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# First Quarter 2006 Groundwater Monitoring and Sampling Report

Mission Valley Rock Company 7999 Athenour Way Sunol, California

Prepared by: **Tait Environmental Management, Inc.** 

April 20, 2006

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Mission Valley Rock Company 7999 Athenour Way Sunol, California

Prepared for:

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Project No. EM-5009A

### **TABLE OF CONTENTS**

1.0	INTRODUCTION	1
2.0	OBJECTIVE AND SCOPE OF WORK	1
3.0	BACKGROUND	1
4.0	SITE HYDROGEOLOGY	2
5.0	GROUNDWATER MONITORING WELL PURGING AND SAMPLING	2
6.0	LABORATORY ANALYSES	3
7.0	SUMMARY OF ACTIVITIES AND FINDINGS	3
8.0	QUALITY ASSURANCE/QUALITY CONTROL	4
9.0	REFERENCES	4
10.0	LIMITATIONS	5
FIGU	URES	
1.	Site Vicinity Map	
2.	Site Plan	
3.	First Quarter 2006 Groundwater Contour Map (Shallow Zone)	
4.	First Quarter 2006 Groundwater Contour Map (Deep Zone)	
5.	First Quarter 2006 - TPH-G Concentrations in Groundwater (Shallow Zone)	
6.	First Quarter 2006 - TPH-G Concentrations in Groundwater (Deep Zone)	
7.	First Quarter 2006 - MTBE Concentrations in Groundwater (Shallow Zone)	

### **TABLES**

8.

1. Well Construction Details and Groundwater Elevation Data - First Quarter 2006

First Quarter 2006 - MTBE Concentrations in Groundwater (Deep Zone)

- 2. Historical Groundwater Gauging Data
- 3. Groundwater Analytical Results First Quarter 2006
- 4. Historical Groundwater Analytical Results

### **APPENDICES**

- A. Sampling Data Sheets
- B. Certificate of Disposal
- C. Laboratory Report

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# First Quarter 2006 Groundwater Monitoring and Sampling Report Mission Valley Rock Company Sunol. California

### 1.0 INTRODUCTION

This report summarizes the First Quarter 2006 groundwater monitoring and sampling event conducted at the Mission Valley Rock Company (site) located at 7999 Athenour Way in Sunol, California (Figure 1). The wells were sampled as part of the First Quarter 2006 groundwater monitoring and sampling program.

### 2.0 OBJECTIVE AND SCOPE OF WORK

The objective of the proposed scope of work was to monitor and sample the existing groundwater monitoring wells at the site (Figure 2).

The scope of work that Tait Environmental Management (TEM) developed to meet the objectives included the following tasks:

- Groundwater Monitoring & Sampling
- Laboratory Analyses
- Report Preparation
- Non-hazardous Waste Disposal

### 3.0 BACKGROUND

In May 1996, Tank Protect Engineering (TPE) removed one gasoline and two diesel underground storage tanks (USTs). During June 1998, three groundwater monitoring wells (MW-1, MW-2, and MW-3) were installed at the site. Quarterly groundwater monitoring continued from January 1999 through March 2000 (TEM, 2000).

In June 2000, TEM assumed the contract for environmental services at the site. In December 2002, eight soil borings (TB-1 through TB-8) were drilled and sampled at the site using a direct-push rig.

In January 2005, eight additional soil borings were advanced at the site using a hollow-stem auger drill rig. Six of the borings were converted to single-, double-, and triple-completion groundwater monitoring wells for a total of 12 wells. Groundwater monitoring well MW-2 was abandoned. The work was performed in accordance with the Alameda County Environmental Health Services (ACEHS) directive of November 16, 2004, which requested the collection of depth-discrete groundwater samples from the site (ACEHS, 2004)

Quarterly groundwater monitoring and sampling have been conducted by TEM from the Fourth



Quarter 2000 through the present.

### 4.0 SITE HYDROGEOLOGY

The site is located within the Sunol Valley at an elevation of approximately 260 feet above mean sea level (USGS, 1989). The land surface at the site has been disturbed by excavation activities; however, the natural surface slopes at a gradient of approximately 35 feet per mile toward San Antonio Creek to the east-northeast. San Antonio Creek flow is toward the northwest.

Drilling and sampling activities at the site indicate that a discontinuous clay layer is present below the surficial gravels to depths of 10 to 15 feet below ground surface (bgs), with the exception of the area at MW-2S/2M/2D, where the clay layer extends to a depth of 25 feet bgs (TEM, 2005). Soils below the clay layer to the maximum depth explored (30 feet bgs) consist primarily of gravelly sand and sandy gravel mixtures.

Groundwater levels are measured from the shallow-zone and deep-zone wells. The levels are generally similar between the zones, and the groundwater zones appear to be generally hydraulically continuous.

Based on the First Quarter 2006 groundwater monitoring data, the depth to groundwater at the site averaged 2.30 feet bgs. This represents an overall average rise in the groundwater table of about five feet relative to the Fourth Quarter 2005 groundwater monitoring event. The apparent groundwater flow direction in both the shallow-zone and the deep-zone wells is to the southeast at a gradient of about 0.02 feet/foot (Figures 3 and 4). The flow direction is opposite to the regional northwestern groundwater flow direction in the Sunol Valley as reported by the ACEHS in their letter to Mission Valley Rock Company, dated November 3, 2005 (ACEHS, 2005). The variation from the regional trend may reflect local conditions, and the groundwater levels at the site may be affected by excavation and pumping operations related to aggregate extraction at the site.

### 5.0 GROUNDWATER MONITORING WELL PURGING AND SAMPLING

On March 2, 2006, static groundwater levels were measured and recorded in the on-site groundwater monitoring wells using an electrical product/water interface meter. Water levels were measured relative to the top of the well casing (representing the wellhead survey point). Prior to use at each well, the meter was decontaminated with a mild detergent solution and two de-ionized water rinses. Groundwater gauging and elevation data for the First Quarter 2006 event are summarized in Table 1. Historical groundwater elevation data are summarized in Table 2. Groundwater sampling data sheets are presented in Appendix A.

On March 2 and 3, 2006, the groundwater monitoring wells were sampled using a Waterra inertial pump as part of the First Quarter 2006 groundwater monitoring and sampling event. Groundwater samples were collected from 14 wells at the site. The samples were labeled, placed into an ice-chilled cooler (4°C), and transported under chain-of-custody protocols to

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SunStar Laboratories, Inc. (SunStar), a State-Certified laboratory (ELAP No. 2250) for chemical analysis. Approximately 65 gallons of purged groundwater were pumped into two steel 55-gallon drums during the sampling event. Groundwater samples were collected from the discharge end of the pump at low-flow levels and transferred into laboratory-supplied containers. Care was taken to ensure that no headspace was present in the containers.

Integrated Waste Management of Milpitas, California provided pick-up services for the drummed purge water generated by the monitoring activities. The drums were transported and disposed as non-hazardous water at Seaport Refining & Environmental in Redwood City, California on March 23, 2006. The Certificate of Disposal is contained in Appendix B.

### 6.0 LABORATORY ANALYSES

The groundwater samples collected during the First Quarter 2006 groundwater monitoring and sampling event were analyzed for:

- The diesel and gasoline fractions of Total Petroleum Hydrocarbons (TPHd and TPHg, respectively) using EPA Method No. 8015M.
- Benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary butyl ether (MTBE), and the other fuel oxygenates tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), di-isopropyl ether (DIPE), and ethyl tertiary-butyl ether (ETBE) using EPA Method No. 8260B.

Dissolved-phase TPHg concentrations in the shallow groundwater zone are presented in Figure 5, and deep-zone TPHg concentrations are contoured in Figure 6. Dissolved-phase MTBE concentrations in shallow-zone wells are contoured in Figure 7, and deep-zone MTBE isoconcentration contours are presented in Figure 8.

First Quarter 2006 groundwater analytical results are summarized in Table 3, and a copy of the laboratory analytical report is presented in Appendix C. Historical groundwater analytical results are summarized in Table 4.

### 7.0 SUMMARY OF ACTIVITIES AND FINDINGS

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

 Based on the depth to water measurements obtained by TEM, groundwater levels averaged 2.30 feet bgs, which is approximately five feet higher than the water levels measured in the wells during the Fourth Quarter 2005 groundwater monitoring event. The groundwater flow direction in both the shallow-zone and deep-zone wells is to the southeast at a gradient of approximately 0.02 feet/foot.



- Fourteen (14) groundwater samples were collected from the monitoring wells at the site, and they were delivered to SunStar for analysis.
- A maximum TPHd concentration of 45,000 µg/L was detected in well MW-7D.
- A maximum TPHg concentration of 71,000 μg/L was detected in well MW-7D.
- A maximum benzene concentration of 420 µg/L was detected in well MW-7D.
- A maximum shallow-zone MTBE concentration of 60 μg/L was detected in well MW-6S.
- The maximum MTBE concentration in the deep-zone wells was 140 μg/L in well MW-3.
- In general, the levels of hydrocarbons decreased relative to their respective Fourth Quarter 2005 concentrations.
- MTBE concentrations were centered in the area downgradient from the former USTs in the vicinity of wells MW-3S/D and MW-6S/D.
- Based on groundwater sampling data, the BTEX concentrations were low except in well MW-7D, and fuel oxygenates other than MTBE were not detected above laboratory reporting limits.

### 8.0 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 program includes formal procedures for sampling, decontamination, instrument calibration, documentation of activities and calculations, and peer review. Routine QC procedures were performed by the laboratory and included daily calibration of instruments, percent surrogate recoveries and analysis of matrix spikes and matrix spike duplicates. The laboratory reported the results to be within acceptable percent recoveries with no results exceeding the laboratory-established control limits.

