

**MISSION VALLEY / ROCK COMPANY
ASPHALT COMPANY
READY MIX COMPANY**

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

June 11, 2001

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

JUN 13 2001

Dear Mr. Seery:

Submitted herewith is the first 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

JUN 13 2001

**Groundwater Monitoring Report
First Quarter 2001**

Mission Valley Rock Company
7999 Athenour Way
Sunol, California

Prepared by:
Tait Environmental Management, Inc.

June 1, 2001

June 1, 2001


**Groundwater Monitoring Report
First Quarter 2001**


Mission Valley Rock Company
7999 Athenour Way
Sunol, California

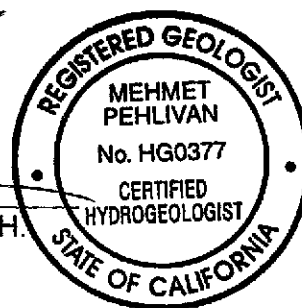
Prepared for:

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Project No. EM-5009

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**GROUNDWATER MONITORING REPORT
FIRST QUARTER 2001**

**MISSION VALLEY ROCK COMPANY
7999 ATHENOUR WAY
SUNOL, CALIFORNIA**

1.0 INTRODUCTION

Tait Environmental Management, Inc. (TEM) is pleased to submit this Groundwater Monitoring Report, First Quarter 2001 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 First Quarter of 2001 included:

- Submitted to the client, *Groundwater Monitoring Report, Fourth Quarter 2000*.
- Measured depth-to-groundwater in monitoring wells MW-1, MW-2 and MW-3 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 March 22, 2001 TEM measured and recorded static groundwater levels in three (3) groundwater monitoring wells using a product/water interface meter. The meter was decontaminated with a detergent bath and two (2) de-ionized water rinses following the water level measurement of each well.

Water levels were measured from the top of the well casings representing the well head survey points. A slight Liquid Phase Hydrocarbons (LPH) sheen (0.10 feet) was observed in monitoring well MW-2. No LPH was observed in monitoring wells MW-1 and MW-3.

1.2"

Based on the data, the average depth to groundwater measured at the Site during this sampling event is approximately 3.41 feet below ground surface (bgs). The apparent groundwater flow direction is to the southeast with a groundwater gradient of approximately 0.022 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 appropriate sampling containers, stored at <4° C, and hand delivered to the laboratory under chain-of-custody protocol.

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 three (3) 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 (STL), a State-Certified laboratory located in Santa Ana, California. First Quarter 2001 groundwater sample analytical results are summarized in Table 2 and shown in Figure 3. 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 sampling was conducted for three (3) groundwater monitoring wells (MW-1, MW-2, and MW-3). A total of three (3) groundwater samples, one (1) sample from each well, was collected and submitted to a State-Certified laboratory for analyses;
- The average depth to groundwater measured at the Site during this sampling event is approximately 3.41 feet bgs. The apparent groundwater flow direction is to the southeast with a groundwater gradient of approximately 0.022 ft/ft;
- Groundwater elevations have shown an increase in all monitoring wells since the previous quarterly monitoring performed in December 2000;

- A slight LPH sheen (0.10 feet) was observed in monitoring well MW-2. No LPH was observed in monitoring wells MW-1 and MW-3;
- The highest TPHd and TPHg concentrations were detected in the groundwater sample collected from well MW-2. The TPHd concentration was 610 milligrams per Liter (mg/L) and the TPHg concentration was 3.3 mg/L;
- Benzene concentrations were not detected at or above the laboratory reporting limit (1.0 ug/L) in any of the three (3) wells this quarter. A benzene concentration of 5.3 ug/L had been detected in well MW-1 during the last sampling event December 2000;
- The highest MTBE concentration (83 ug/L) was detected in the sample collected from well MW-3; and
- Interpretation of Charts 2A, 2B, and 2C would indicate that TPH-D, TPH-G, and MTBE have shown an overall decrease since groundwater sampling began in June 1998 with the exception of well MW-2 and MW-3 where MTBE concentrations have shown a recent increase since the December 2000 sampling event.

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:

- Continue monitoring all wells for floating product, sheen and odors.
- Continue quarterly groundwater monitoring and sampling to evaluate gradient and to monitor contaminant concentrations.
- In order to better define the extent of the contamination in the subsurface soils and groundwater an additional site assessment should be performed utilizing direct-push/hydropunch technology and an onsite mobile laboratory.

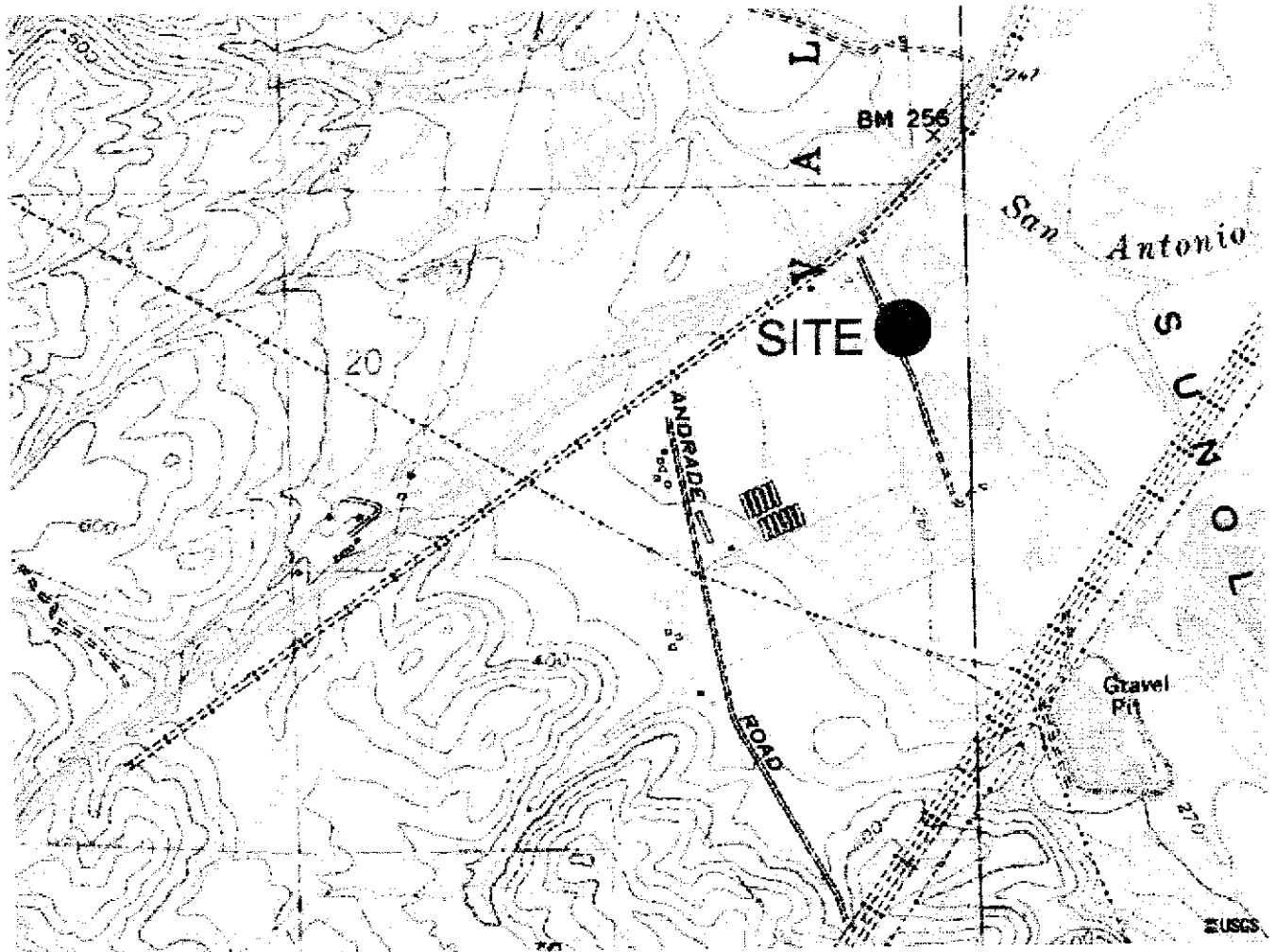
7.0 QUALITY ASSURANCE/QUALITY CONTROL

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 the results to be within acceptable percent recoveries with no results exceeding the laboratory-established control limits.

