature (°C)	Turbidity (NTU)	Conductivity (S/m)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
1102	1	1.5	0.75	N-M	6.79	18.1	749	1.87	8.86	N-M	MUDY - SMALL
1104	2	3.0	0.75	N-M	7.00	18.9	746	1.79	8.87	N-M	GREY ad
1107	3	4.6	0.51	N-M	7.07	19.8	740	1.90	8.72	N-M	CLEARING
Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification			
11 AM	11:07	0.67	4.6	3	8.4	8.4	11:20	MW-1			

Notes: Stinger inside well. Soft bottom.



TAIT Environmental Management, Inc

Groundwater Sampling Data Sheet

Page ___ of ___

Project Name: Mission Valley Rock Company					Date: 9/21/01						
Project No.: EM-5009					Prepared By: Richard Kinder						
Well Identification: MW-2					Weather: Clear						
Measurement Point Description: TOC - north side											
Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Depth to Sediment (ft-bmp)	Water Column Height (ft)	Top of Free Phase Chemicals (ft-bmp)	Bottom of Free Phase Chemicals (ft-bmp)	Free Phase Chemical Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)			
7.08	19.15		12.07	6.74	7.08	0.34	1.9	5.79			
Well Diameter (in)		Gallons/Foot			Field Equipment: Solinst Interface Meter, Horiba Water Quality Meter						
		0.75	2	4	6	Purge Method: Whale 12V submersible pump w/ disposable tubing					
0.75	(2)	4	6	0.02	0.16	0.65	1.47	Well Condition: Poor			
Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	pH	Temperature (°C)	Turbidity (NTU)	Conductivity (S/m)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
12:48	1	1.9	0.95	N-M	6.88	22.4	3.35	1.56	8.77	N-M	free product
12:50	2	3.8	0.95	N-M	6.87	22.8	354	1.66	8.51	N-M	free / smell
12:54	3	5.79	0.47	N-M	6.86	22.7	311	1.56	8.51	N-M	clean
Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification			
12:50	12:54	0.79	5.79	3	9.49	9.49	1305	MW-2			

Notes: Free product cover is broken in HALF. soft bottom

ft-bmp = feet below measuring point

C:\My Documents\Scott EFORMS\Field Forms\Well Sampling Sheet (4-20-2001).DOC



TAIT Environmental Management, Inc

Groundwater Sampling Data Sheet

Page ___ of ___

Project Name: Mission Valley Rock Company				Date: 9/21/01							
Project No.: EM-5009				Prepared By: Richard Kinder							
Well Identification: MW-3				Weather: CLEAR							
Measurement Point Description: TOL - north side											
Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Depth to Sediment (ft-bmp)	Water Column Height (ft)	Top of Free Phase Chemicals (ft-bmp)	Bottom of Free Phase Chemicals (ft-bmp)	Free Phase Chemical Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)			
7.89	17.460		9.51				1.5	4.5			
Well Diameter (in)		Gallons/Foot			Field Equipment: Solinst Interface Meter, Horiba Water Quality Meter						
		0.75	2	4	6	Purge Method: Whale 12V submersible pump w/ disposable tubing					
0.75	(2)	4	6	0.02	0.16	0.65	1.47	Well Condition: Poor			
Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (S/m)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
11:58	1	1.5	0.5	12/1M	6.97	21.4	7999	1.27	8.38	11/1M	GREY
12:00	2	3.0	0.75	11/1M	7.02	22.0	7999	1.26	8.31	11/1M	FUEL odor
12:05	3	4.5	0.3	11/1M	7.11	21.6	7999	1.25	8.93	11/1M	clear-gray
Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification			
11:55	12:05	0.51	4.5	3	9.79	9.79	12:15	MW-3			

Notes: Well box destroyed. No stinger in well. Soft bottom.

SEVERN
TRENT
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

October 1, 2001

STL LOT NUMBER: E1I240148

Scott Ek
Tait Environmental
701 Park Center Dr
Santa Ana, CA 92705

Dear Mr. Ek:

This report contains the analytical results for the four samples received under chain of custody by STL Los Angeles on September 24, 2001. These samples are associated with your **Mission Valley Rock** project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA.

Any matrix related anomaly is footnoted within the report. A cooler receipt temperature between 2-6 degrees Celsius is within EPA acceptance criteria. The temperature of the cooler received for this project can be found on the Project Receipt Checklist. All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

Preliminary results were sent via facsimile on September 30, 2001.