### 9.0 REFERENCES

Alameda County Environmental Health Services, November 16, 2004, *Fuel Leak Case No. R00000207*, Mission Valley Rock and Asphalt, 7999 Anthenour Way, CA.

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Alameda County Environmental Health Services, November 3, 2005, *Fuel Leak Case No. RO0000207*, Mission Valley Rock and Asphalt, 7999 Anthenour Way, CA.

Tait Environmental Management, July 28, 2000, Second Quarter Report, June 2000, Mission Valley Rock Company, 7999 Athenour Way, Sunol, California 94586.

Tait Environmental Management, April 1, 2005, Site Assessment and First Quarter 2005 Groundwater Monitoring and Sampling Report, Mission Valley Rock Company, 7999 Athenour Way, Sunol, California 94586.

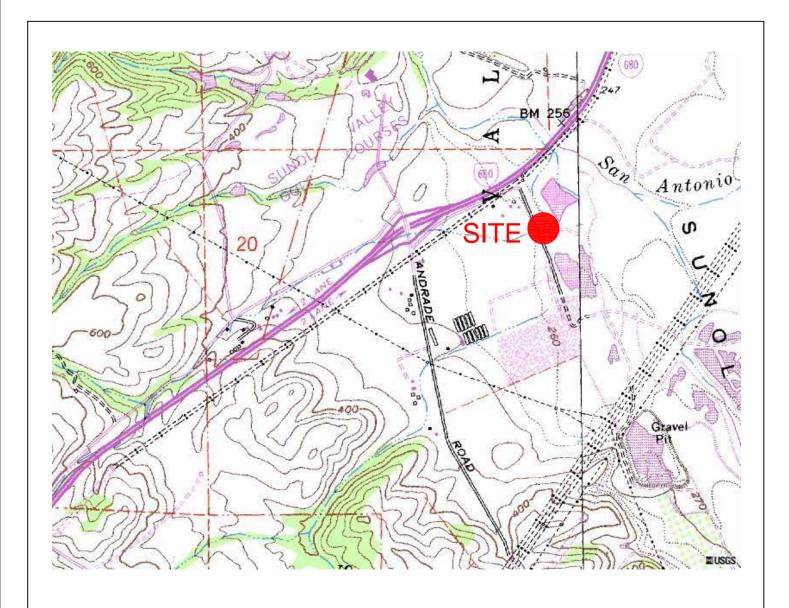
U.S. Geological Survey (USGS), 1989, Fremont 7.5 Minute Topographic Quadrangle Map, 1:24,000.

### 10.0 LIMITATIONS

No investigation is considered thorough enough to exclude the presence of hazardous materials at a given site. Opinions and/or recommendations presented apply to site conditions existing at the time of the performance of services and 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. No responsibility is assumed by TEM for conditions it is 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. TEM is 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.

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

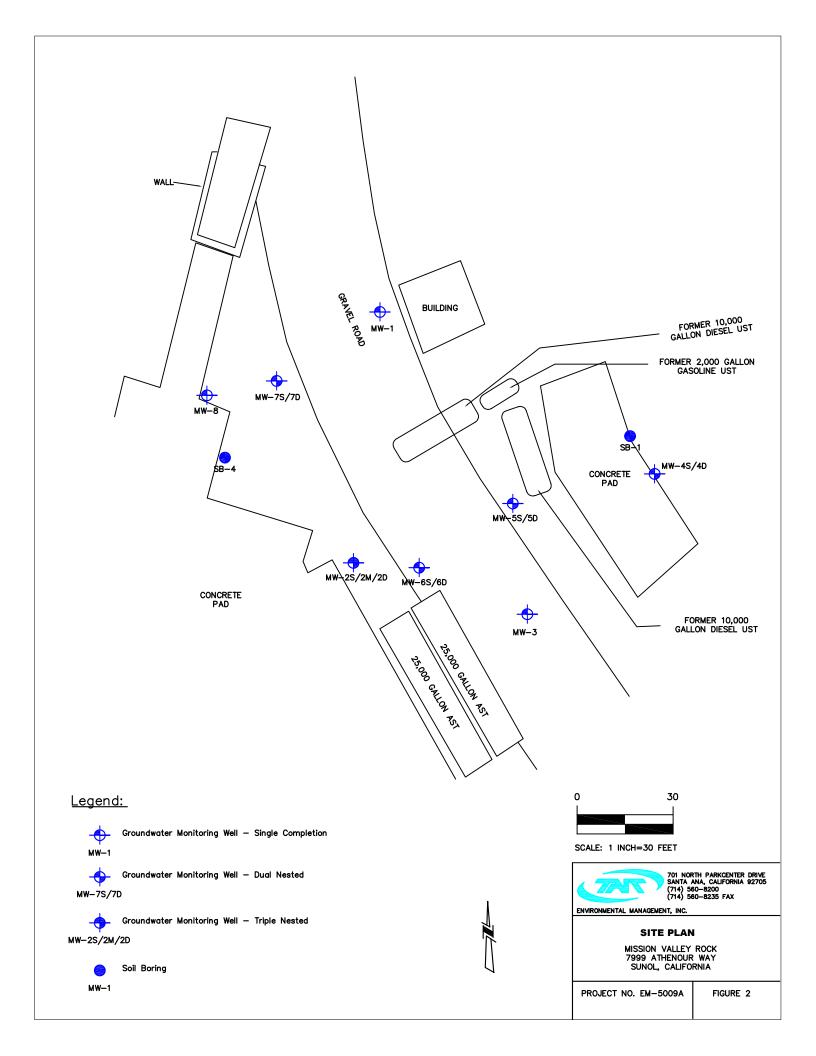


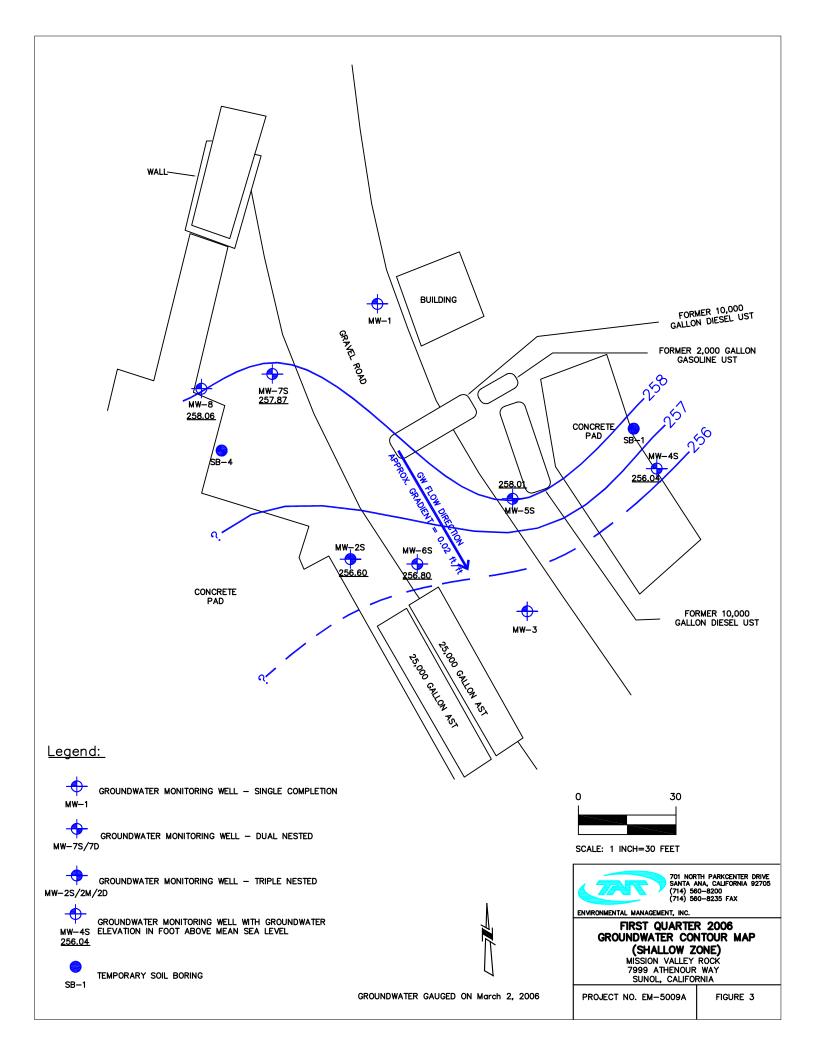
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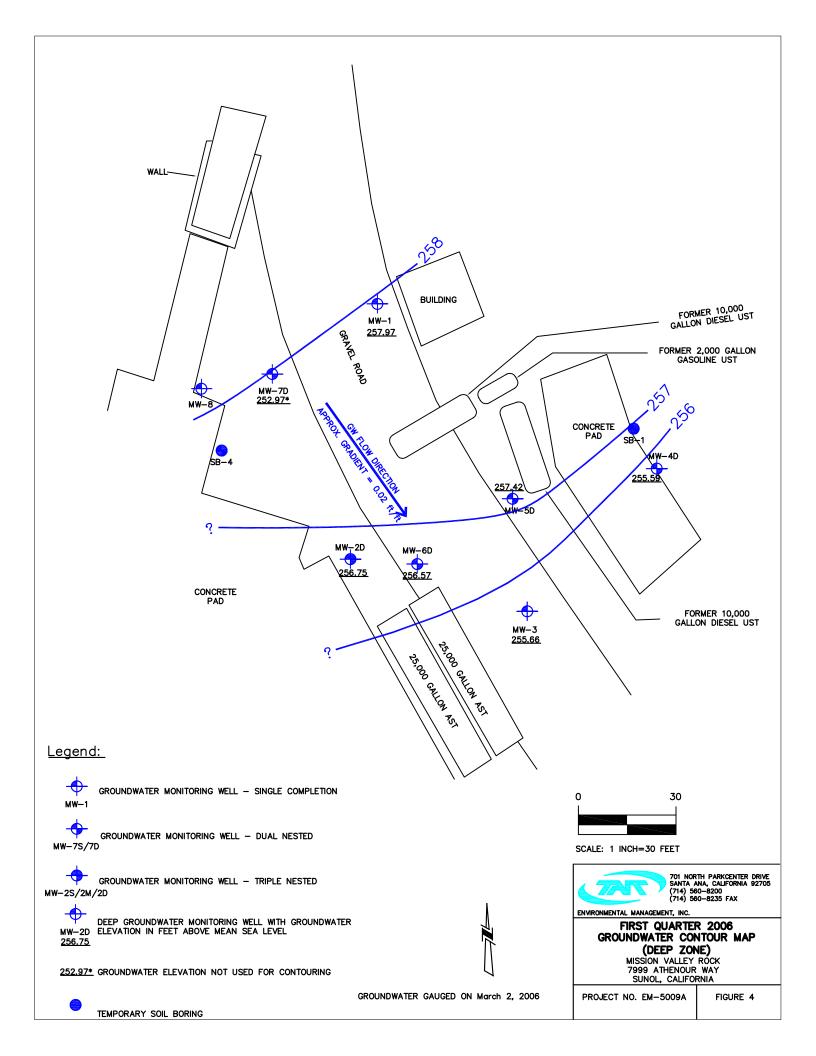
SITE VICINITY MAP MISSION VALLEY ROCK CO. 7999 ATHENOUR WAY SUNOL, CALIFORNIA