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



1" = 2000'

NOTES:

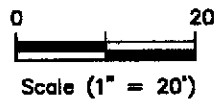
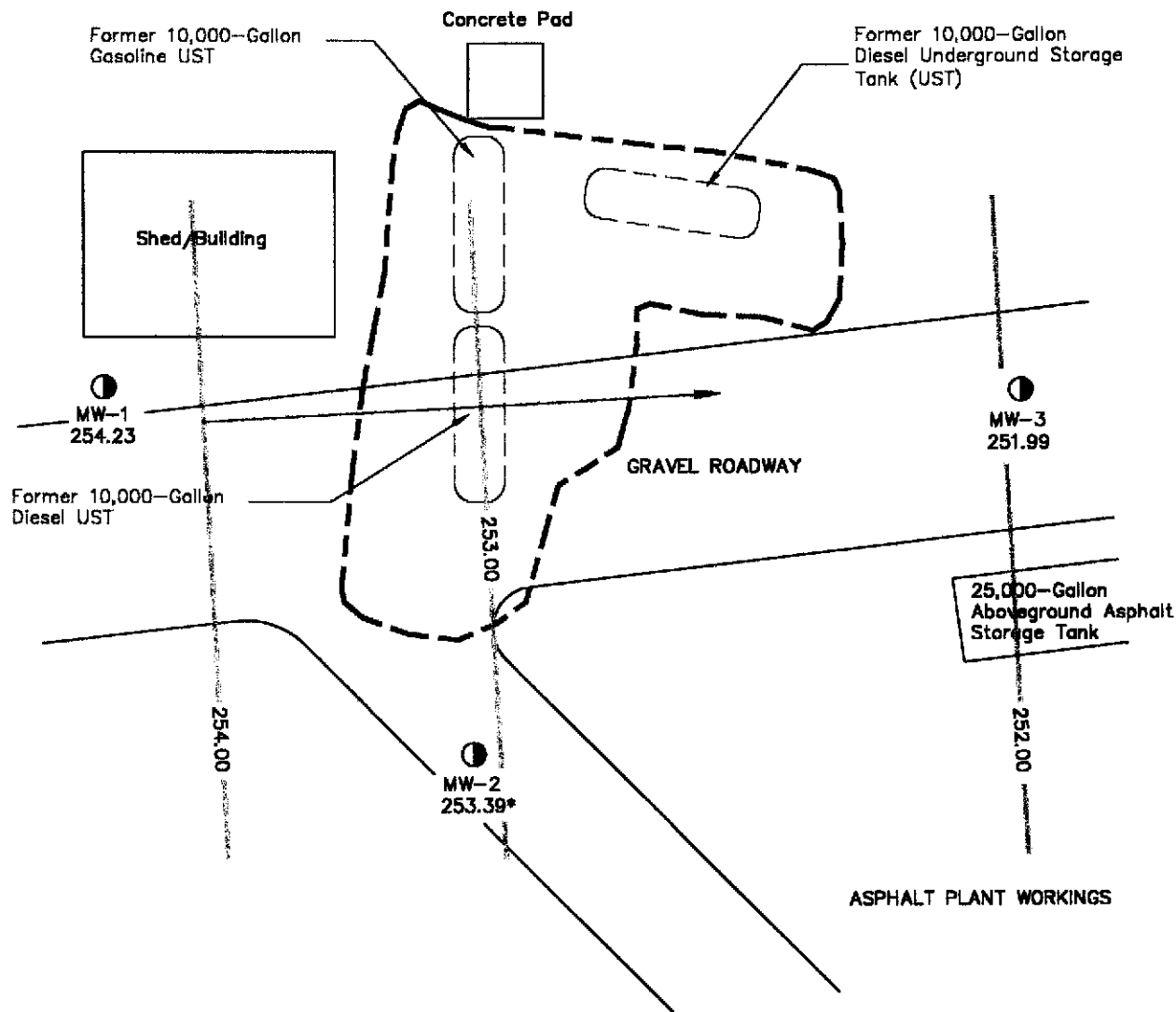
BASE MAP TAKEN FROM TERRASERVER.COM, UNITED STATES GEOLOGICAL SURVEY (USGS), FREEMONT QUADRANGLE, ALAMEDA COUNTY, CALIFORNIA. PRINTED JULY 1, 1989.

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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

- 
MW-1
 254.23
 GROUNDWATER MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
- 
 253.00
 GROUNDWATER CONTOUR WITH ELEVATION IN FEET ABOVE MSL
- 
 GENERAL DIRECTION OF GROUNDWATER FLOW
- 
 253.39*
 LIMITS OF FORMER UST EXCAVATION CORRECTED GROUNDWATER ELEVATION

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SITE PLAN WITH GROUNDWATER ELEVATIONS (MARCH 2001)
 MISSION VALLEY ROCK CO.
 7999 ATHENOUR WAY
 SUNOL, CALIFORNIA

PROJECT NO. EM-5009 FIGURE 2

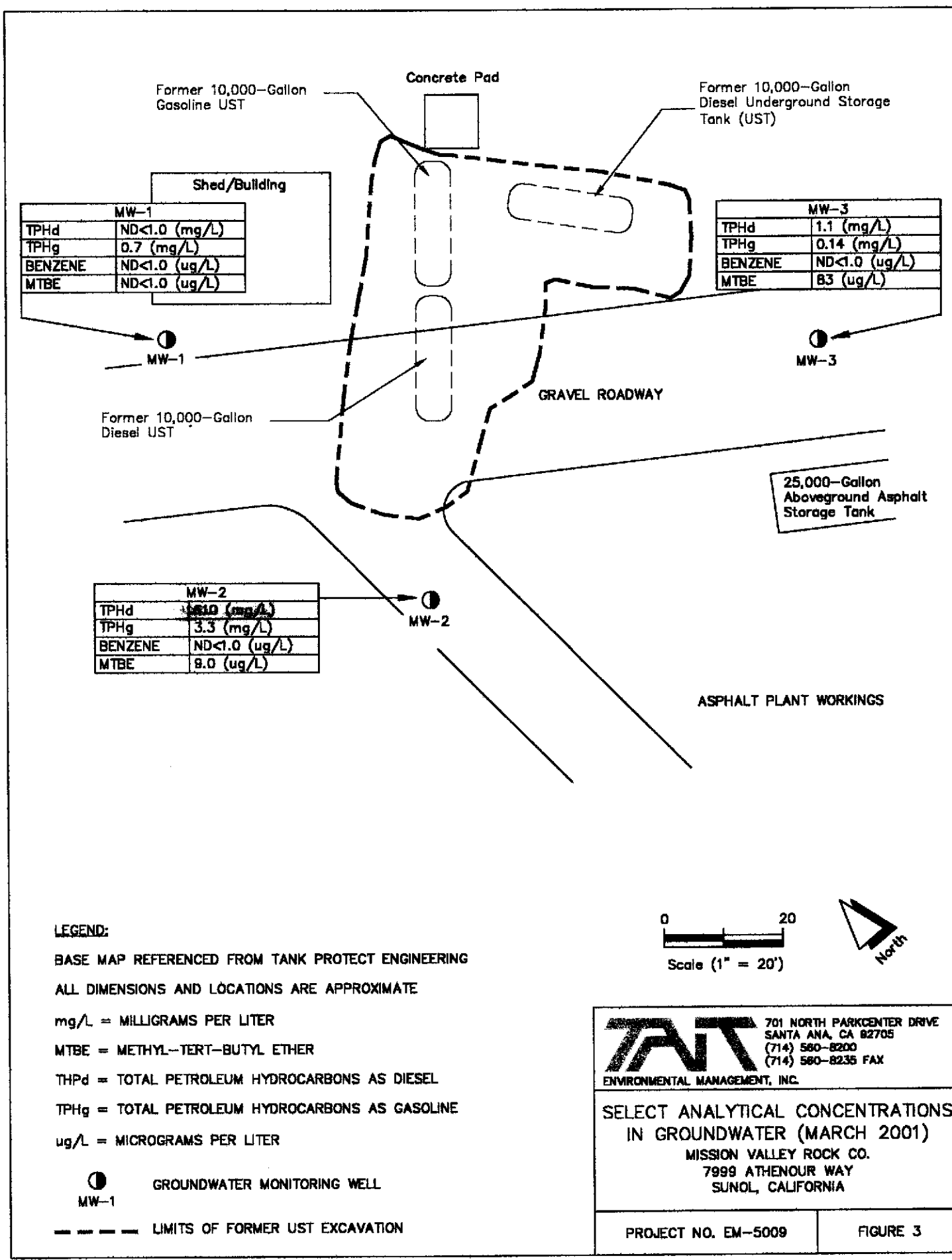


Table 1
Well Construction and Groundwater Elevation Data
First Quarter (March 2001)

Mission Valley Rock Company
Sunol, California

Well ID	Casing Diameter	Depth to LNAPL	Depth to Water	Total Depth	Screened Interval	Measuring Point Elevation	Groundwater Elevation	Comments
MW-1	2	Not Detected	2.28	15.75	5.0 - 20.0	256.51	254.23	Well in good condition
MW-2	2	0.10	3.21	19.10	5.0 - 20.0	256.70	253.39*	Well in good condition
MW-3	2	Not Detected	4.73	17.26	5.0 - 20.0	256.72	251.99	Small steel plate placed over well cover.