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

This report contains 000043 pages.

000001

STL Los Angeles is a part of Severn Trent Laboratories, Inc.



SEVERN
TRENT
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

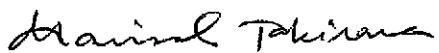
Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

CASE NARRATIVE

There was insufficient sample volume provided to prepare a project-specific MS/MSD for the Extractable Petroleum Hydrocabons analysis. A duplicate LCS has been prepared to provide accuracy and precision measurement for the samples in this project.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,



Marisol Tabirara
Project Manager

CC: Project File

000002

STL Los Angeles is a part of Severn Trent Laboratories, Inc.



CHAIN OF CUSTODY

E1I240148

Project Name <i>Mission Valley Rock</i>			Project or PO# <i>EM-5009</i>	Lab Name <i>STL</i>	Analyses Required	
Address <i>7999 Athenour Way</i>			Client <i>TAIT</i>			
City, State, Zip <i>Sunol, CA</i>		Report attention <i>SCOTT EK</i>				
SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	Sampled by <i>DK 9-21-1</i>	Number of Containers	Remarks	
			MATRIX			LAB I.D. NUMBER
<i>MW-1</i>	<i>9-21-1</i>	<i>11:20</i>		<i>7</i>	<i>X X X</i>	
<i>MW-2</i>	<i>9-21-1</i>	<i>13:05</i>		<i>7</i>	<i>X X X</i>	
<i>MW-3</i>	<i>9-21-1</i>	<i>12:15</i>		<i>7</i>	<i>X X X</i>	
<i>Tripblank</i>	<i>9-21-1</i>	<i>" "</i>		<i>3</i>	<i>X</i>	
<i>0000003</i>						
Signature	Print Name		Company		Date	Time
<i>Richard Kinder</i> <i>R. L. Kinder</i>	<i>Richard Kinder</i> <i>M. TRUFAX</i>		<i>TAIT ENVI MNGT</i>		<i>9-21-14:09</i>	
			<i>STL</i>		<i>9/29/01</i>	<i>10:40</i>



SEVERN
TRENT
SERVICES

Analytical Report

000005

ANALYTICAL REPORT

PROJECT NO. EM-5009

MISSION VALLEY ROCK

Lot #: E1I240148

Scott Ek

Tait Environmental

SEVERN TRENT LABORATORIES, INC.

**Marisol Tabirara
Project Manager**

October 1, 2001

000006

EXECUTIVE SUMMARY - Detection Highlights

E1I240148

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
MW-1 09/21/01 11:20 001				
TPH (as Gasoline)	0.73	0.10	mg/L	SW846 8015B
Benzene	1.4	1.0	ug/L	SW846 8260B
Ethylbenzene	7.6	1.0	ug/L	SW846 8260B
Isopropylbenzene	1.3	1.0	ug/L	SW846 8260B
n-Propylbenzene	3.0	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	1.0	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	1.2	1.0	ug/L	SW846 8260B
MW-2 09/21/01 13:05 002				
TPH (as Diesel)	530	50	mg/L	SW846 8015B
TPH (as Gasoline)	7.0	1.0	mg/L	SW846 8015B
MW-3 09/21/01 12:15 003				
TPH (as Diesel)	3.8	1.0	mg/L	SW846 8015B
Methyl tert-butyl ether	45	1.0	ug/L	SW846 8260B

000007

METHODS SUMMARY

E1I240148

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Extractable Petroleum Hydrocarbons	SW846 8015B	SW846 3510
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

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

000008

SAMPLE SUMMARY

E1I240148

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
EK05X	001	MW-1	09/21/01	11:20
EK073	002	MW-2	09/21/01	13:05
EK075	003	MW-3	09/21/01	12:15
EK076	004	TRIP BLANK	09/21/01	

NOTE(S) :

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

000003

TAIT ENVIRONMENTAL

Client Sample ID: MW-1

GC Semivolatiles

Lot-Sample #....: E1I240148-001 Work Order #....: EK05X1AA Matrix.....: WATER
Date Sampled....: 09/21/01 11:20 Date Received...: 09/24/01 10:40 MS Run #.....:
Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
Prep Batch #....: 1268348 Analysis Time...: 16:45
Dilution Factor: 1
Analyst ID.....: 356074 Instrument ID...: G02
Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Diesel)	ND	1.0	mg/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Benzo (a)pyrene	77	(60 - 130)	