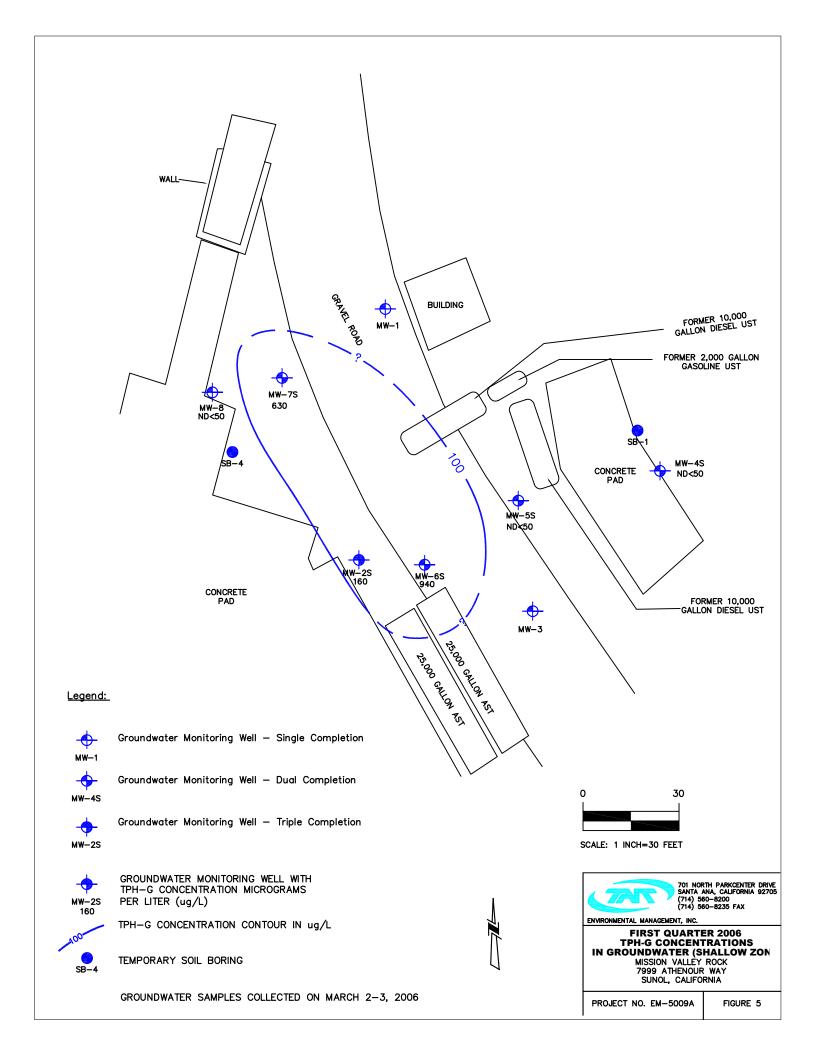
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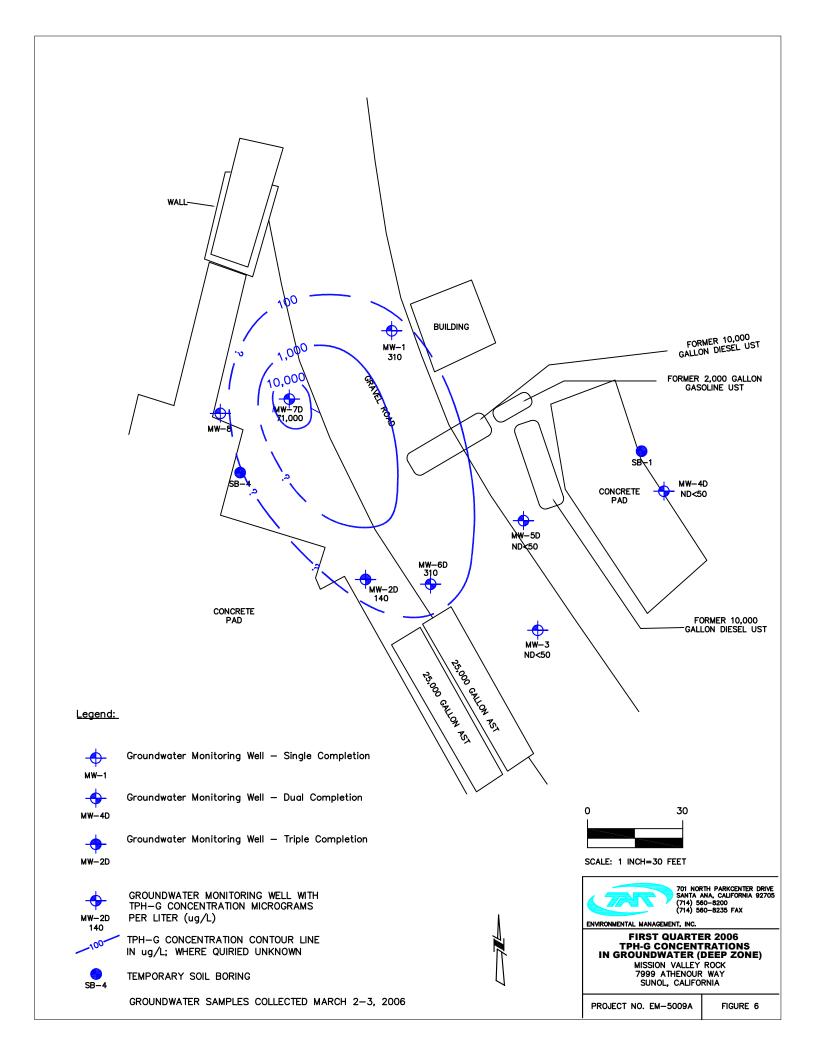
FIGURE 1