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 March 26, 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 (0.10)

LPH = Light Phase Hydrocarbons

Table 2
Summary of Groundwater Sample Analytical Results - First Quarter (March 2001)

Mission Valley Rock Company
Sunol, California

Sample ID	MW-1	MW-2	Sample ID	MW-1	MW-2
Date Sampled	3/22/01	3/22/01	Date Sampled	3/22/01	3/22/01
GC/MS Volatiles			GC/MS Volatiles		
	ug/L			ug/L	
Acetone	ND<10	ND<10	1,1-Dichloropropene	ND<1.0	ND<1.0
Benzene	ND<1.0	ND<1.0	cis-1,3-Dichloropropene	ND<1.0	ND<1.0
Bromobenzene	ND<1.0	ND<1.0	trans-1,3-Dichloropropene	ND<1.0	ND<1.0
Bromochloromethane	ND<1.0	ND<1.0	Ethylbenzene	1.4	ND<1.0
Bromoform	ND<2.0	ND<2.0	Hexachlorobutadiene	ND<1.0	ND<1.0
Bromomethane	ND<5.0	ND<5.0	2-Hexanone	ND<5.0	ND<5.0
2-Butanone	ND<1.0	ND<1.0	Isopropylbenzene	ND<1.0	1.5
n-Butylbenzene	ND<1.0	ND<1.0	p-Isopropyltoluene	ND<1.0	ND<1.0
sec-Butylbenzene	ND<1.0	4.0	Methylene Chloride	ND<1.0	ND<1.0
tert-Butylbenzene	ND<1.0	ND<1.0	4-Methyl-2-Pentanone	ND<5.0	ND<5.0
Carbon Disulfide	ND<1.0	ND<1.0	Methyl Tert-Butyl Ether	ND<1.0	9.0
Carbon Tetrachloride	ND<1.0	ND<1.0	Napthalene	ND<1.0	ND<1.0
Chlorobenzene	ND<1.0	ND<1.0	n-Propylbenzene	2.0	4.1
Dibromochloromethane	ND<1.0	ND<1.0	Styrene	ND<1.0	ND<1.0
Bromodichloromethane	ND<1.0	ND<1.0	1,1,1,2-Tetrachloroethane	ND<1.0	ND<1.0
Chloroethane	ND<2.0	ND<2.0	1,1,2,2-Tetrachloroethane	ND<1.0	ND<1.0
Chloroform	ND<1.0	ND<1.0	Tetrachloroethene	ND<1.0	ND<1.0
Chloromethane	ND<2.0	ND<2.0	Toluene	ND<1.0	ND<1.0
2-Chlorotoluene	ND<1.0	ND<1.0	1,2,3-Trichlorobenzene	ND<1.0	ND<1.0
4-Chlorotoluene	ND<1.0	ND<1.0	1,2,4-Trichlorobenzene	ND<1.0	ND<1.0
1,2-Dibromo-3-Chloro-Propane	ND<2.0	ND<2.0	1,1,1-Trichloroethane	ND<1.0	ND<1.0
1,2-Dibromoethane (EDB)	ND<1.0	ND<1.0	1,1,2-Trichloroethane	ND<1.0	ND<1.0
Dibromomethane	ND<1.0	ND<1.0	Trichloroethene	ND<1.0	ND<1.0
1,2-Dichlorobenzene	ND<1.0	ND<1.0	Trichlorofluoromethane	ND<2.0	ND<2.0
1,3-Dichlorobenzene	ND<1.0	ND<1.0	1,2,3-Trichloropropane	ND<1.0	ND<1.0
1,4-Dichlorobenzene	ND<1.0	ND<1.0	1,1,2-Trichlorotrifluoroethane	ND<1.0	ND<1.0
Dichlorodifluoromethane	ND<2.0	ND<2.0	1,2,4-Trimethylbenzene	ND<1.0	ND<1.0
1,1-Dichloroethane	ND<1.0	ND<1.0	1,3,5-Trimethylbenzene	ND<1.0	ND<1.0
1,2-Dichloroethane	ND<1.0	ND<1.0	Vinyl Chloride	ND<2.0	ND<2.0
1,1-Dichloroethene	ND<1.0	ND<1.0	m-Xylene & p-Xylene	ND<1.0	ND<1.0
cis-1,2-Dichloroethene	ND<1.0	ND<1.0	o-Xylene	ND<1.0	ND<1.0
trans-1,2-Dichloroethene	ND<1.0	ND<1.0	Tert-Amyl Methyl Ether	ND<2.0	ND<2.0
1,2-Dichloropropane	ND<1.0	ND<1.0	Tert-Butyl Ethyl Ether	ND<2.0	ND<2.0
1,3-Dichloropropane	ND<1.0	ND<1.0	t-Butanol	ND<25	ND<25
2,2-Dichloropropane	ND<1.0	ND<1.0	Isopropyl Ether	ND<2.0	ND<2.0
GC Semi-Volatiles			GC Volatiles		
	mg/L			mg/L	
TPHd	ND<1.0	610	TPHg	0.70	3.3

GC/MS Volatile analyses performed by Severn Trent Laboratories, Inc. using EPA method 8260B.

GC Semi-Volatile and GC Volatile analyses performed by Severn Trent Laboratories, Inc. using EPA Method 8015B.

mg/L = Milligrams per Liter

ND = Not detected at or above corresponding reporting limit

TPHd = Total petroleum hydrocarbons as diesel

TPHg = Total petroleum hydrocarbons as gasoline

ug/L = Micrograms per Liter

Table 2
Summary of Groundwater Sample Analytical Results - First Quarter (March 2001)

Mission Valley Rock Company
Sunol, California

Sample ID	MW-3	Sample ID	MW-3
Date Sampled	3/22/01	Date Sampled	3/22/01
GC/MS Volatiles		GC/MS Volatiles	
	ug/L		ug/L
Acetone	ND<1.0	1,1-Dichloropropene	ND<1.0
Benzene	ND<1.0	cis-1,3-Dichloropropene	ND<1.0
Bromobenzene	ND<1.0	trans-1,3-Dichloropropene	ND<1.0
Bromochloromethane	ND<1.0	Ethylbenzene	ND<1.0
Bromoform	ND<2.0	Hexachlorobutadiene	ND<1.0
Bromomethane	ND<5.0	2-Hexanone	ND<5.0
2-Butanone	ND<1.0	Isopropylbenzene	ND<1.0
n-Butylbenzene	ND<1.0	p-Isopropyltoluene	ND<1.0
sec-Butylbenzene	ND<1.0	Methylene Chloride	ND<1.0
tert-Butylbenzene	1.0	4-Methyl-2-Pentanone	ND<5.0
Carbon Disulfide	ND<1.0	Methyl Tert-Butyl Ether	83
Carbon Tetrachloride	ND<1.0	Napthalene	ND<1.0
Chlorobenzene	ND<1.0	n-Propylbenzene	ND<1.0
Dibromochloromethane	ND<1.0	Styrene	ND<1.0
Bromodichloromethane	ND<1.0	1,1,1,2-Tetrachloroethane	ND<1.0
Chloroethane	ND<2.0	1,1,2,2-Tetrachloroethane	ND<1.0
Chloroform	ND<1.0	Tetrachloroethene	ND<1.0
Chloromethane	ND<2.0	Toluene	ND<1.0
2-Chlorotoluene	ND<1.0	1,2,3-Trichlorobenzene	ND<1.0
4-Chlorotoluene	ND<1.0	1,2,4-Trichlorobenzene	ND<1.0
1,2-Dibromo-3-Chloro-Propane	ND<2.0	1,1,1-Trichloroethane	ND<1.0
1,2-Dibromoethane (EDB)	ND<1.0	1,1,2-Trichloroethane	ND<1.0
Dibromomethane	ND<1.0	Trichloroethene	ND<1.0
1,2-Dichlorobenzene	ND<1.0	Trichlorofluoromethane	ND<2.0
1,3-Dichlorobenzene	ND<1.0	1,2,3-Trichloropropane	ND<1.0
1,4-Dichlorobenzene	ND<1.0	1,1,2-Trichlorotrifluoroethane	ND<1.0
Dichlorodifluoromethane	ND<2.0	1,2,4-Trimethylbenzene	ND<1.0
1,1-Dichloroethane	ND<1.0	1,3,5-Trimethylbenzene	ND<1.0
1,2-Dichloroethane	ND<1.0	Vinyl Chloride	ND<2.0
1,1-Dichloroethene	ND<1.0	m-Xylene & p-Xylene	ND<1.0
cis-1,2-Dichloroethene	ND<1.0	o-Xylene	ND<1.0
trans-1,2-Dichloroethene	ND<1.0	Tert-Amyl Methyl Ether	ND<2.0
1,2-Dichloropropane	ND<1.0	Tert-Butyl Ethyl Ether	ND<2.0
1,3-Dichloropropane	ND<1.0	t-Butanol	ND<25
2,2-Dichloropropane	ND<1.0	Isopropyl Ether	ND<2.0
GC Semi-Volatiles		GC Volatiles	
	mg/L		mg/L
TPHd	1.1	TPHg	0.14

GC/MS Volatile analyses performed by Severn Trent Laboratories, Inc. using EPA method 8260B.