000013

TAIT ENVIRONMENTAL

Client Sample ID: MW-1

GC Volatiles

Lot-Sample #....: E1I240148-001 Work Order #....: EK05X1AC Matrix.....: WATER
Date Sampled....: 09/21/01 11:20 Date Received...: 09/24/01 10:40 MS Run #.....: 1269250
Prep Date.....: 09/24/01 Analysis Date...: 09/24/01
Prep Batch #....: 1268269 Analysis Time...: 21:11
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G16
Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	0.73	0.10	mg/L
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
a,a,a-Trifluorotoluene (TFT)	95	(60 - 130)	

000011

TAIT ENVIRONMENTAL

Client Sample ID: MW-1

GC/MS Volatiles

Lot-Sample #....: E1I240148-001 Work Order #....: EK05X1AD Matrix.....: WATER
 Date Sampled....: 09/21/01 11:20 Date Received...: 09/24/01 10:40 MS Run #.....: 1268143
 Prep Date.....: 09/24/01 Analysis Date...: 09/24/01
 Prep Batch #....: 1268302 Analysis Time...: 18:24
 Dilution Factor: 1
 Analyst ID.....: 004648 Instrument ID...: MSC
 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acetone	ND	10	ug/L
Benzene	1.4	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
2-Butanone	ND	5.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L

(Continued on next page)

000012

TAIT ENVIRONMENTAL

Client Sample ID: MW-1

GC/MS Volatiles

Lot-Sample #....: E1I240148-001 Work Order #....: EK05X1AD Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	7.6	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Isopropylbenzene	1.3	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
n-Propylbenzene	3.0	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	1.0	1.0	ug/L
Vinyl chloride	ND	2.0	ug/L
m-Xylene & p-Xylene	1.2	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L
t-Butanol	ND	25	ug/L
Isopropyl ether	ND	2.0	ug/L
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>
<u>RECOVERY</u>		<u>LIMITS</u>	
Bromofluorobenzene	98	(75 - 120)	
1,2-Dichloroethane-d4	108	(65 - 130)	
Toluene-d8	99	(80 - 130)	

000013

TAIT ENVIRONMENTAL

Client Sample ID: MW-2

GC Semivolatiles

Lot-Sample #....: ELI240148-002 Work Order #....: EK0731AA Matrix.....: WATER
Date Sampled....: 09/21/01 13:05 Date Received...: 09/24/01 10:40 MS Run #.....:
Prep Date.....: 09/25/01 Analysis Date...: 09/26/01
Prep Batch #....: 1268348 Analysis Time...: 10:18
Dilution Factor: 50
Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	530	50	mg/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Benzo(a)pyrene	0.0 SRD,*	(60 - 130)	

NOTE (S) :

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

* Surrogate recovery is outside stated control limits.

The pattern elutes within the diesel range but does not match the diesel std used for calibration. C range- C10 to beyond C24.

000014

TAIT ENVIRONMENTAL

Client Sample ID: MW-2

GC Volatiles

Lot-Sample #....: E1I240148-002 Work Order #....: EK0731AC Matrix.....: WATER
Date Sampled...: 09/21/01 13:05 Date Received...: 09/24/01 10:40 MS Run #.....: 1269250
Prep Date.....: 09/24/01 Analysis Date...: 09/25/01
Prep Batch #....: 1268269 Analysis Time...: 02:02
Dilution Factor: 10
Analyst ID.....: 001464 Instrument ID...: G16
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
TPH (as Gasoline)	7.0	1.0	mg/L
SURROGATE	PERCENT	RECOVERY	
	RECOVERY	LIMITS	
a,a,a-Trifluorotoluene (TFT)	75	(60 - 130)	