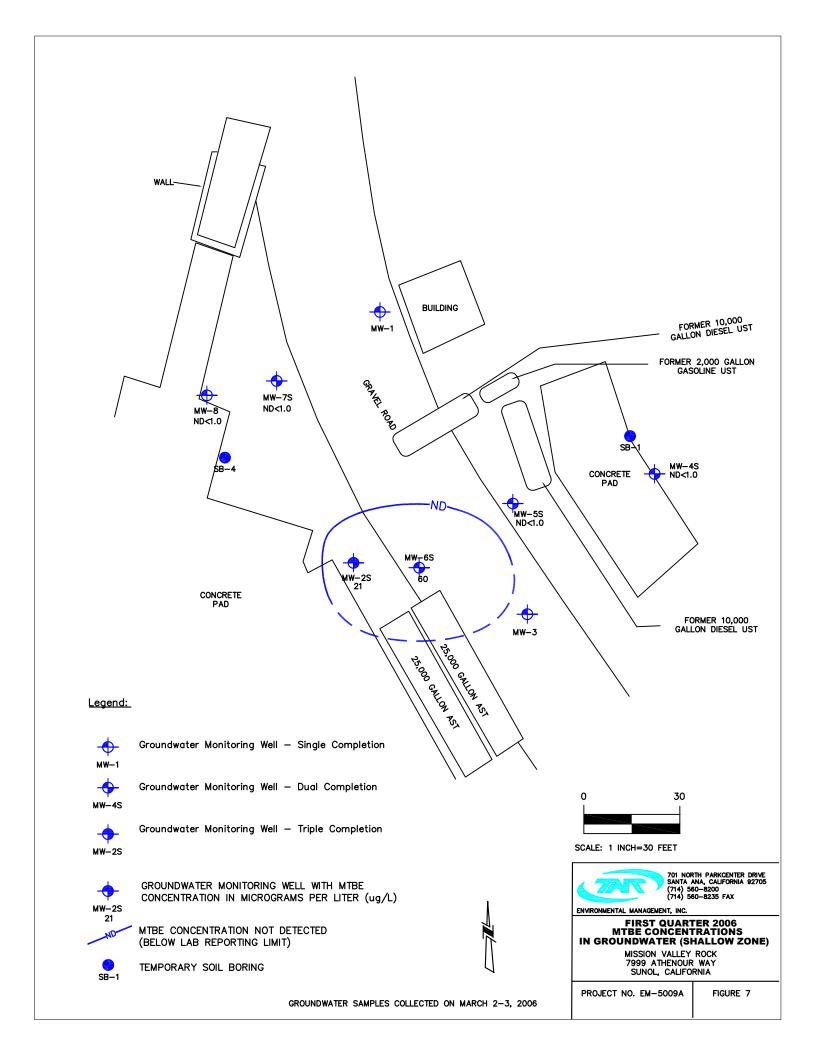


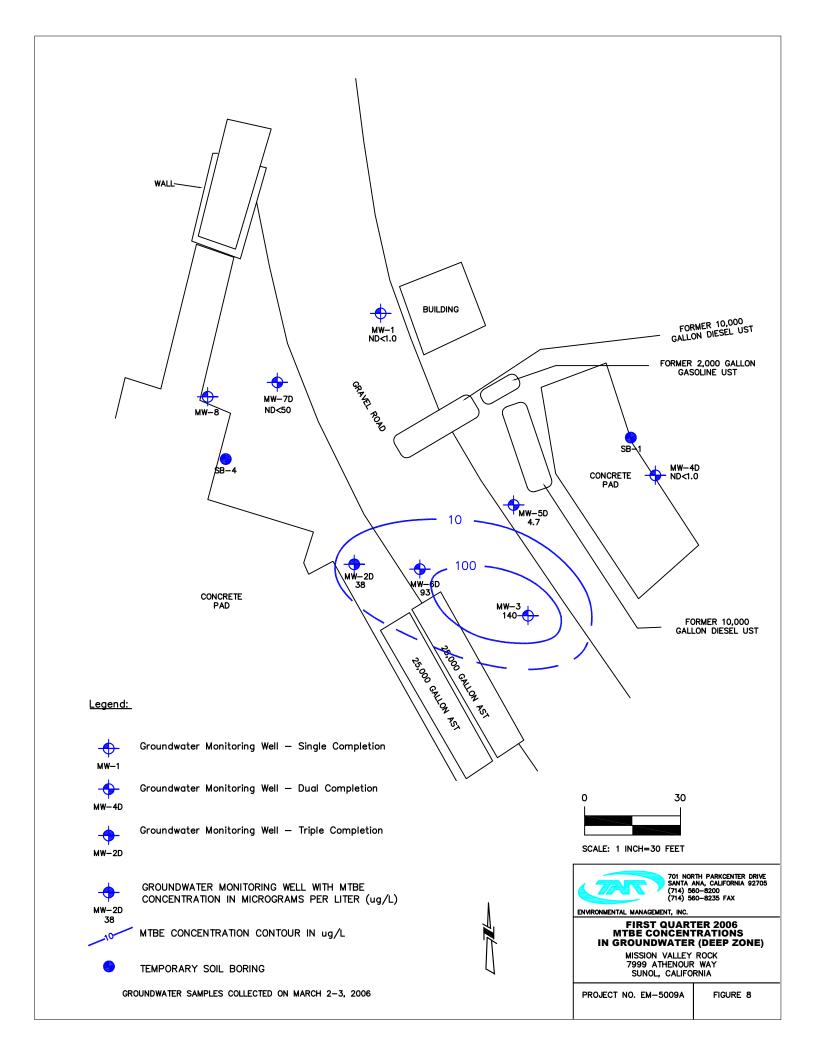














# Table 1 Well Construction Details and Groundwater Elevation Data First Quarter 2006

Mission Valley Rock Company Sunol, California

Well ID	Casing Diameter (inches)	Depth to Water (feet below TOC)	Total Depth (feet below TOC)	Screened Interval (feet bgs)	Measuring Point Elevation (feet MSL)	Groundwater Elevation (feet MSL)
MW-1	2	0.71	17.55	5.0 - 20.0	258.68	257.97
MW-2S	2	2.24	8.50	3.0-8.0	258.84	256.60
MW-2M	2	2.10	18.76	14.0-19.0	258.99	256.89
MW-2D	2	2.16	29.43	25.0-30.0	258.91	256.75
MW-3	2	3.42	15.55	5.0-20.0	259.08	255.66
MW-4S	2	3.10	8.15	3.0-8.0	259.14	256.04
MW-4D	2	3.63	23.19	17.0-22.0	259.22	255.59
MW-5S	2	1.42	8.01	3.0-8.0	259.43	258.01
MW-5D	2	1.98	22.68	17.0-22.0	259.40	257.42
MW-6S	2	1.95	14.79	5.0-15.0	258.75	256.80
MW-6D	2	2.70	28.95	24.5-29.5	259.27	256.57
MW-7S	2	0.95	8.38	5.0-8.0	258.82	257.87
MW-7D	2	5.10	22.57	20.0-25.0	258.07	252.97
MW-8	2	0.78	15.10	5.0-15.0	258.84	258.06

Screened intervals are approximated. Screened interval in wells is lower than the measured total depth due to silting in the bottom of wells. The measurement point for the above 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 2, 2006.

Total depth and depth to water measurements taken by Tait Environmental Management from designated measurement point. Groundwater Elevation = Measurement Point Elevation - Depth to Water.

TOC = Top of Casing

bgs = Below Ground Surface

MSL = Mean Sea Level

# Table 2 Historical Groundwater Gauging Data Mission Valley Rock Company Sunol, California

	I – .				
	Top of			_	
Well	Casing	Date	Depth to Water	Groundwater	LPH Thickness
	Elevation	Daio	(feet below TOC)	Elevation (feet MSL)	(feet)
	(Feet)				
MW-1	256.51	06/01/98	1.32	255.19	ND
		01/01/99	2.28	254.23	ND
		03/01/99	1.88	254.63	ND
		06/01/99	3.35	253.16	ND
		09/01/99	3.66	252.85	ND
		12/01/99	2.94	253.57	ND
		03/01/00	2.72	253.79	Odor
		06/01/00	4.01	252.50	Slight Odor
		09/01/00	5.11	251.40	Slight Odor
		12/01/00	4.95	251.56	ND
		03/01/01	2.28	254.23	ND
		06/01/01 09/01/01	3.60	252.91	ND ND
			6.50 1.29	250.01	ND ND
		12/01/01 03/01/02	2.91	255.22 253.60	ND
		06/02/02	3.95	252.56	ND ND
		09/02/02	5.18	252.36	ND ND
		12/01/02	3.90	252.61	ND ND
		03/01/03	1.40	255.11	ND ND
		06/03/03	2.65	253.86	ND ND
		09/19/03	4.67	251.84	ND ND
		12/03/03	4.60	251.91	ND ND
	258.68	01/17/05	3.41	255.27	ND ND
	256.06	05/04/05	1.20	257.48	ND ND
		08/12/05	4.52	254.16	ND ND
		12/12/05	6.44	252.24	ND
		03/02/06	0.71	257.97	ND ND
MW-2	256.7	06/01/98	1.72	254.98	0.005
1V1 V V -Z	250.7	01/01/99	2.69	254.01	4.00
		03/01/99	2.50	254.20	ND
		06/01/99	4.00	252.70	Sheen
		09/01/99	4.54	252.16	0.50
		12/01/99	3.85	252.85	0.13
		03/01/00	3.20	253.50	0.03
		06/01/00	4.62	252.08	0.02
		09/01/00	5.95	250.75	>0.01
		12/01/00	5.65	251.05	0.07
		03/01/01	3.21	253.49	0.10
		06/01/01	3.31	253.39	0.06
		09/01/01	7.08	249.62	0.34
		12/01/01	2.18	254.52	0.26
		03/01/02	3.40	253.30	0.90
		06/02/02	4.35	252.35	0.08
		09/02/02	5.54	251.16	ND
		12/01/02	4.30	252.40	ND
		03/01/03	1.78	254.92	ND
		06/03/03	3.10	253.60	ND
		09/19/03	5.02	251.68	ND
		12/03/03	NM	NM	NM
	1	01/05/05	i	Abandoned	

# Table 2 Historical Groundwater Gauging Data Mission Valley Rock Company Sunol, California

Well	Top of Casing Elevation (Feet)	Date	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)	LPH Thickness (feet)
MW-2S	258.84	01/17/05	4.25	254.59	ND
		05/04/05	1.98	256.86	ND
		08/12/05	5.46	253.38	ND
		12/12/05	7.38	251.46	ND
		03/02/06	2.24	256.60	ND
MW-2M	258.99	01/17/05	4.68	254.31	ND
		05/04/05	2.32	256.67	ND
		08/12/05	5.77	253.22	ND
		12/12/05	7.78	251.21	ND
101/05	0.50.04	03/02/06	2.1	256.89	ND ND
MW-2D	258.91	01/17/05	4.75	254.16	ND ND
		05/04/05	2.38	256.53	ND ND
		08/12/05	5.90	253.01	ND ND
		12/12/05 03/02/06	7.85 2.16	251.06	ND ND
MW-3	050.70	06/01/98	2.66	256.75	ND ND
IVIVV-3	256.72	01/01/99	2.00 4.47	254.06 252.25	
	-	03/01/99	3.96	252.25	Slight Odor Sheen
		06/01/99	5.54	251.18	ND
		09/01/99	6.18	250.54	Sheen
		12/01/99	5.52	251.20	Odor
		03/01/00	4.61	252.11	Odor
		06/01/00	6.35	250.37	Very Slight Odor
		09/01/00	7.30	249.42	Very Slight Odor
		12/01/00	7.29	249.43	ND
		03/01/01	4.73	251.99	ND
		06/01/01	NM	NM	NM
		09/01/01	7.89	248.83	ND
		12/01/01	3.77	252.95	ND
		03/01/02	5.12	251.60	ND
		06/02/02	6.52	250.20	ND
		09/02/02	7.28	249.44	ND
		12/01/02	6.40	250.32	ND
		03/03/03	4.01	252.71	ND
		06/03/03	5.13	251.59	ND
		09/19/03	5.13	251.59	ND
		12/03/03	7.20	249.52	ND
	259.08	01/17/05	5.81	253.27	ND
	[	05/04/05	3.50	255.58	ND
		08/12/05	6.01	253.07	ND
		12/12/05	8.45	250.63	ND
		03/02/06	3.42	255.66	ND
MW-4S	259.14	01/17/05	4.62	254.52	ND
		05/04/05	3.73	255.41	ND ND
		08/12/05	3.45	255.69	ND ND
		12/12/05	5.48	253.66	ND ND
	1 050 00	03/02/06	3.1	256.04	ND ND
MW-4D	259.22	01/17/05	5.96	253.26	ND
		05/04/05	3.93	255.29	ND ND
		08/12/05	5.60	253.62	ND