GC Semi-Volatile and GC Volatile analyses performed by Severn Trent Laboratories, Inc. using EPA Method 8015B.

mg/L = Milligrams per Liter

TPHg = Total petroleum hydrocarbons as gasoline

ND = Not detected at or above corresponding reporting limit

ug/L = Micrograms per Liter

TPHd = Total petroleum hydrocarbons as diesel

Table 3
Historical Summary of Groundwater Data

Mission Valley Rock Company
Sunol, California

Well	Date	Depth to Water	Groundwater Elevation	LPH Thickness
MW-1	Jun-98	1.32	255.19	0
	Jan-99	2.28	254.23	0
	Mar-99	1.88	254.63	0
	Jun-99	3.35	253.16	0
	Sep-99	3.66	252.85	0
	Dec-99	2.94	253.57	0
	Mar-00	2.72	253.79	Odor
	Jun-00	4.01	252.50	Slight Odor
	Sep-00	5.11	251.40	Slight Odor
	Dec-00	4.95	251.56	0
	Mar-00	2.28	254.23	0
MW-2	Jun-98	1.72	254.98	0.005
	Jan-99	2.69	254.01	4.00
	Mar-99	2.50	254.20	0
	Jun-99	4.00	252.70	Sheen
	Sep-99	4.54	252.16	0.50
	Dec-99	3.85	252.85	0.13
	Mar-00	3.20	253.50	0.03
	Jun-00	4.62	252.08	0.02
	Sep-00	5.95	250.75	>0.01
	Dec-00	5.65	251.05	0.07
	Mar-00	3.21	253.39*	0.10
MW-3	Jun-98	2.66	254.06	0
	Jan-99	4.47	252.25	Slight Odor
	Mar-99	3.96	252.76	Sheen
	Jun-99	5.54	251.18	0
	Sep-99	6.18	250.54	Sheen
	Dec-99	5.52	251.20	Odor
	Mar-00	4.61	252.11	Odor
	Jun-00	6.35	250.37	Very Slight Odor
	Sep-00	7.30	249.42	Very Slight Odor
	Dec-00	7.29	249.43	0
Mar-00	4.73	251.99	0	

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 (0.10)

Table 4
Historical Summary of Groundwater Sample Analytical Results

Mission Valley Rock Company
Sunol, California

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

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

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

MTBE = Methyl-tert-Butyl Ether

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

ug/l?