000015

TAIT ENVIRONMENTAL

Client Sample ID: MW-2

GC/MS Volatiles

Lot-Sample #....: E1I240148-002 Work Order #....: EK0731AD Matrix.....: WATER
 Date Sampled...: 09/21/01 13:05 Date Received...: 09/24/01 10:40 MS Run #.....: 1268143
 Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
 Prep Batch #....: 1268577 Analysis Time...: 19:48
 Dilution Factor: 50
 Analyst ID.....: 015590 Instrument ID...: MSC
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND G	500	ug/L
Benzene	ND G	50	ug/L
Bromobenzene	ND G	50	ug/L
Bromochloromethane	ND G	50	ug/L
Bromoform	ND G	50	ug/L
Bromomethane	ND G	100	ug/L
2-Butanone	ND G	250	ug/L
n-Butylbenzene	ND G	50	ug/L
sec-Butylbenzene	ND G	50	ug/L
tert-Butylbenzene	ND G	50	ug/L
Carbon disulfide	ND G	50	ug/L
Carbon tetrachloride	ND G	50	ug/L
Chlorobenzene	ND G	50	ug/L
Dibromochloromethane	ND G	50	ug/L
Bromodichloromethane	ND G	50	ug/L
Chloroethane	ND G	100	ug/L
Chloroform	ND G	50	ug/L
Chloromethane	ND G	100	ug/L
2-Chlorotoluene	ND G	50	ug/L
4-Chlorotoluene	ND G	50	ug/L
1,2-Dibromo-3-chloro- propane	ND G	100	ug/L
1,2-Dibromoethane (EDB)	ND G	50	ug/L
Dibromomethane	ND G	50	ug/L
1,2-Dichlorobenzene	ND G	50	ug/L
1,3-Dichlorobenzene	ND G	50	ug/L
1,4-Dichlorobenzene	ND G	50	ug/L
Dichlorodifluoromethane	ND G	100	ug/L
1,1-Dichloroethane	ND G	50	ug/L
1,2-Dichloroethane	ND G	50	ug/L
1,1-Dichloroethene	ND G	50	ug/L
cis-1,2-Dichloroethene	ND G	50	ug/L
trans-1,2-Dichloroethene	ND G	50	ug/L
1,2-Dichloropropane	ND G	50	ug/L
1,3-Dichloropropane	ND G	50	ug/L
2,2-Dichloropropane	ND G	50	ug/L
1,1-Dichloropropene	ND G	50	ug/L

(Continued on next page)

000016

TAIT ENVIRONMENTAL

Client Sample ID: MW-2

GC/MS Volatiles

Lot-Sample #....: E1I240148-002 Work Order #....: EK0731AD Matrix.....: WATER

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
cis-1,3-Dichloropropene	ND G	50	ug/L
trans-1,3-Dichloropropene	ND G	50	ug/L
Ethylbenzene	ND G	50	ug/L
Hexachlorobutadiene	ND G	50	ug/L
2-Hexanone	ND G	250	ug/L
Isopropylbenzene	ND G	50	ug/L
p-Isopropyltoluene	ND G	50	ug/L
Methylene chloride	ND G	50	ug/L
4-Methyl-2-pentanone	ND G	250	ug/L
Methyl tert-butyl ether	ND G	50	ug/L
Naphthalene	ND G	50	ug/L
n-Propylbenzene	ND G	50	ug/L
Styrene	ND G	50	ug/L
1,1,1,2-Tetrachloroethane	ND G	50	ug/L
1,1,2,2-Tetrachloroethane	ND G	50	ug/L
Tetrachloroethene	ND G	50	ug/L
Toluene	ND G	50	ug/L
1,2,3-Trichlorobenzene	ND G	50	ug/L
1,2,4-Trichloro- benzene	ND G	50	ug/L
1,1,1-Trichloroethane	ND G	50	ug/L
1,1,2-Trichloroethane	ND G	50	ug/L
Trichloroethene	ND G	50	ug/L
Trichlorofluoromethane	ND G	100	ug/L
1,2,3-Trichloropropane	ND G	50	ug/L
1,1,2-Trichlorotrifluoro- ethane	ND G	50	ug/L
1,2,4-Trimethylbenzene	ND G	50	ug/L
1,3,5-Trimethylbenzene	ND G	50	ug/L
Vinyl chloride	ND G	100	ug/L
m-Xylene & p-Xylene	ND G	50	ug/L
o-Xylene	ND G	50	ug/L
Tert-amyl methyl ether	ND G	100	ug/L
Tert-butyl ethyl ether	ND G	100	ug/L
t-Butanol	ND G	1200	ug/L
Isopropyl ether	ND G	100	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
Bromofluorobenzene	104	(75 - 120)	
1,2-Dichloroethane-d4	113	(65 - 130)	
Toluene-d8	106	(80 - 130)	

NOTE(S) :

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

000017

TAIT ENVIRONMENTAL

Client Sample ID: MW-3

GC Semivolatiles

Lot-Sample #....: E1I240148-003 Work Order #....: EK0751AA Matrix.....: WATER
Date Sampled....: 09/21/01 12:15 Date Received...: 09/24/01 10:40 MS Run #.....:
Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
Prep Batch #....: 1268348 Analysis Time...: 18:02
Dilution Factor: 1
Analyst ID.....: 356074 Instrument ID...: G02
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
TPH (as Diesel)	3.8	1.0	mg/L
PERCENT		RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Benzo (a) pyrene	97	(60 - 130)	

NOTE(S) :

The pattern is unknown hydrocarbons; C range-C10 to C24.