# Table 2 Historical Groundwater Gauging Data

Mission Valley Rock Company Sunol, California

Well	Top of Casing Elevation (Feet)	Date	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)	LPH Thickness (feet)
		12/12/05	8.50	250.72	ND
		03/02/06	3.63	255.59	ND
MW-5S	259.43	01/17/05	4.57	254.86	ND
		05/04/05	2.50	256.93	ND NB
		08/12/05	5.30	254.13	ND ND
		12/12/05 03/02/06	7.68 1.42	251.75	ND ND
NAVA ( 5 D	050.40			258.01	ND ND
MW-5D	259.40	01/17/05	5.15	254.25	ND
		05/04/05	2.75	256.65	ND
		08/12/05	5.60	253.80	ND
		12/12/05 03/02/06	7.92 1.98	251.48 257.42	ND ND
100	050.75				ND ND
MW-6S	258.75	01/17/05	4.30	254.45	ND
		05/04/05	1.96	256.79	ND
		08/12/05	5.17	253.58	ND
		12/12/05	7.48 1.95	251.27	ND
NAVA ( O D	050.07	03/02/06		256.80	ND
MW-6D	259.27	01/17/05	5.17	254.10	ND ND
		05/04/05	2.80	256.47	ND ND
		08/12/05 12/12/05	6.30	252.97	ND ND
		03/02/06	8.32 2.7	250.95 256.57	ND ND
NAVA 70	050.00	01/17/05		255.40	ND ND
MW-7S	258.82		3.42		ND
		05/04/05 08/12/05	1.44	257.38 254.02	ND ND
		12/12/05	4.80 6.64	254.02	ND ND
		03/02/06	0.95	252.16	ND ND
MW-7D	258.07	01/17/05		252.57	ND ND
IVIVV-7D	258.07	05/04/05	5.50	256.62	
		08/12/05	1.45 4.70	253.37	ND ND
		12/12/05	7.40	250.67	ND ND
		03/02/06	7.40 5.10	250.67	
MW-8	258.84	01/17/05	3.45	255.39	Gasoline odor ND
IVIVV-O	200.04	05/04/05	1.25	257.59	ND ND
		08/12/05	4.92	253.92	ND ND
		12/12/05	6.67	252.17	ND ND
		03/02/06	0.78	258.06	ND ND

Groundwater elevations reported in feet above mean sea level (msl).

Adjusted groundwater elevation = Measurement Point Elevation - Depth to Water + (LPH Thickness x 0.75)

NM = Not Measured

ND = Not Detected

TOC = Top of Casing

MSL = Mean Sea Level

 $\mathsf{LPH} = \mathsf{Liquid}\text{-}\mathsf{Phase}\;\mathsf{Hydrocarbon}$ 

# Table 3 Groundwater Analytical Results First Quarter 2006

Mission Valley Rock Company Sunol, California

Well	Date	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	TBA (ug/L)
MW-1	3/3/2006	ND<50	310	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<10
MW-2S	3/3/2006	5900	160	ND<0.5	ND<0.5	ND<0.5	ND<1.0	21	ND<10
MW-2M	3/3/2006	ND<50	290	ND<0.5	ND<0.5	0.5	ND<1.0	17	ND<10
MW-2D	3/3/2006	ND<50	140	ND<0.5	ND<0.5	ND<0.5	ND<1.0	38	ND<10
MW-3	3/3/2006	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	140	ND<10
MW-4S	3/3/2006	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<10
MW-4D	3/3/2006	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<10
MW-5S	3/3/2006	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<10
MW-5D	3/3/2006	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	4.7	ND<10
MW-6S	3/3/2006	ND<50	940	ND<0.50	ND<0.50	4.9	ND<1.0	60	ND<10
MW-6D	3/3/2006	ND<50	310	ND<0.50	ND<0.5	ND<0.5	ND<1.0	93	ND<10
MW-7S	3/3/2006	ND<50	630	1.1	9.0	31	78	ND<1.0	ND<10
MW-7D	3/3/2006	45000	71000	420	2400	4400	11300	ND<1.0	ND<10
MW-8	3/3/2006	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<10

#### Notes:

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

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

Tert-amyl methyl ether (TAME), Di-isoproppyl ether (DIPE), and Ethyl tert-butyl ther (ETBE) were not detected above laboratory detection limits.

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

NM = Not Measured

mg/L = Milligrams per Liter

ug/L = Micrograms per Liter

ND = Non-detect at or above corresponding laboratory reporting limit.

Monitoring wells MW-1 and MW-3 were sampled on December 13, 2005.

# Table 4 Historical Groundwater Analytical Results Mission Valley Rock Company Sunol, California

Well	Date	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
weii	Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
	06/01/98	0.1	3,100	19	2.3	91	48	110
				3.1				ND<0.50
	10/01/98	0.1	2,300		4.2	5.0	15	
	12/01/98	350	ND<50	12	7.5	20	6.2	ND<5.0
	03/01/99	190	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/01/99	210	1,800	1.2	0.9	1.5	4.6	ND<0.5
	09/01/99	62	180	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5
	12/01/99	290	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	03/01/00	86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/01/00	70	450	2.1	ND<0.5	2.1	1.4	7.6
	09/01/00	ND<50	850	5.4	ND<0.50	9.4	2.6	9.8
MW-1	12/01/00	ND<1,000	370	5.3	ND<1.0	2.7	ND<3.0	55
	03/01/01	ND<1,000	700	ND<1.0	ND<1.0	1.4	ND<1.0	ND<1.0
	06/01/01	ND<1,000	170	ND<1.0	ND<1.0	1.2	ND<1.0	ND<1.0
	09/01/01	ND<1,000	730	1.4	ND<1.0	7.6	1.2	ND<1.0
	12/01/01	1000	500	15	ND<1.0	27	5.5	ND<1.0
	03/02/02	12000	29000	50	ND<25	960	290	ND<25
	06/02/02	ND<1,000	1400	3.5	ND<1.0	42	7.9	ND<1.0
	09/02/02	1400	760	ND<1.0	ND<1.0	4.3	1.1	ND<1.0
	12/01/02	ND<1,000	1600	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	03/01/03	ND<1,000	620	1.2	ND<1.0	12	ND<1.0	ND<1.0
	06/03/03	ND<1,000	0.61	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	09/01/03	ND<1,000	1.2	ND<1.0	ND<1.0	6.4	ND<1.0	ND<1.0
	12/03/03	ND<1,000	0.49	ND<1.0	ND<1.0	3.0	ND<1.0	ND<1.0
	01/17/05	ND<50	63	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
	05/04/05	ND<50	1200	ND<0.5	ND<0.5	8.5	1.2	ND<1.0
	08/12/05	ND<50	410	ND<0.5	ND<0.5	2.4	ND<0.5	ND<1.0
	12/13/05	ND<50	750	3.8	ND<0.5	4.2	ND<1.0	ND<1.0
	03/03/06						ND<1.0	
$\vdash$		ND<50	310	ND<0.5	ND<0.5	ND<0.5		ND<1.0
	06/01/98	12,000	2,500	0.68	ND<0.50	1.2	0.57	14
	10/01/98	4,300	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	12/01/98	38,000	ND<5,000	ND<50	ND<50	51	190	ND<500
	03/01/99	580	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/01/99	4,500	24,000	38	27	41	98	ND<0.5
	09/01/99	24,000	1,400	ND<0.50	ND<0.50	ND<0.50	ND<0.50	27
	12/01/99	2,300	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	03/01/00	620	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/01/00	1,700	270	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17
	09/01/00	5,800	130	ND<0.50	ND<0.50	ND<0.50	0.94	12
MW-2	12/01/00	19,000	1700	ND<50	ND<50	ND<50	ND<150	ND<250
IVIVV-Z	03/01/01	610000	3300	ND<1.0	ND<1.0	ND<1.0	ND<1.0	9.0
	06/01/01	8800	1800	ND<1.0	ND<1.0	ND<1.0	ND<1.0	6.7
	09/01/01	530000	7000	ND<50	ND<50	ND<50	ND<50	ND<50
	12/01/01	27000	310	ND<1.0	ND<1.0	ND<1.0	ND<1.0	62
	03/02/02	65000	130	ND<1.0	ND<1.0	ND<1.0	ND<1.0	30
	06/02/02	130000	460	ND<1.0	ND<1.0	ND<1.0	ND<1.0	24
	09/02/02	480000	290	ND<1.0	ND<1.0	ND<1.0	ND<1.0	16
	12/01/02	61000	1800	ND<1.0	ND<1.0	ND<1.0	ND<1.0	10
	03/01/03	5000	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	14
	06/17/03	8.1	360	ND<1.0	ND<1.0	ND<1.0	ND<1.0	20
	09/19/03	85	12	ND<1.0	ND<1.0	ND<1.0	ND<1.0	15
	12/03/03	- 00	1-	145 (1.0	NS	145 (1.0	145 (1.0	
	01/17/05				Abando	ned		
MW-2S	01/17/05	4400	700	ND 0.50			2.5	
10100-23		1100	730	ND<0.50	ND<0.50	1.0	3.5	50
	05/04/05	8200	190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	44
	08/12/05	6100	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	77
	12/12/05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	26
	03/03/06	5900	160	ND<0.5	ND<0.5	ND<0.5	ND<1.0	21
MW-2M	01/17/05	4100	3300	6.5	1.7	89	82.2	38
	05/04/05	ND<50	610	ND<0.5	ND<0.5	16	10.6	32
	08/12/05	ND<50	460	ND<0.5	ND<0.5	2.5	1.2	56
	12/12/05	ND<50	410	ND<0.5	ND<0.5	ND<0.5	ND<1.0	28
	03/03/06	ND<50	290	ND<0.5	ND<0.5	0.5	ND<1.0	17
MANA/ OD								
MW-2D	01/17/05	1800	1000	6.5	ND<0.50	80	71	62
	05/04/05	ND<50	250	ND<0.5	ND<0.5	4.6	1.6	72
	08/12/05	ND<50	ND<50	ND<0.5	ND<0.5	2.8	1.1	51
	12/12/05	ND<50	200	ND<0.5	ND<0.5	ND<0.5	ND<1.0	39
LI	03/03/06	ND<50	140	ND<0.5	ND<0.5	ND<0.5	ND<1.0	38
MW-3	06/01/98	12,000	300	0.80	ND<0.50	ND<0.50	ND<0.50	150
	10/01/98	6400	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	12/01/98	5,600	ND<100	1.6	1.4	ND<1.0	ND<1.0	110
	03/01/99	150	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/01/99	620	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	09/01/99	1,500	230		ND<0.50	ND<0.50	ND<0.50	89
	12/01/99	58	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	03/01/00	94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/01/00	240	170	ND<0.5	0.52	ND<0.5	ND<0.5	100
	09/01/00	850	170	0.81	ND<0.50	ND<0.50	ND<0.50	68
	12/01/00	1600	230	ND<1.0	ND<1.0	ND<1.0	ND<3.0	80
1	03/01/01 06/01/01	1100	140	ND<1.0	ND<1.0	ND<1.0	ND<1.0	83
		NS	NS	NS	NS	NS	NS	NS