**CHART 1
HISTORICAL GROUNDWATER ELEVATION
MISSION VALLEY ROCK, SUNOL**

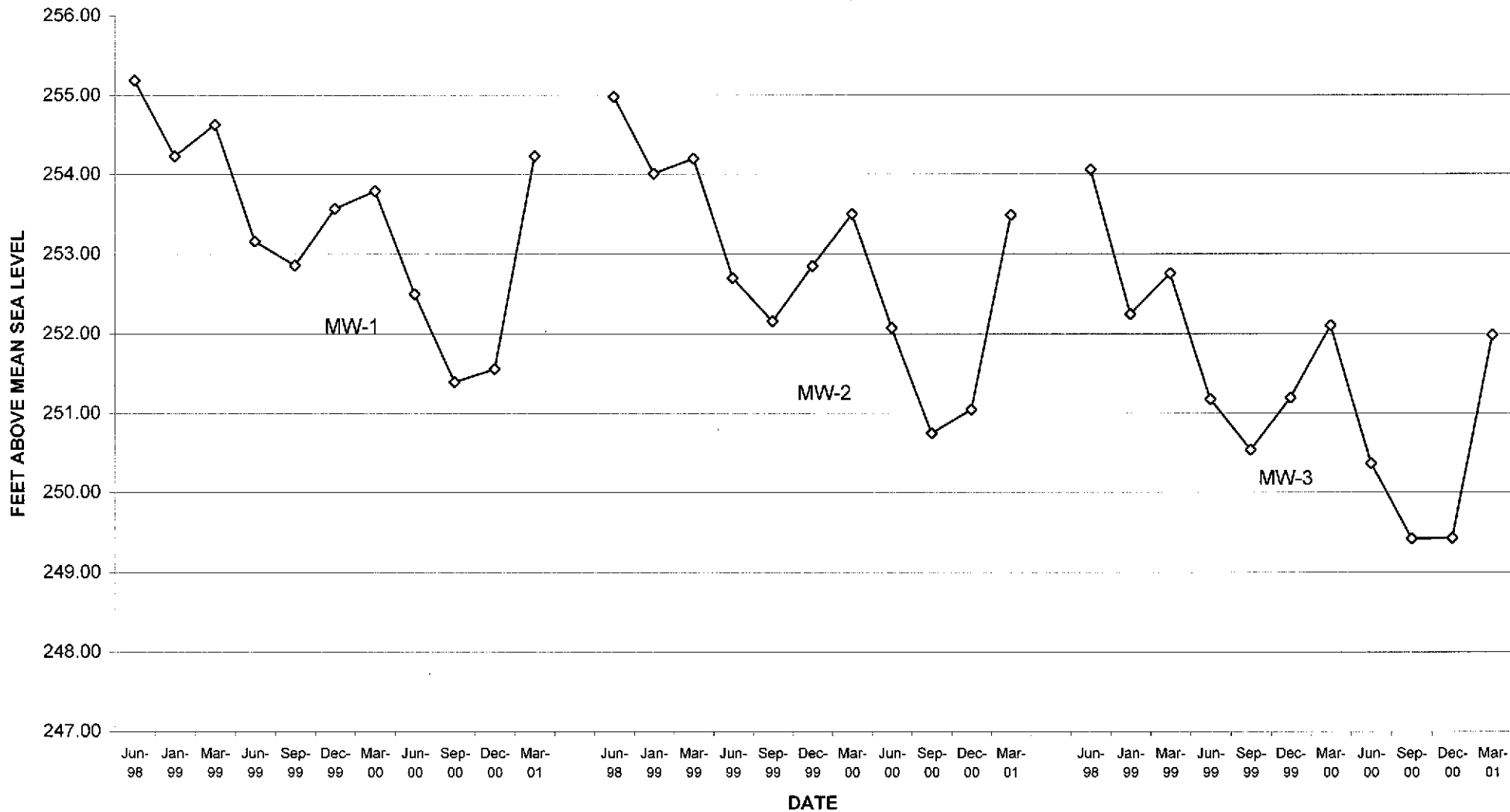


CHART 2A
HISTORICAL TPHd CONCENTRATIONS
MISSION VALLEY ROCK, SUNOL

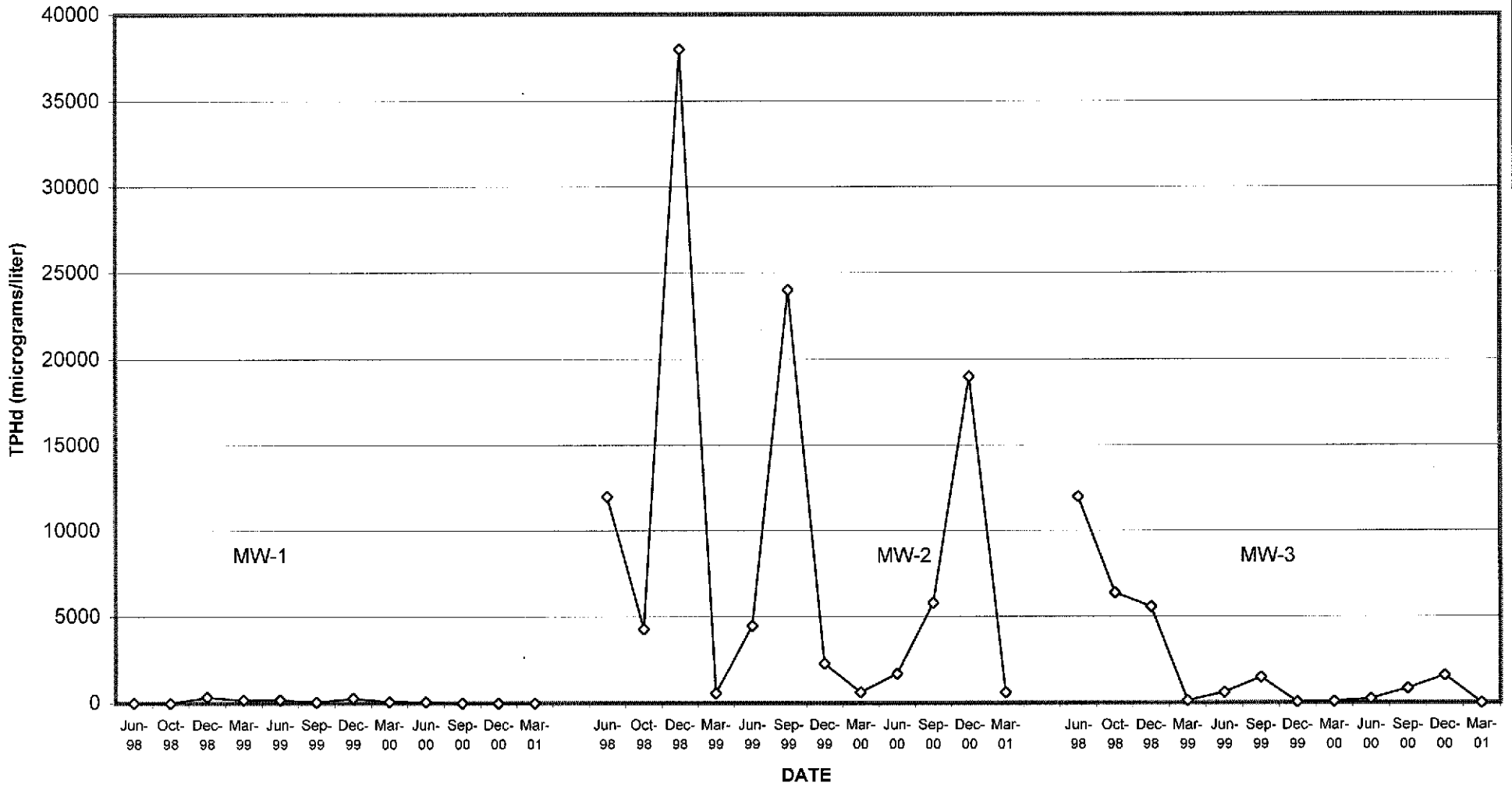


CHART 2B
HISTORICAL TPHg CONCENTRATIONS
MISSION VALLEY ROCK, SUNOL

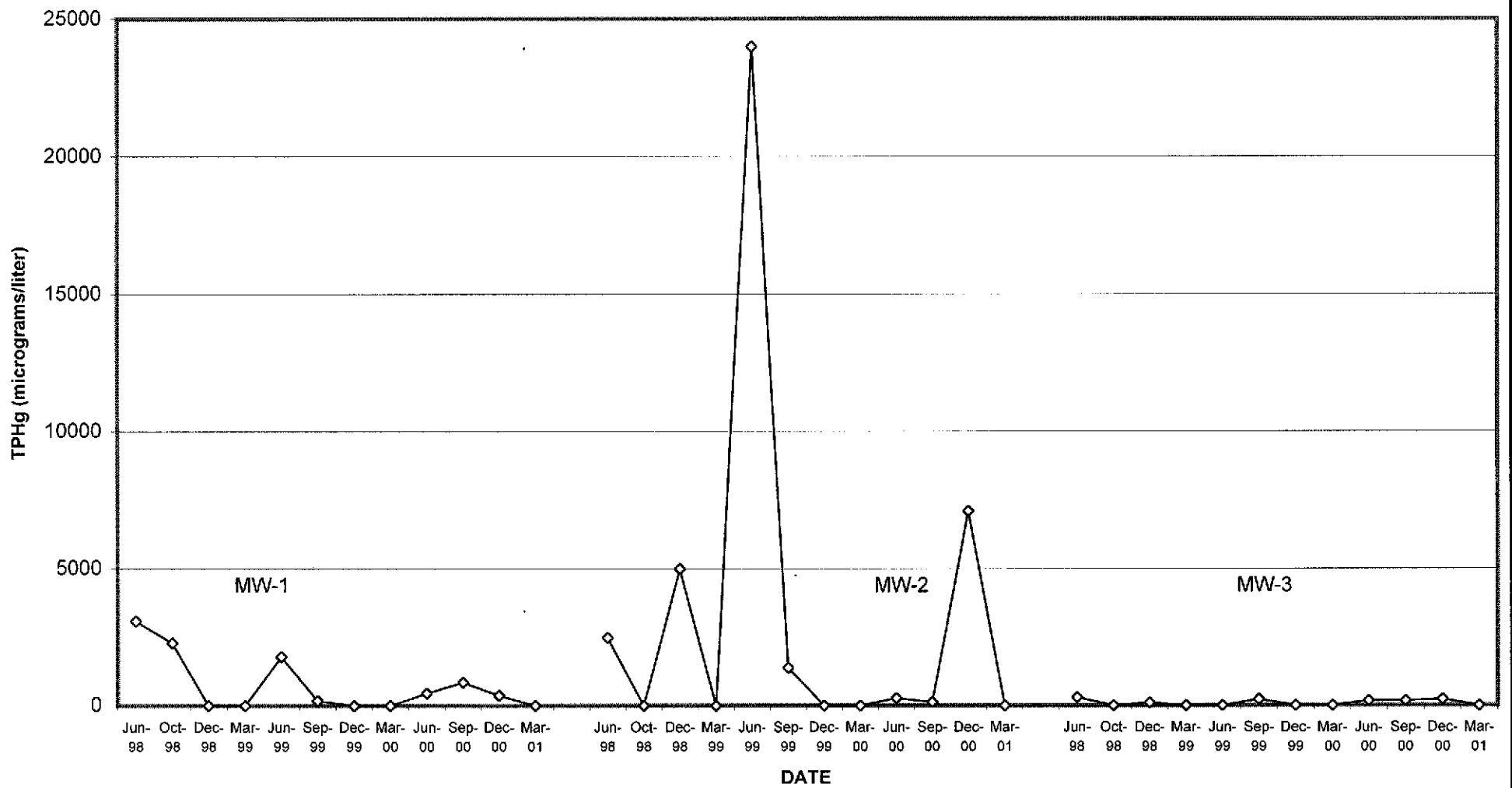
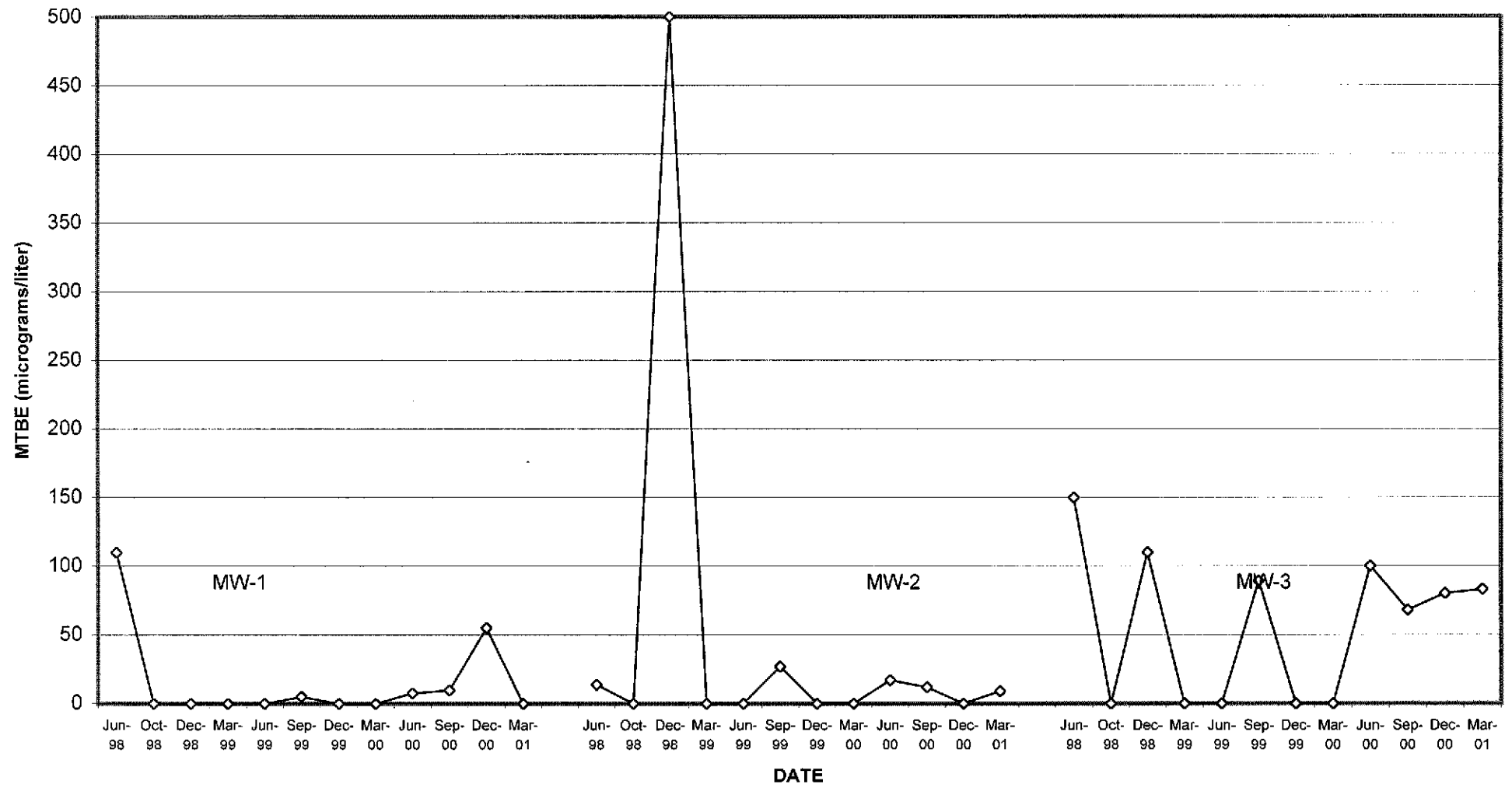


CHART 2C
 HISTORICAL MTBE CONCENTRATIONS
 MISSION VALLEY ROCK, SUNOL





Environmental Management, Inc.