000018

TAIT ENVIRONMENTAL

Client Sample ID: MW-3

GC Volatiles

Lot-Sample #....: E1I240148-003 Work Order #....: EK0751AC Matrix.....: WATER
Date Sampled....: 09/21/01 12:15 Date Received...: 09/24/01 10:40 MS Run #.....: 1269250
Prep Date.....: 09/24/01 Analysis Date...: 09/24/01
Prep Batch #....: 1268269 Analysis Time...: 22:10
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G16
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
TPH (as Gasoline)	ND	0.10	mg/L
SURROGATE	PERCENT	RECOVERY	
	RECOVERY	LIMITS	(60 - 130)
a,a,a-Trifluorotoluene (TFT)	75		

000013

TAIT ENVIRONMENTAL

Client Sample ID: MW-3

GC/MS Volatiles

Lot-Sample #....: E1I240148-003 Work Order #....: EK0751AD Matrix.....: WATER
 Date Sampled....: 09/21/01 12:15 Date Received...: 09/24/01 10:40 MS Run #.....: 1268143
 Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
 Prep Batch #....: 1268302 Analysis Time...: 01:24
 Dilution Factor: 1
 Analyst ID.....: 004648 Instrument ID...: MSC
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
2-Butanone	ND	5.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L

(Continued on next page)

000020

TAIT ENVIRONMENTAL

Client Sample ID: MW-3

GC/MS Volatiles

Lot-Sample #...: E1I240148-003 Work Order #...: EK0751AD Matrix.....: WATER

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Methyl tert-butyl ether	45	1.0	ug/L
Naphthalene	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	2.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L
t-Butanol	ND	25	ug/L
Isopropyl ether	ND	2.0	ug/L
SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	90	(75 - 120)	
1,2-Dichloroethane-d4	100	(65 - 130)	
Toluene-d8	88	(80 - 130)	

000021

TAIT ENVIRONMENTAL

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #....: E1I240148-004 Work Order #....: EK0761AA Matrix.....: WATER
 Date Sampled....: 09/21/01 Date Received...: 09/24/01 10:40 MS Run #.....: 1268143
 Prep Date.....: 09/24/01 Analysis Date...: 09/24/01
 Prep Batch #....: 1268302 Analysis Time...: 15:53
 Dilution Factor: 1
 Analyst ID.....: 004648 Instrument ID...: MSC
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
2-Butanone	ND	5.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro- propane	ND	2.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L

(Continued on next page)

000022

TAIT ENVIRONMENTAL

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #....: E1I240148-004 Work Order #....: EK0761AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	2.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L
t-Butanol	ND	25	ug/L
Isopropyl ether	ND	2.0	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Bromofluorobenzene	98	(75 - 120)	
1,2-Dichloroethane-d4	91	(65 - 130)	
Toluene-d8	98	(80 - 130)	

000023

SEVERN
TRENT
SERVICES

QA/QC

000024

QC DATA ASSOCIATION SUMMARY

ELI240148

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	WATER	SW846 8015B		1268348	
	WATER	SW846 8015B		1268269	1269250
	WATER	SW846 8260B		1268302	1268143
002	WATER	SW846 8015B		1268348	
	WATER	SW846 8015B		1268269	1269250
	WATER	SW846 8260B		1268577	1268143
003	WATER	SW846 8015B		1268348	
	WATER	SW846 8015B		1268269	1269250
	WATER	SW846 8260B		1268302	1268143
004	WATER	SW846 8260B		1268302	1268143

000025

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E1I240148
MB Lot-Sample #: E1I250000-269

Analysis Date...: 09/24/01
Dilution Factor: 1

Work Order #...: EK2F41AA

Prep Date.....: 09/24/01
Prep Batch #...: 1268269

Analyst ID.....: 001464

Matrix.....: WATER

Analysis Time...: 20:13
Instrument ID...: G16

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
TPH (as Gasoline)	ND	0.10	mg/L	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY		
	66	LIMITS (60 - 130)		

NOTE(S) :