# Table 4 Historical Groundwater Analytical Results Mission Valley Rock Company Sunol, California

				_		I		
Well	Date	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
	09/01/01	3800	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	45
	12/01/01	3100	340	1.4	1.1	10	3.8	45
	03/02/02	1500	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	50
	06/02/02	ND<1000	160	ND<1.0	ND<1.0	ND<1.0	ND<1.0	36
	09/02/02	ND<1000	ND<1000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	43
	12/01/02	ND<1000	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	41
	03/01/03	ND<1000	ND<100	ND<2.5	ND<2.5	ND<2.5	ND<2.5	92
	06/03/03	1200.0	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	93
	09/19/03	ND<1000	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	65
	12/01/03	5700	190	ND<2.0	ND<2.0	ND<2.0	ND<2.0	56
	01/17/05	ND<50	590	ND<0.50	ND<0.50	ND<0.50	ND<0.50	47
	05/04/05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	190
	08/11/05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	110
	12/13/05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	75
	03/03/06	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	140
MW-4S	01/17/05	ND<50	65	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
	05/04/05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0
	08/12/05	ND<50	ND<50	ND<0.5	ND<0.5	2.2	5.8	ND<1.0
	12/12/05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
	03/03/06	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-4D	01/17/05	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
	05/04/05	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
	08/12/05	ND<50	410	ND<0.5	2.20	10.0	25.5	ND<1.0
	12/12/05	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0
	03/03/06	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0
MW-5S	01/17/05	ND<50	ND<50	ND<0.50	4.5	ND<0.50	ND<0.50	ND<1.0
	05/04/05	ND<50	ND<50	ND<0.50	ND<0.5	ND<0.50	ND<0.50	ND<1.0
	08/11/05	ND<50	ND<50	ND<0.50	ND<0.5	ND<0.50	ND<0.50	6
	12/12/05	ND<50	ND<50	3.4	1.3	ND<0.50	ND<1.0	ND<1.0
NAVA ( ED.	03/03/06	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0
MW-5D	01/17/05	ND<50	210	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
	05/04/05	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10
	08/11/05	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6
	12/12/05 03/03/06	ND<50	ND<50 ND<50	ND<0.50	ND<0.50	ND<0.50 ND<0.50	ND<1.0	ND<1.0
MW-6S	03/03/00	ND<50	1600	ND<0.50	ND<0.50		ND<1.0	5 160
10100-03	05/04/05	2800 ND<50	750	6.1 ND<0.5	ND<0.50 ND<0.5	3.6 3.0	2.3 ND<0.5	160
	08/12/05	1300	1100	ND<0.50	ND<0.50	ND<0.50	ND<0.50	410
	12/12/05	ND<50	1000	ND<0.50	ND<0.50	1.4	ND<0.50	190
	03/03/06	ND<50	940	ND<0.50	ND<0.50	4.9	ND<1.0	60
MW-6D	01/17/05	2100	1200	10	ND<0.50	1.6	2.2	180
IVIVV OD	05/04/05	ND<50	360	2	ND<0.5	ND<0.5	ND<0.5	360
	08/12/05	ND<50	480	2	ND<0.5	ND<0.5	ND<0.5	270
	12/12/05	ND<50	240	ND<0.50	ND<0.5	ND<0.5	ND<1.0	92
	03/03/06	ND<50	310	ND<0.50	ND<0.5	ND<0.5	ND<1.0	93
MW-7S	01/17/05	ND<50	12000	10	89	590	1670	ND<1.0
	05/04/05	520	1600	ND<0.5	ND<0.5	31	18.4	1600
	08/12/05	ND<50	660	ND<0.5	ND<0.5	5.5	ND<0.5	ND<1.0
	12/12/05	ND<50	610	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
	03/03/06	ND<50	630	1.1	9.0	31.0	78	ND<1.0
MW-7D	01/17/05	ND<50	23000	350	1000	1800	5200	ND<1.0
	05/04/05			1	NS			
	08/12/05	37	83000	550	2200	4400	10600	ND<50
	12/12/05	150000	1300000	640	3100	21000	54800	ND<50
	03/03/06	45000	71000	420	2400	4400	11300	ND<1.0
MW-8	01/17/05	ND<50	120	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
	05/04/05	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
	08/12/05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0
	12/12/05	830	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
	03/03/06	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0

Concentrations reported in micrograms per Liter (ug/L)
MTBE = Methyl-tert-Butyl Ether
ND = Not Detected at or above corresponding reporting limit

NS = Not Sampled

TPHd = Total Petroleum Hydrocarbons as Diesel

TPHd = Total Petroleum Hydrocarbons as Gasoline

NM: Not Measured

# APPENDIX A SAMPLING DATA SHEETS





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Page \_\_ of \_\_

Project No. Vell Identif Measureme		MW-2		NOFTH			Prepare Weather Pump I	er: 🗞	maan,	S Howe	, ( S	reen:		
Depth to LNAPL (ft-bmp)	Dept Static Level (	Water		tal Depth bmp)	Water Column Height (ft)	I	L Thickne ft-bmp)		One (1) olume (	_	g Cas	e (3) sing mes ons)	Above Screen Volume	Screen Volume
No	2.1	٥	18,7	16	16.66	, ,	ulo		2.4	, (۵	7.9	9		_
Well Dia	meter (in)		Gallo	ons/Foot		Field Equ	pment:	Solins	t		1			
TTEN DIA		0.75	2	4	6	Purge Me	thod: ん	<i>M</i> Lter	A Pur	~ P				, -,,,,,
0.75 2	4 6	0.02	0.16	0.65	1.47	Well Cond			OFT E	-	<u>~)</u>			
Time	Casing Screen	Volume Purged (gallons)	Flow Ra	( 1 4 1 4	l Ph		erature T	urbidity (NTU)	Condu	ctivity	Dissolved Oxygen (mg/L)	ORP (mV)	Obse	ervations
11:35	1.0	2.5	,35	2,90	7.6	/3.	۹ :	210	Q.	7	8.57	-119	Cloud	'y
11:40	2.0	5.0	.31	3,58		16.	1	78	٠, ۲	7	8.86	-114	Clear	
11:47	3.0	7.5	.35	3.90	5 6.8	17.	3 /	60	,2`	7	3,79	-/18	Clovo	19 %
												-		
									-					
Purge Start Time	Purge End Time		ge Flow om)	Total Gallons Purged	Total Ca Volum Purge	es   F	80% ecovery ater Level Depth	Water at San Time (f	npling	Colle	nple ection ne	San	nple Identifica	tion
11:25	וו:47	.3	34	7,5	3.0	5.	44	2,3	30	, 11	:55			

TAIT Environmental Management, Inc.