SITE: Mission Rock	Project #: EM5009	Date: 3/22/01
Well #: MW-1	Well Diameter (in): 2	Measurement Point: TOC north side
Purge Method: bailer ^{disp.}	Sample Method: 12VDC deep bailer ^{whole down to}	Equipment: Horiba U-22

Depth to Water (ft): 2.28 Total Depth (ft): 15.75

Height of Water Column (ft): 13.47 One (1) Casing Volume (gal): 2.19

Depth to LPH (ft): ND LPH Thickness (ft): ND

Purge Start Time: 14:10 Purge End Time: 14:16

Total Volume Purged (gal): 6

Time	Volume Purged (gal)	Purge Rate (gpm)	Depth to Water (ft)	Temp (C)	pH	Conductivity (mS/m)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Description
14:12	2	1.0	NA	16.0	6.81	0.15	7990	4.8	-110	clear/cloudy
14:14	4	1.0	NA	15.7	6.73	0.15	>990	2.2	-125	" "
14:16	6	1.0	NA	15.5	6.73	0.15	400	1.6	-136	clear

80% Recovery Depth (ft): 2.31 Depth to Water at Sampling (ft): 2.31

Sample Collection Time: 14:25 Sample #: MW-1

Analysis: _____

Notes:



Environmental Management, Inc.

SITE: Mission Rock	Project #: EM 5009	Date: 3/22/01
Well #: MW-2	Well Diameter (in): 2	Measurement Point: TOC north
Purge Method: bailer ^{disp.}	Sample Method: Disp. Bailer ^{SEE} 12V DC Pump	Equipment: Horiba U-22

Depth to Water (ft): 3.21 Total Depth (ft): 19.10

Height of Water Column (ft): 15.89 One (1) Casing Volume (gal): ~~0.10~~ SEE 2.59

Depth to LPH (ft): 3.11 LPH Thickness (ft): 0.10

Purge Start Time: 15:05 Purge End Time: 15:14

Total Volume Purged (gal): 9

Time	Volume Purged (gal)	Purge Rate (gpm)	Depth to Water (ft)	Temp (C)	pH	Conductivity (mS/m)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Description
15:08	3	1.0	NA	17.4	6.54	0.15	6	1.4	-154	clear
15:11	6	1.0	NA	17.4	6.55	0.15	17	0.9	-163	clear
15:14	9	1.0	NA	17.6	6.56	0.15	37	0.8	-167	"

80% Recovery Depth (ft): _____ Depth to Water at Sampling (ft): ~~3.21~~ (see print)

Sample Collection Time: 15:30 Sample #: MW-2

Analysis: _____

Notes:

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

April 4, 2001

STL LOT NUMBER: **E1C230260**

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

Dear Mr. Ek:

This report contains the analytical results for the three samples received under chain of custody by STL Los Angeles on March 23, 2001. These samples are associated with your **MISSION VALLEY ROCK, SUNOL, CA** project.

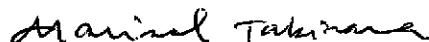
Preliminary results were sent via facsimile on March 30, 2001.

STL Los Angeles certifies that the test results provided in this report meet all the requirements of NELAC. Our certificate number is **01118CA**. All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report shall not be reproduced except in full, without the written approval of the laboratory. This report contains 000038 pages.

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

Sincerely,



Marisol Tabirara
Project Manager

cc: Project File

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 method 8015B (Extractable Petroleum Hydrocarbons). A duplicate LCS has been prepared to provide accuracy and precision measurement for the samples in this project.

The client is requested to supply sufficient sample volume for MS/MSD.

000002

Chain of Custody Record

**SEVERN
TRENT
SERVICES**

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: Tait Env. Mgmt. Project Manager: SCOTT EK Date: 3/22/01 Chain of Custody Number: 051693

Address: 701 N. Parkcenter Dr Telephone Number (Area Code)/Fax Number: (714) 560-8694 Lab Number: _____ Page 1 of 1

City: Santa Ana State: CA Zip Code: 92705 Site Contact: - Lab Contact: M. Tabirara

Project Name and Location (State): Mission Valley Rock, Sundel, CA Carrier/Waybill Number: -

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives								Analysis (Attach list if more space is needed)			Special Instructions/ Conditions of Receipt									
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc2	NaOH	8260 VOC/MTBE/OXYGENATES/BTEX	TPH - Gas	TPH - Diesel											
MW-1	3/22/01	14:25		X																							
MW-2	↓	15:30		X																							
MW-3	↓	14:55		X																							

Possible Hazard Identification: Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal: Return To Client Disposal By Lab Archive For _____ Months (A lab may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: 24 Hours 48 Hours 7 Days 14 Days 21 Days Other normal

QC Requirements (Specify): _____

1. Relinquished By: <u>SCOTT EK</u>	Date: <u>3/23/01</u>	Time: <u>12:30</u>	1. Received By: <u>ADD/PO</u>	Date: <u>3/23/01</u>	Time: <u>12:30</u>
2. Relinquished By: _____	Date: _____	Time: _____	2. Received By: _____	Date: _____	Time: _____
3. Relinquished By: _____	Date: _____	Time: _____	3. Received By: _____	Date: _____	Time: _____

Comments: * PER SCOTT EK, 8260B (STD LIST + OXYGENATES) 3/27/01 MT

**STL - LOS ANGELES
PROJECT RECEIPT CHECKLIST**

Date: 3/23/01

Quantims Lot #: EIC 230260

Quote #: _____
Project: MISSION VALLEY ROCK, SUNDI, CA

Client Name: TAIT ENV. MGMT.

Date/Time Received: 3/23/01 12:30

Received by: AV

Delivered by: Client Airborne Fed Ex
 UPS DES Other

DHL Ultra-Ex Rey B.

Initial / Date

Custody Seal Status: Intact Broken None AV 3/23

Custody Seal #(s): _____ No Seal # _____

Sample Container(s): STL-LA Client N/A

Temperature(s) (COOLER/BLANK) in °C: 6.0 (CORRECTED TEMP) _____

Thermometer Used: IR (Infra-red) Digital (Probe)

Samples: Intact Broken Other

Anomalies: No Yes (See Clouseau)

Labeled by _____

Labeling checked by _____

Turn Around Time: RUSH-24HR RUSH-48HR RUSH-72HR NORMAL AV 3/23

Short-Hold Notification: Ph Wet Chem Metals (Filter/Pres) Encore N/A ...

Outside Analysis(es) (Test/Lab/Date Sent Out) :

***** LEAVE NO BLANK SPACES ; USE N/A *****

Fraction	123										PH
VOA#	5										N/A
LTAGB	1										

MIC Sodium Hydroxide Zinc Acetate Sodium Hydroxide H2SO4 HNO3 H2O2 - Field Stored H2O2 - Lab Stored
 CGL Clear Glass Jar CGR Clear Glass Bottle AGC Amber Glass Jar AGB Amber Glass Bottle PB Poly Bottle E-Bottle Sampler V-VOA
 * Number of VOA's w/ Headspace present

LOGGED BY/DATE: MB 03/23/01 REVIEWED BY/DATE: MT 3/23/01
 000004

ANALYTICAL REPORT

MISSION VALLEY ROCK, SUNOL, CA

Lot #: E1C230260

Scott Ek

Tait Environmental

SEVERN TRENT LABORATORIES, INC.

**Marisol Tabirara
Project Manager**

April 4, 2001

000005

EXECUTIVE SUMMARY - Detection Highlights

E1C230260

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
MW-1 03/22/01 14:25 001				
TPH (as Gasoline)	0.70	0.10	mg/L	SW846 8015B
Ethylbenzene	1.4	1.0	ug/L	SW846 8260B
n-Propylbenzene	2.0	1.0	ug/L	SW846 8260B
MW-2 03/22/01 15:30 002				
TPH (as Diesel)	610	50	mg/L	SW846 8015B
TPH (as Gasoline)	3.3	0.20	mg/L	SW846 8015B
sec-Butylbenzene	4.0	1.0	ug/L	SW846 8260B
Isopropylbenzene	1.5	1.0	ug/L	SW846 8260B
Methyl tert-butyl ether	9.0	1.0	ug/L	SW846 8260B
n-Propylbenzene	4.1	1.0	ug/L	SW846 8260B
MW-3 03/22/01 14:55 003				
TPH (as Diesel)	1.1	1.0	mg/L	SW846 8015B
TPH (as Gasoline)	0.14	0.10	mg/L	SW846 8015B
tert-Butylbenzene	1.0	1.0	ug/L	SW846 8260B
Methyl tert-butyl ether	83	1.0	ug/L	SW846 8260B

000006

METHODS SUMMARY

E1C230260

<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.