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

000026

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1I240148
 MB Lot-Sample #: E1I250000-302
 Analysis Date...: 09/24/01
 Dilution Factor: 1

Work Order #...: EK2PG1AA
 Prep Date.....: 09/24/01
 Prep Batch #...: 1268302
 Analyst ID.....: 004648

Matrix.....: WATER
 Analysis Time...: 15:12
 Instrument ID...: MSC

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-	ND	2.0	ug/L	SW846 8260B
propane				
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

000027

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1I240148

Work Order #....: EK2PG1AA

Matrix.....: WATER

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Tert-amyl methyl ether	ND	2.0	ug/L	SW846 8260B
Tert-butyl ethyl ether	ND	2.0	ug/L	SW846 8260B
t-Butanol	ND	25	ug/L	SW846 8260B
Isopropyl ether	ND	2.0	ug/L	SW846 8260B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	94		(75 - 120)	
1,2-Dichloroethane-d4	93		(65 - 130)	
Toluene-d8	90		(80 - 130)	

NOTE(S) :

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

000028

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: E1I240148 Work Order #....: EK2XJ1AA Matrix.....: WATER
MB Lot-Sample #: E1I250000-348

Analysis Date..: 09/25/01 Prep Date.....: 09/25/01 Analysis Time...: 14:49
Dilution Factor: 1 Prep Batch #....: 1268348 Instrument ID...: G02

Analyst ID.....: 356074

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
TPH (as Diesel)	ND	1.0	mg/L	SW846 8015B
SURROGATE	PERCENT	RECOVERY		
Benzo(a)pyrene	RECOVERY	LIMITS		
	96	(60 - 130)		

NOTE(S) :

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

000023

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1I240148
 MB Lot-Sample #: E1I250000-577
 Analysis Date...: 09/25/01
 Dilution Factor: 1

Work Order #....: EK30K1AA
 Prep Date.....: 09/25/01
 Prep Batch #:....: 1268577
 Analyst ID.....: 015590

Matrix.....: WATER
 Analysis Time...: 15:39
 Instrument ID...: MSC

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro- propane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

000030

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1I240148

Work Order #....: EK30K1AA

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Tert-amyl methyl ether	ND	2.0	ug/L	SW846 8260B
Tert-butyl ethyl ether	ND	2.0	ug/L	SW846 8260B
t-Butanol	ND	25	ug/L	SW846 8260B
Isopropyl ether	ND	2.0	ug/L	SW846 8260B
SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS	
Bromofluorobenzene	102	(75 - 120)		
1,2-Dichloroethane-d4	103	(65 - 130)		
Toluene-d8	101	(80 - 130)		

NOTE(S) :

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

000031

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1I240148 Work Order #....: EK2XJ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: E1I250000-348 EK2XJ1AD-LCSD
Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
Prep Batch #....: 1268348 Analysis Time...: 15:27
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

PARAMETER	SPIKE	MEASURED		PERCENT	RPD	METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY		
TPH (as Diesel)	5.00	5.15	mg/L	103		SW846 8015B
	5.00	5.22	mg/L	104	1.4	SW846 8015B

SURROGATE		PERCENT	RECOVERY
		RECOVERY	LIMITS
Benzo (a) pyrene	97	(60 - 130)	
	98	(60 - 130)	

NOTE(S) :

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

Bold print denotes control parameters

000032

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1I240148 Work Order #....: EK2XJ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: E1I250000-348 EK2XJ1AD-LCSD
Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
Prep Batch #....: 1268348 Analysis Time...: 15:27
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

PARAMETER	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	RECOVERY	LIMITS			
TPH (as Diesel)	103	(65 - 140)			SW846 8015B
	104	(65 - 140)	1.4	(0-25)	SW846 8015B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Benzo(a)pyrene	97	(60 - 130)
	98	(60 - 130)

NOTE(S) :

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

Bold print denotes control parameters

000033

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1I240148 Work Order #....: EK2F41AC Matrix.....: WATER
LCS Lot-Sample#: E1I250000-269
Prep Date.....: 09/24/01 Analysis Date...: 09/24/01
Prep Batch #:....: 1268269 Analysis Time...: 20:42
Dilution Factor: 1 Instrument ID...: G16
Analyst ID.....: 001464

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	1.00	1.12	mg/L	112	SW846 8015B
<hr/>					
SURROGATE		PERCENT RECOVERY	RECOVERY	LIMITS	
a,a,a-Trifluorotoluene (TFT)		105		(60 - 130)	