Page \_\_ of \_\_

Project Nar		1017 A L	illey Ro	<u> </u>			Date:	<u> 3 2 </u>					<u> </u>	,
Project No.	<u> </u>	09	<del>-</del>					red By:						
Measureme	ication: N	1W - 45	<u>,                                    </u>					er: S			Sc	reen: -	-	
weasureme	nt Point De	-	Toc	<u> HT10U</u>	· · · · · · · · · · · · · · · · · · ·	<del></del>	Pump	Intake	' فا					
Depth to LNAPL (ft-bmp)	Depr Static Level (	Water	Well Tot	•	Wate Colun Heigh (ft)	ın LNA	NPL Thickn (ft-bmp)		One (1) Volume (	-	Cas	mes	Above Screen Volume	Screen Volume
Nla	3.1	U	8.15	)	5.05		Nlo		.80	)	2.4	12	-	
Well Disc	meter (in)		Galloi	s/Foot		Field Ed	quipment:	Solin	nst					
		0.75	2	4	6	Purge N	lethod:	WAL-	tern f	م سرن				
0.75 2	4 6	0.02	0.16	0.65	1.47	Well Co			(HArd		٠)			
Time (	asing/ Screen	Volume Purged (gallons)	Flow Rat (gpm)	e Wat Lev (ft-br	el F	Ph Ter	nperature (°C)	Turbidity (NTU)	Condu		Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervätions
12:42	1.0	1.0	.ა	3.2	28 7.	2 /	4.5	550	1.1		5.10	-152	GRE	4
19:48	2.0	2,0	۲,	3,3		1 1.	5.3	690	.1.1		4,17	-/13	GRE	У
12:53	3,0	3.0	.2	3,3	8 7.	1 /	4.6	710	1.1		4.88	-110	GRE	<b>4</b> .
											· · · · · · · · · · · · · · · · · · ·			, <u>Q</u>
														····
Purge Start Time	Purge End Time		ge Flow To	otal Gallons Purged	Total ( Volu Pur	mes 🗍 ,	80% Recovery Water Level Depth	at Sa	er Level ampling (ft-bmp)	Samp Collect Time	ion	San	nple Identifica	ation
12:37	12:53	, (	8	3.0	3.0	С	4.11	3.	20	12;	58			
Notes:		<u> </u>						1					· · · · · · · · · · · · · · · · · · ·	



Page \_\_ of \_\_

TAIT Environmental Management, Inc.

Project N Project N	0.:	Em5	5ion V 000	A ! le	ey Koc	K				Date Prep		¦ - <u>ລ</u> - By:						
Well Iden	tificati	ion:	MW-	1 D	!								444		Sc	reen:	****	e e je
Measure	nent P	oint De	escription	n:	TOC	Nor	TH_			Pum	p Int	ake:	Blai" I	8"				<u> </u>
Depth LNAP (ft-bm	L	Statio	th to Water (ft-bmp)		Well To	tal De <sub>l</sub> omp)	pth C	Water Colum Heigh _ (ft)	n l	LNAPL Thick (ft-bmp)			One (1) olume (	_	-	ing mes	Above Screen Volume	Screen Volume
NIa	)	3.0	ε3		23.	19		954	e No				3.12		9.3	88	-	-
Well D	iamete	r (in)			Gallo	ns/Fo	ot		Field	d Equipment	: {	Solins	it					
			0.7	5	(2)	4		6	Purg	je Method:	NA	Lter	ra Pur	·P				
0.75	) 4	6	0.0	2	0.16	0.6	35 1	.47	Well	Condition:			ard Bo	•				
Time	Casing	Screen	Volume Purged (gallons		.Flow Ra (gpm)		Water Level (ft-bmp)	Р	h	Temperature (°C)	Tur	oidity TU)	Condu	ctivity	Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervations
12:13	1.0	5	3,0		,3		3.98	7.	2	18.4	10	0	٦,	6	6,88	-120	Clou	dy
12:22	2,		6.0		.3		4.04	7.0	2	18.9	11	1	,7		4.06	-124	Cle	Ar
12:29	3.	ව	9.0		.4		4.02	6.9	9	18.7	11		,7	4	2,25	7/22	Cle	.Ar
												•						
															·			
<del></del>					<del>-</del>		1			1				Ç.				
Purge Sta Time	rt P	urge En Time		rage (gpm		Fotal Ga Purg	alions	Total C Volur Purg	mes	80% Recovery Water Leve Depth	.	Water at San Time (f		Colle	nple ection me	Sa	mple Identifica	ation
12:0	3 1:	7:29		3		9.0	C	3,0	<b>-</b>	7,55		3,	19	12:	35			

15,64



Page \_\_ of \_\_

TAIT Environmental Management, Inc.

roject Nam	e: Missio	N VA	11ey Ro	el <sup>c</sup>			Date:	3/3	106					
roject No.:	£ M50	09	•					red By:	SR	·			•	
Nell Identific	eation: $\mathcal{M}$	1W - 6	<b>D</b>				Weath	er: C	loud y	<u>'</u>	Sc	reen:		
Measuremen	t Point Des	cription	TVC	NorTH	1	<del></del> -	Pump	Intake:	ירג.		· • • · · · · · · · · · · · · · · · · ·			
Depth to LNAPL (ft-bmp)	Depti Static \ Level (f	Water		otal Depth -bmp)	Water Columi Height (ft)	1 LNAF	L Thickn (ft-bmp)	4	One (1) Casing Volume (gallons)			ing mes	Above Screen Volume	Screen Volume
No	2.7	0	28,	.95	J6.21	5	مام		۲,۵	<u> </u>	12.	6		
141-11 b:	-4. 29.		Gall	ons/Foot		Field Equ	ipment:	Solins	st					<del> </del>
Well Diam	eter (in)	0.75	2	4	6	Purge Me	thod: j	NALte	.ra. f	Dun-P				
0.75 2	4 6	0.02	0.16	0.65	1.47	Well Con		OK SO		•	<b>)</b>			
Time Cas	sing)/ Screen	Volume Purged (gallons)	Flow R (gpm	1 1 01/6	el Pr		erature °C)	Turbidity (NTU)	Condu	ctivity	Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervations
09:56	1.0	4.0	ماما.	4.1	1 7.0	15	.3	5	, 20	,	4.23	-134	Clex	16
. 10:42	2.0	8.0	.66	4.4	3 7.1	14	,7	710	.20	)	1.41	-124	GRE	✓
10.08	3.0	12.0	.66	4,4	1. 7.0		.3	570	.19		2.30	-121	11	
					Total Ca	esing	80%	Water	Level	San	nole .			
Purge Start Time	Purge End Time		ge Flow om)	Total Gallons Purged	Volum	nes \	Recovery ater Level Depth	at San Time (f	npling	Colle Tin	ction	Sar	nple Identifica	tion
09:50	10:08	.6	6	0.61	3,0	-	7.93	2.9	7	10	:15			



Page of

TAIT Environmental Management, Inc

Project Name	missi	AV 40	lley Rock	ζ .			Date:	3/2/6	57.							
Project No.:	<u>Emso</u>	100	<u> </u>				Prepared By: SR									
Well Identific	ation: M	W-55	•				Weathe	er: 3.	7440		Sc	reen:				
Measuremen	t Point Des	cription	TOC .	VOFTH			Pump I	ntake:	٦''							
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)		Well Total Depth (ft-bmp)		Water Colum Height (ft)	n LNAP	. Thickness t-bmp)		One (1) Casing Volume (gallons)		_		Above Screen Volume	Screen Volume		
oln	1.47	2 8.01		1	6.59	N	Nlo		1,05		3.1	(e	_	****		
Well Diam	eter (in)		Gallo	s/Foot		Field Equi	pment:	Solin	st							
		0.75	2	4	6	Purge Met	hod:	WAL	tera	Pu-	P					
0.75 2	4 6	0.02	0.16	0.65	1.47	Well Cond		0 K	CHArd				,			
Time Cas	ing / Screen	Volume Purged (gallons)	Flow Ra (gpm)	e Wate Leve (ft-bm	ı Pi	Tempe (%		urbidity (NTU)	Conduc		Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervations		
14:56	1,0	1.0	,25	1.90	0 7,:	3 <i>13</i> .	0	190	.26		7,97	1/3	GRE	4		
15:00	2,0	2.0	. 25	2.0	0 7.5	7 /3.	0 9	<sup>7</sup> 30	.24	,	6.65	£65	11 3	1		
15:03	3.0	3.0	,33			13.	13.0		10 .25		5.57	-51	1. 1			
								Y .						<del></del>		
		<u></u>		-			:				· · · · · · · · · · · · · · · · · · ·					
					<u> </u>					_				79,		
Purge Start Time	Purge End Time		ge Flow Tom)	otal Gallons Purged	Total C Volun Purg	asing Renes Wa	80% ecovery ter Level Depth	at Sa	r Level mpling (ft-bmp)	Colle	mple ection me	Sai	mple Identifica	+ 5		
14:52	15:03	. 2	ר	3.0	3.0		,74	1.5	,2	15:	10			7. ·		
Notes:			m ,		n .						5,27					



Page \_\_\_ of \_\_\_

TAIT Environmental Management, Inc.