000007

SAMPLE SUMMARY

E1C230260

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
DXWJJ	001	MW-1	03/22/01	14:25
DXWJN	002	MW-2	03/22/01	15:30
DXWJR	003	MW-3	03/22/01	14:55

NOTE (S) :

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

000008

TAIT ENVIRONMENTAL

Client Sample ID: MW-1

GC Semivolatiles

Lot-Sample #...: E1C230260-001 Work Order #...: DXWJJ1AA Matrix.....: WATER
Date Sampled...: 03/22/01 14:25 Date Received...: 03/23/01 12:30 MS Run #.....:
Prep Date.....: 03/26/01 Analysis Date...: 03/27/01
Prep Batch #...: 1085504 Analysis Time...: 14:08
Dilution Factor: 1
Analyst ID.....: 356074 Instrument ID...: G01
Method.....: SW846 8015B

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

TAIT ENVIRONMENTAL

Client Sample ID: MW-1

GC Volatiles

Lot-Sample #...: E1C230260-001 Work Order #...: DXWJJ1AC Matrix.....: WATER
Date Sampled...: 03/22/01 14:25 Date Received...: 03/23/01 12:30 MS Run #.....: 1088183
Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
Prep Batch #...: 1088331 Analysis Time...: 07:42
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	0.70	0.10	mg/L
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
a,a,a-Trifluorotoluene (TFT)	92	(60 - 130)	

TAIT ENVIRONMENTAL

Client Sample ID: MW-1

GC/MS Volatiles

Lot-Sample #....: E1C230260-001 Work Order #....: DXWJJ1AE Matrix.....: WATER
 Date Sampled....: 03/22/01 14:25 Date Received...: 03/23/01 12:30 MS Run #.....: 1086003
 Prep Date.....: 03/24/01 Analysis Date...: 03/24/01
 Prep Batch #....: 1086092 Analysis Time...: 17:36
 Dilution Factor: 1
 Analyst ID.....: 004648 Instrument ID...: MSH
 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)

000011

TAIT ENVIRONMENTAL

Client Sample ID: MW-1

GC/MS Volatiles

Lot-Sample #....: E1C230260-001 Work Order #....: DXWJJIAE 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	1.4	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	2.0	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	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>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
<u>SURROGATE</u>			
Bromofluorobenzene	110	(75 - 120)	
1,2-Dichloroethane-d4	125	(65 - 130)	
Toluene-d8	115	(80 - 130)	

000012

TAIT ENVIRONMENTAL

Client Sample ID: MW-2

GC Semivolatiles

Lot-Sample #....: E1C230260-002 Work Order #....: DXWJN1AA Matrix.....: WATER
Date Sampled....: 03/22/01 15:30 Date Received...: 03/23/01 12:30 MS Run #.....:
Prep Date.....: 03/26/01 Analysis Date...: 03/28/01
Prep Batch #....: 1085504 Analysis Time...: 10:17
Dilution Factor: 50
Analyst ID.....: 356074 Instrument ID...: G01
Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>
TPH (as Diesel)	610	50	mg/L
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
Benzo (a)pyrene	<u>RECOVERY</u>	<u>LIMITS</u>	
	70	(60 - 130)	

NOTE(S) :

The pattern elutes within the diesel range but not a perfect match with the diesel standard used for calibration. C-range C10 to beyond C24.

TAIT ENVIRONMENTAL

Client Sample ID: MW-2

GC Volatiles

Lot-Sample #...: E1C230260-002 Work Order #...: DXWJN1AC Matrix.....: WATER
Date Sampled...: 03/22/01 15:30 Date Received...: 03/23/01 12:30 MS Run #.....: 1088183
Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
Prep Batch #...: 1088334 Analysis Time...: 22:11
Dilution Factor: 2
Analyst ID.....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	3.3	0.20	mg/L
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	84	(60 - 130)	

TAIT ENVIRONMENTAL

Client Sample ID: MW-2

GC/MS Volatiles

Lot-Sample #...: E1C230260-002 Work Order #...: DXWJN1AE Matrix.....: WATER
 Date Sampled...: 03/22/01 15:30 Date Received...: 03/23/01 12:30 MS Run #.....: 1086003
 Prep Date.....: 03/24/01 Analysis Date...: 03/24/01
 Prep Batch #...: 1086092 Analysis Time...: 19:36
 Dilution Factor: 1
 Analyst ID.....: 004648 Instrument ID...: MSH
 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	4.0	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)

TAIT ENVIRONMENTAL

Client Sample ID: MW-2

GC/MS Volatiles

Lot-Sample #...: E1C230260-002 Work Order #...: DXWJN1AE 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	1.5	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	9.0	1.0	ug/L
Naphthalene	ND	1.0	ug/L
n-Propylbenzene	4.1	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	190 I,*	(75 - 120)
1,2-Dichloroethane-d4	118	(65 - 130)
Toluene-d8	111	(80 - 130)

NOTE (S) :

I Matrix interference.
* Surrogate recovery is outside stated control limits.

TAIT ENVIRONMENTAL

Client Sample ID: MW-3

GC Semivolatiles

Lot-Sample #....: E1C230260-003 Work Order #....: DXWJR1AA Matrix.....: WATER
Date Sampled....: 03/22/01 14:55 Date Received...: 03/23/01 12:30 MS Run #.....:
Prep Date.....: 03/26/01 Analysis Date...: 03/27/01
Prep Batch #....: 1085504 Analysis Time...: 16:21
Dilution Factor: 1
Analyst ID.....: 356074 Instrument ID...: G01
Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Diesel)	1.1	1.0	mg/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Benzo(a)pyrene	84	(60 - 130)	

TAIT ENVIRONMENTAL

Client Sample ID: MW-3

GC Volatiles

Lot-Sample #....: E1C230260-003 Work Order #....: DXWJR1AC Matrix.....: WATER
Date Sampled...: 03/22/01 14:55 Date Received...: 03/23/01 12:30 MS Run #.....: 1088183
Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
Prep Batch #....: 1088331 Analysis Time...: 08:35
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	0.14	0.10	mg/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
a,a,a-Trifluorotoluene (TFT)	79	(60 - 130)	

TAIT ENVIRONMENTAL

Client Sample ID: MW-3

GC/MS Volatiles

Lot-Sample #....: E1C230260-003 Work Order #....: DXWJR1AE Matrix.....: WATER
 Date Sampled...: 03/22/01 14:55 Date Received...: 03/23/01 12:30 MS Run #.....: 1086003
 Prep Date.....: 03/24/01 Analysis Date...: 03/24/01
 Prep Batch #....: 1086092 Analysis Time...: 11:36
 Dilution Factor: 1
 Analyst ID.....: 004648 Instrument ID...: MSH
 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	1.0	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

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TAIT ENVIRONMENTAL

Client Sample ID: MW-3

GC/MS Volatiles

Lot-Sample #....: E1C230260-003 Work Order #....: DXWJR1AE 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	83	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	110	(75 - 120)
1,2-Dichloroethane-d4	114	(65 - 130)
Toluene-d8	116	(80 - 130)

QC DATA ASSOCIATION SUMMARY

E1C230260

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		1085504	
	WATER	SW846 8015B		1088331	1088183
	WATER	SW846 8260B		1086092	1086003
002	WATER	SW846 8015B		1085504	
	WATER	SW846 8015B		1088334	1088183
	WATER	SW846 8260B		1086092	1086003
003	WATER	SW846 8015B		1085504	
	WATER	SW846 8015B		1088331	1088183
	WATER	SW846 8260B		1086092	1086003

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METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E1C230260 Work Order #...: DX0651AA Matrix.....: WATER
MB Lot-Sample #: E1C260000-504
Prep Date.....: 03/26/01 Analysis Time...: 09:43
Analysis Date...: 03/27/01 Prep Batch #...: 1085504 Instrument ID...: G01
Dilution Factor: 1
Analyst ID.....: 064667

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
TPH (as Diesel)	ND	1.0	mg/L	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
	<u>RECOVERY</u>	<u>LIMITS</u>		
Benzo (a) pyrene	93	(60 - 130)		

NOTE(S) :

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1C230260 Work Order #...: DX09K1AA Matrix.....: WATER
 MB Lot-Sample #: E1C270000-092
 Prep Date.....: 03/24/01 Analysis Time...: 10:36
 Prep Batch #...: 1086092 Instrument ID...: MSH
 Analysis Date...: 03/24/01
 Dilution Factor: 1
 Analyst ID.....: 004648

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

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1C230260

Work Order #...: DX09K1AA

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	111	(75 - 120)
1,2-Dichloroethane-d4	109	(65 - 130)
Toluene-d8	115	(80 - 130)

NOTE (S) :

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E1C230260 Work Order #...: DX5351AA Matrix.....: WATER
MB Lot-Sample #: E1C290000-331
Prep Date.....: 03/28/01 Analysis Time...: 03:43
Analysis Date...: 03/28/01 Prep Batch #...: 1088331 Instrument ID...: G15
Dilution Factor: 1
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
TPH (as Gasoline)	ND	0.10	mg/L	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
a, a, a-Trifluorotoluene (TFT)	76	(60 - 130)		

NOTE (S) :

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E1C230260
MB Lot-Sample #: E1C290000-334
Analysis Date...: 03/28/01
Dilution Factor: 1

Work Order #...: DX54R1AA
Prep Date.....: 03/28/01
Prep Batch #...: 1088334
Analyst ID.....: 001464

Matrix.....: WATER
Analysis Time...: 19:28
Instrument ID...: G15

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
TPH (as Gasoline)	ND	0.10	mg/L	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
	<u>RECOVERY</u>	<u>LIMITS</u>		
a, a, a-Trifluorotoluene (TFT)	71	(60 - 130)		