NOTE(S) :

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

Bold print denotes control parameters

000034

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1I240148 Work Order #....: EK2PG1AC Matrix.....: WATER
 LCS Lot-Sample#: E1I250000-302
 Prep Date.....: 09/24/01 Analysis Date...: 09/24/01
 Prep Batch #....: 1268302 Analysis Time...: 14:41
 Dilution Factor: 1 Instrument ID...: MSC
 Analyst ID.....: 004648

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
Benzene	10.0	9.67	ug/L	97	SW846 8260B
Chlorobenzene	10.0	8.84	ug/L	88	SW846 8260B
1,1-Dichloroethene	10.0	8.44	ug/L	84	SW846 8260B
Toluene	10.0	8.41	ug/L	84	SW846 8260B
Trichloroethene	10.0	9.08	ug/L	91	SW846 8260B

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Bromofluorobenzene	108	(75 - 120)
1,2-Dichloroethane-d4	114	(65 - 130)
Toluene-d8	96	(80 - 130)

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 #....: E1I240148 Work Order #....: EK30K1AC Matrix.....: WATER
 LCS Lot-Sample#: E1I250000-577
 Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
 Prep Batch #....: 1268577 Analysis Time...: 14:37
 Dilution Factor: 1 Instrument ID...: MSC
 Analyst ID.....: 015590

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
Benzene	10.0	10.4	ug/L	104	SW846 8260B
Chlorobenzene	10.0	10.2	ug/L	102	SW846 8260B
1,1-Dichloroethene	10.0	9.90	ug/L	99	SW846 8260B
Toluene	10.0	10.4	ug/L	104	SW846 8260B
Trichloroethene	10.0	10.1	ug/L	101	SW846 8260B

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Bromofluorobenzene	110	(75 - 120)
1,2-Dichloroethane-d4	106	(65 - 130)
Toluene-d8	108	(80 - 130)

NOTE(S) :

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

Bold print denotes control parameters

0000?6

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1I240148 Work Order #....: EK2F41AC Matrix.....: WATER
LCS Lot-Sample#: E1I250000-269
Prep Date.....: 09/24/01 Analysis Date...: 09/24/01
Prep Batch #....: 1268269 Analysis Time...: 20:42
Dilution Factor: 1 Instrument ID...: G16
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	112	(60 - 130)	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
a, a, a-Trifluorotoluene (TFT)	105	(60 - 130)	

NOTE(S) :

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

Bold print denotes control parameters

000037

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1I240148 Work Order #....: EK2PG1AC Matrix.....: WATER
LCS Lot-Sample#: E1I250000-302
Prep Date.....: 09/24/01 Analysis Date...: 09/24/01
Prep Batch #....: 1268302 Analysis Time...: 14:41
Dilution Factor: 1 Instrument ID...: MSC
Analyst ID.....: 004648

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Benzene	97	(75 - 120)	SW846 8260B
Chlorobenzene	88	(80 - 120)	SW846 8260B
1,1-Dichloroethene	84	(70 - 130)	SW846 8260B
Toluene	84	(80 - 120)	SW846 8260B
Trichloroethene	91	(75 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	108	(75 - 120)
1,2-Dichloroethane-d4	114	(65 - 130)
Toluene-d8	96	(80 - 130)

NOTE (S) :

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

Bold print denotes control parameters

000038

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1I240148 Work Order #....: EK30K1AC Matrix.....: WATER
LCS Lot-Sample#: E1I250000-577
Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
Prep Batch #:....: 1268577 Analysis Time...: 14:37
Dilution Factor: 1 Instrument ID...: MSC
Analyst ID.....: 015590

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	104	(75 - 120)	SW846 8260B
Chlorobenzene	102	(80 - 120)	SW846 8260B
1,1-Dichloroethene	99	(70 - 130)	SW846 8260B
Toluene	104	(80 - 120)	SW846 8260B
Trichloroethene	101	(75 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	110	(75 - 120)
1,2-Dichloroethane-d4	106	(65 - 130)
Toluene-d8	108	(80 - 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/MS Volatiles

Client Lot #....: E1I240148 Work Order #....: EKWQE1AD-MS Matrix.....: WATER
 MS Lot-Sample #: E1I210262-001 EKWQE1AE-MSD
 Date Sampled....: 09/19/01 09:25 Date Received...: 09/21/01 10:15 MS Run #.....: 1268143
 Prep Date.....: 09/25/01 Analysis Date...: 09/25/01
 Prep Batch #....: 1268302 Analysis Time...: 00:23
 Dilution Factor: 1 Analyst ID.....: 004648 Instrument ID.: MSC