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1C230260 Work Order #...: DX0651AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: E1C260000-504 DX0651AD-LCSD
 Prep Date.....: 03/26/01 Analysis Date...: 03/27/01
 Prep Batch #...: 1085504 Analysis Time...: 10:12
 Dilution Factor: 1 Instrument ID...: G01
 Analyst ID.....: 064667

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
TPH (as Diesel)	5.00	3.86	mg/L	77		SW846 8015B
	5.00	4.44	mg/L	89	14	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Benzo (a) pyrene	79	(60 - 130)
	92	(60 - 130)

NOTE (S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1C230260 Work Order #...: DX0651AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: E1C260000-504 DX0651AD-LCSD
 Prep Date.....: 03/26/01 Analysis Date...: 03/27/01
 Prep Batch #...: 1085504 Analysis Time...: 10:12
 Dilution Factor: 1 Instrument ID...: G01
 Analyst ID.....: 064667

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
TPH (as Diesel)	77	(65 - 140)			SW846 8015B
	89	(65 - 140)	14	(0-25)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Benzo (a)pyrene	79	(60 - 130)
	92	(60 - 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 #....: E1C230260 Work Order #....: DX09K1AC Matrix.....: WATER
 LCS Lot-Sample#: E1C270000-092
 Prep Date.....: 03/24/01 Analysis Date...: 03/24/01
 Prep Batch #....: 1086092 Analysis Time...: 10:06
 Dilution Factor: 1 Instrument ID...: MSH
 Analyst ID.....: 004648

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
Benzene	10.0	9.64	ug/L	96	SW846 8260B
Chlorobenzene	10.0	8.83	ug/L	88	SW846 8260B
1,1-Dichloroethene	10.0	12.4	ug/L	124	SW846 8260B
Toluene	10.0	9.64	ug/L	96	SW846 8260B
Trichloroethene	10.0	9.28	ug/L	93	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Bromofluorobenzene	112	(75 - 120)
1,2-Dichloroethane-d4	110	(65 - 130)
Toluene-d8	120	(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 Volatiles

Client Lot #...: E1C230260 Work Order #...: DX5351AC Matrix.....: WATER
 LCS Lot-Sample#: E1C290000-331
 Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
 Prep Batch #...: 1088331 Analysis Time...: 02:49
 Dilution Factor: 1 Instrument ID...: G15
 Analyst ID.....: 001464

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
TPH (as Gasoline)	1.00	1.05	mg/L	105	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
a, a, a-Trifluorotoluene (TFT)	103	(60 - 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 Volatiles

Client Lot #....: E1C230260 Work Order #....: DX54R1AC Matrix.....: WATER
 LCS Lot-Sample#: E1C290000-334
 Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
 Prep Batch #....: 1088334 Analysis Time...: 19:58
 Dilution Factor: 1 Instrument ID...: G15
 Analyst ID.....: 001464

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
TPH (as Gasoline)	1.00	0.980	mg/L	98	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
a, a, a-Trifluorotoluene (TFT)	100	(60 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E1C230260 Work Order #...: DX09K1AC Matrix.....: WATER
 ICS Lot-Sample#: E1C270000-092
 Prep Date.....: 03/24/01 Analysis Date...: 03/24/01
 Prep Batch #...: 1086092 Analysis Time...: 10:06
 Dilution Factor: 1 Instrument ID...: MSH
 Analyst ID.....: 004648

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	96	(75 - 120)	SW846 8260B
Chlorobenzene	88	(80 - 120)	SW846 8260B
1,1-Dichloroethene	124	(70 - 130)	SW846 8260B
Toluene	96	(80 - 120)	SW846 8260B
Trichloroethene	93	(75 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	112	(75 - 120)
1,2-Dichloroethane-d4	110	(65 - 130)
Toluene-d8	120	(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 EVALUATION REPORT

GC Volatiles

Client Lot #...: E1C230260 Work Order #...: DX5351AC Matrix.....: WATER
 LCS Lot-Sample#: E1C290000-331
 Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
 Prep Batch #...: 1088331 Analysis Time...: 02:49
 Dilution Factor: 1 Instrument ID...: G15
 Analyst ID.....: 001464

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	105	(60 - 130)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	103	(60 - 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 #...: E1C230260 Work Order #...: DX54R1AC Matrix.....: WATER
LCS Lot-Sample#: E1C290000-334
Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
Prep Batch #...: 1088334 Analysis Time...: 19:58
Dilution Factor: 1 Instrument ID...: G15
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	98	(60 - 130)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
a, a, a-Trifluorotoluene (TFT)	100	(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 DATA REPORT

GC/MS Volatiles

Client Lot #...: E1C230260 Work Order #...: DXR0D1AE-MS Matrix.....: WATER
 MS Lot-Sample #: E1C220216-007 DXR0D1AF-MSD
 Date Sampled...: 03/16/01 09:29 Date Received...: 03/22/01 10:00 MS Run #.....: 1086003
 Prep Date.....: 03/24/01 Analysis Date...: 03/24/01
 Prep Batch #...: 1086092 Analysis Time...: 20:06
 Dilution Factor: 5 Analyst ID.....: 004648 Instrument ID...: MSH

PARAMETER	SAMPLE SPIKE		MEASRD	UNITS	PERCENT		
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	METHOD
Benzene	ND	50.0	48.4	ug/L	97		SW846 8260B
	ND	50.0	47.0	ug/L	94	2.9	SW846 8260B
Chlorobenzene	ND	50.0	44.1	ug/L	88		SW846 8260B
	ND	50.0	44.6	ug/L	89	1.2	SW846 8260B
1,1-Dichloroethene	ND	50.0	56.4	ug/L	113		SW846 8260B
	ND	50.0	56.6	ug/L	113	0.46	SW846 8260B
Toluene	ND	50.0	47.2	ug/L	94		SW846 8260B
	ND	50.0	48.2	ug/L	96	2.2	SW846 8260B
Trichloroethene	ND	50.0	44.0	ug/L	88		SW846 8260B
	ND	50.0	44.8	ug/L	90	1.7	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Bromofluorobenzene	109	(75 - 120)
	114	(75 - 120)
1,2-Dichloroethane-d4	109	(65 - 130)
	110	(65 - 130)
Toluene-d8	114	(80 - 130)
	118	(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 #...: E1C230260 Work Order #...: DXR3X1AF-MS Matrix.....: WATER
 MS Lot-Sample #: E1C220225-005 DXR3X1AG-MSD
 Date Sampled...: 03/13/01 18:37 Date Received...: 03/22/01 10:00 MS Run #.....: 1088183
 Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
 Prep Batch #...: 1088331 Analysis Time...: 16:28
 Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID...: G15

PARAMETER	SAMPLE SPIKE MEASRD			UNITS	PERCENT		
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	METHOD
TPH (as Gasoline)	ND	1.00	0.963	mg/L	96		SW846 8015B
	ND	1.00	0.816	mg/L	82	17	SW846 8015B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
a,a,a-Trifluorotoluene (TFT)	119	(60 - 130)
	112	(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 #....: E1C230260 Work Order #....: DXR0D1AE-MS Matrix.....: WATER
 MS Lot-Sample #: E1C220216-007 DXR0D1AF-MSD
 Date Sampled...: 03/16/01 09:29 Date Received...: 03/22/01 10:00 MS Run #.....: 1086003
 Prep Date.....: 03/24/01 Analysis Date...: 03/24/01
 Prep Batch #....: 1086092 Analysis Time...: 20:06
 Dilution Factor: 5 Analyst ID.....: 004648 Instrument ID...: MSH

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Benzene	97	(75 - 120)			SW846 8260B
	94	(75 - 120)	2.9	(0-25)	SW846 8260B
Chlorobenzene	88	(80 - 120)			SW846 8260B
	89	(80 - 120)	1.2	(0-25)	SW846 8260B
1,1-Dichloroethene	113	(70 - 130)			SW846 8260B
	113	(70 - 130)	0.46	(0-25)	SW846 8260B
Toluene	94	(80 - 120)			SW846 8260B
	96	(80 - 120)	2.2	(0-25)	SW846 8260B
Trichloroethene	88	(75 - 130)			SW846 8260B
	90	(75 - 130)	1.7	(0-25)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	109	(75 - 120)
	114	(75 - 120)
1,2-Dichloroethane-d4	109	(65 - 130)
	110	(65 - 130)
Toluene-d8	114	(80 - 130)
	118	(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 #...: E1C230260 Work Order #...: DXR3X1AF-MS Matrix.....: WATER
 MS Lot-Sample #: E1C220225-005 DXR3X1AG-MSD
 Date Sampled...: 03/13/01 18:37 Date Received...: 03/22/01 10:00 MS Run #.....: 1088183
 Prep Date.....: 03/28/01 Analysis Date...: 03/28/01
 Prep Batch #...: 1088331 Analysis Time...: 16:28
 Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID...: G15

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	96	(60 - 130)			SW846 8015B
	82	(60 - 130)	17	(0-25)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
a, a, a-Trifluorotoluene (TFT)	119	(60 - 130)
	112	(60 - 130)

NOTE(S) :

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

Bold print denotes control parameters

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