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT			
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
Benzene	ND	10.0	10.5	ug/L	105		SW846 8260B
	ND	10.0	10.6	ug/L	106	0.38	SW846 8260B
Chlorobenzene	ND	10.0	9.21	ug/L	92		SW846 8260B
	ND	10.0	9.54	ug/L	95	3.5	SW846 8260B
1,1-Dichloroethene	ND	10.0	9.99	ug/L	100		SW846 8260B
	ND	10.0	10.1	ug/L	101	0.89	SW846 8260B
Toluene	ND	10.0	9.42	ug/L	94		SW846 8260B
	ND	10.0	9.61	ug/L	96	2.0	SW846 8260B
Trichloroethene	ND	10.0	10.4	ug/L	104		SW846 8260B
	ND	10.0	10.5	ug/L	105	0.76	SW846 8260B

SURROGATE	PERCENT		LIMITS
	RECOVERY	RECOVERY	
Bromofluorobenzene	103		(75 - 120)
	106		(75 - 120)
1,2-Dichloroethane-d4	116		(65 - 130)
	118		(65 - 130)
Toluene-d8	100		(80 - 130)
	104		(80 - 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 #....: E1I240148 Work Order #....: EKXGW1AX-MS Matrix.....: WATER
MS Lot-Sample #: E1I210359-005 EKXGW1A0-MSD
Date Sampled...: 09/21/01 14:56 Date Received..: 09/21/01 17:15 MS Run #.....: 1269250
Prep Date.....: 09/24/01 Analysis Date...: 09/25/01
Prep Batch #....: 1268269 Analysis Time...: 12:59
Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID...: G16

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT			
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
TPH (as Gasoline)	0.21	1.00	1.25	mg/L	104		SW846 8015B
	0.21	1.00	1.28	mg/L	107	2.5	SW846 8015B

SURROGATE	PERCENT			RECOVERY	
	RECOVERY			LIMITS	
a,a,a-Trifluorotoluene (TFT)	106			(60 - 130)	
	111			(60 - 130)	

NOTE(S) :

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1I240148	Work Order #....: EKWQE1AD-MS	Matrix.....: WATER
MS Lot-Sample #: E1I210262-001	EKWQE1AE-MSD	
Date Sampled....: 09/19/01 09:25	Date Received...: 09/21/01 10:15	MS Run #.....: 1268143
Prep Date.....: 09/25/01	Analysis Date..: 09/25/01	
Prep Batch #....: 1268302	Analysis Time..: 00:23	
Dilution Factor: 1	Analyst ID.....: 004648	Instrument ID...: MSC

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
Benzene	105	(75 - 120)			SW846 8260B
	106	(75 - 120)	0.38	(0-25)	SW846 8260B
Chlorobenzene	92	(80 - 120)			SW846 8260B
	95	(80 - 120)	3.5	(0-25)	SW846 8260B
1,1-Dichloroethene	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.89	(0-25)	SW846 8260B
Toluene	94	(80 - 120)			SW846 8260B
	96	(80 - 120)	2.0	(0-25)	SW846 8260B
Trichloroethene	104	(75 - 130)			SW846 8260B
	105	(75 - 130)	0.76	(0-25)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	103	(75 - 120)
	106	(75 - 120)
1,2-Dichloroethane-d4	116	(65 - 130)
	118	(65 - 130)
Toluene-d8	100	(80 - 130)
	104	(80 - 130)

NOTE (S) :

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1I240148 Work Order #....: EKXGW1AX-MS Matrix.....: WATER
MS Lot-Sample #: E1I210359-005 EKXGW1A0-MSD
Date Sampled...: 09/21/01 14:56 Date Received...: 09/21/01 17:15 MS Run #.....: 1269250
Prep Date.....: 09/24/01 Analysis Date...: 09/25/01
Prep Batch #....: 1268269 Analysis Time...: 12:59
Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID...: G16

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	LIMITS	METHOD
TPH (as Gasoline)	104	(60 - 130)			SW846 8015B
	107	(60 - 130)	2.5	(0-25)	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS			
a,a,a-Trifluorotoluene (TFT)	106	(60 - 130)			
	111	(60 - 130)			

NOTE(S) :

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

Bold print denotes control parameters