Project Nam		on VA	iley Roc	K			Date:	Date: 3/3/06									
Project No.							Prepar	Prepared By: SR									
Well Identif		nw-6		<u> </u>			Weath		Cloudy		Sc	reen:					
weasureme	nt Point De	scription	Toc	NorTH	·	Pump	Intake	<u>: 13 ''</u>									
Depth to LNAPL (ft-bmp)	Static	Depth to Static Water Level (ft-bmp)		Well Total Depth (ft-bmp)		i i	PL Thickn (ft-bmp)		One (1) Volume (	-	- 1	ing mes	Above Screen Volume	Screen Volume			
	1.9	5	14,79		12.81	1 -		2.0!		5	6.1	6	<u></u>				
Well Die	meter (in)		Gallo	ns/Foot		Field Eq	uipment:	Soli				.l.	-	1			
wen biai	meter (in)	0.75	2	4	6	Purge M	ethod:	VALT	tera f	ump							
0.75 2	4 6	0.02	0.16	0.65	1.47	Well Con	dition:	OK	(SOF	T Bo	++om)						
Time 6	asing/ Screen	Volume Purged (gallons)	Flow Ra (gpm)	: [ \( \O \) \( \)	el Pi		perature (°C)	Turbidity (NTU)	y Condụ	ctivity	Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervations			
1023	1.0	2.0	,4	3,35	7.	2 13	5.2	320	,3:	3	8.99	-110	GRE	<b>Y</b>			
10:28	2.0	4.0	.4	3.45		8 15	5.6	350	.33	3.	2,50	-//9	11 1				
10:34	3.6	6.0	.3	3.40	6.8	3 15	.7	330	.32	3	1.17	-119	!	•			
					7.10	_	80%	· · · · · · · · · · · · · · · · · · ·									
Purge Start Purge End Average Time Time (gpr			otal Gallons Purged Total C Volu Purged		nes 📗 🗤	Recovery /ater Level Depth	Water Level at Sampling Time (ft-bmp)		Colle	nple ection ne	Sample Identification						
10:18	10:34		37	6.0	3.0	,	4.52	2.	,00	10	40						
10',\8 Notes:	10734	•	51	<b>4.</b> 0	3,0	) [	7.34	\ \d'.	.00	10		10.2	}				



Page \_\_ of \_\_

TAIT Environmental Management, Inc

Project Nan Project No.:	Em 500	29	,	Sole			Prepared By: SR								
Well Identifi	cation: 🚜	1W-8					eather:		ear		Sc	reen:	NIA		
Measureme	nt Point De	scription	: Toc	NOTH		P	ump Inta		10"			· ·	<u> </u>		
Depth to  LNAPL  (ft-bmp)  Depth to  Static Wat  Level (ft-bn		Water	Well Total Depth (ft-bmp)		Water Colum Height (ft)	n LNAPL TI	L Thickness ft-bmp)		S One (1) Ca Volume (gal		-	ing mes	Above Screen Volume	Screen Volume	
a/n	0.7	8	15.10		14.32	NO		2.29		6.87		-			
			Gallo	ıs/Foot		Field Equipm	ent: S	olins	:t		<u>'</u>		· · · · · · · · · · · · · · · · · · ·	!	
Well Diar	neter (in)	0.75	2	4	6	Purge Method	i: hic	 11+	eta	Ρ	•	·	· .		
0.75 2	4 6	0.02	0.16	0.65	1.47	Well Condition		,	Hard		• .	1.8			
Time	asing) Screen	Volume Purged (gallons)	Flow Rat (gpm)	e Wate Leve (ft-bm	ei Pi	n Temperatu (°C)		dity .	Condu	ctivity	Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervations	
11:36	1,0	2,3	.32	1.0	0 6.	1 16.0	49	)	.15	5	8.39	161	Clear	~	
11:42	2.0	4.6	.38	1.0	1 6,0	15.4	55	₹	.14	/	9.17	137	Clear	•	
11:48	3.0	6.9	.38	.38 1.02		16.0	64	.14		7.55	67	Clear			
													7		
		: .													
	-	:								<del></del>					
Purge Start Time				Total C Volum Purg	nes Recov	covery at		Sampling Co		mple ection me	Sample Identification				
11:29	11:48	•	36	6.9	3.0	) 3.6	5	, 8.	5	11;	52				
Notes:	·						<u> </u>				'	45			



Page \_\_ of \_\_

Mission Valley Rock Project Name: Date: 3-2-06 Proiect No.: Em 5009 Prepared By: SR Well Identification: MW-50 Weather: Sunny Screen: Measurement Point Description: Toc Pump Intake: 20" NACTH Water Three (3) Depth to Depth to Ahove **Well Total Depth** Column **LNAPL Thickness** One (1) Casing Casing Screen LNAPL Static Water Screen (ft-bmp) Height (ft-bmp) Volume (gailons) Volumes Volume (ft-bmp) Level (ft-bmp) Volume (ft) (gallons) vilo 22,68 3.31 9.93 1.98 207 2/0 Gallons/Foot Field Equipment: Solinst Well Diameter (in) 2 0.75 4. 6 **Purge Method:** WALterA Pump (2) 0.75 0.02 0.16 0.65 1.47 Well Condition: (Hard Bottom) OK Volume Water Dissolved Flow Rate Conductivity Temperature Turbidity ORP Casing Screen Time Purged Level Ph Oxvaen Observations ( 5/m) (gpm) (°C) (NTU) (mV) (gallons) (ft-bmp) (mg/L) 14:26 7.5 3.0 .5 3.81 -163 Clear 62 .43 6.53 16.4 .5 6.9 14:32 3.86 4.42 2.0 6.0 16.5 32 :47 -104 11 11 14:37 3.0 9.0 .4 3.88 11 16.3 23 ,48 2.58 -104 80% **Total Casing** Water Level Sample Purge Start Purge End Average Flow **Total Gallons** Recovery Collection Sample Identification Volumes at Sampling Time Time Purged Water Level (gpm) Purged Time (ft-bmp) Time Depth 9.0 14:20 14:37 3.0 2.02 14:45 6.12 ,53 **Notes:** 16,56



Page \_\_ of \_\_

Project Nan		on Va	Hey R	مداد				Date:	3-2-0	ما(						
Project No.:	tm500	١٩	77					Prepared By:								
Well Identifi		1W-3						Weath	er: <i>5</i>	JUNNY		Sc	creen: -	-		
Measureme	nt Point Des	cription	· Toc	No.	rTH					: /2"				* 🐉	*	
Depth to LNAPL (ft-bmp)	Static V	Depth to Static Water Level (ft-bmp)		Well Total Dep (ft-bmp)		Vater olumn leight (ft)	1	LNAPL Thickness (ft-bmp)		ss One (1) Casing Volume (gallons)		Cas ) Volu	ee (3) sing imes lons)	Above Screen Volume	Screen Volume	
No	3.4	2	15.55		13	2,13	Nlo			1.94		5.82		منے	-	
Well Dian	neter (in)		Gal	lons/Foo	t		Field Equ	ipment:	Solin	ıst			1 2		<i>t</i>	
		0.75	2	4	- 6	3 1	Purge Me	thod:	WALT.	era Pi	ump				· · · · · · · · · · · · · · · · · · ·	
0.75 2	4 6	0.02	0.16	0.6	5 1.4	47	Well Con			SOFT	•	m)	ing side of the second			
Time C	asing) Screen	Volume Purged gallons)	Flow I	~\	Water Level (ft-bmp)	Ph	Temp	erature °C)	Turbidity (NTU)	Condu (_ <i>5/,</i>	Ctivity	Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervations	
13:35	1.0	2.0	7//3		4.15	7,2	19	.2	5	.2	8	3.04	-119	CleA		
13:42	2.0	4.0	.28		4,22	7.0	17	,7	760	.25	5	2.02	-119	GRE	Y	
13:50	3.0	6.0	.95	•	4.42	6.9	17	,7	5	, 2	3	7,80	-125	<u> </u>	Ar	
		-														
Purge Start	Purge End		ge Flow	Total Ga	IIONS	otal Ca Volum		80% Recovery		er Level	Sam		Sam	nple Identifica	tion	
Time	Time		pm)	Purge		Purge	ed vv	ater Level Depth	Time	(ft-bmp)	Tim	е				
13:30	13:50	.3	3	6.0		3.0	7	5.85	3,	60	13.	55			-	
Notes:												9,70				
							. , ,	PL								



Page \_\_ of \_\_

Project Nam	ie: Miss	ON VA	lley Ro	cK			Date:	3-3	-06					
Project No.:	Em 50	09						red By:	SR					
Vell Identifi			·				Weath	er: 🏗	army.	RAININ	<sub>A</sub> Sc	reen: -	-	
leasureme	nt Point De	scription	· Toe	NorTH	,		Pump	Intake:	16"	•	•			
LNAPL Sta		Depth to Static Water Level (ft-bmp)		tal Depth bmp)	Wate Colum Heigh (ft)	n LNAF	LNAPL Thickness (ft-bmp)		ss One (1) Casing Volume (gallons)		Three Cas Volu (galle	ing mes	Above Screen Volume	Screen Volume
Nlo	0,-	۱۱	וח,55		16.84	Nlo		2.69		8.08				
Well Dian	neter (in)		Gallo	ns/Foot		Field Equ	ipment:	Solin	st					
	meter (III)	0.75	$\sqrt{2}$	4	6	Purge Me	ethod:	WALT	era f	Om p				
0.75 ②	4 6	0.02	0.16	0.65	1.47	Well Con			SOFT BO					
Time C	asing/ Screen	Volume Purged (gallons)	Flow Rate   Leve		el F		perature (°C)	Turbidity (NTU)			Dissolved Oxygen (mg/L)	ORP (mV)	Observations	
13:12	12 1.0 2.5		, 25	1.4	1.68 7.		3.3	170	,28		762 -77		Cloudy	
13:22	2.0	5,0	.25 1.7		0 7,0	0 1	1.7	83	.3		4.64	-90	Cloudy	
13:31	3.0	7,5	اه.۱ دو.		0 7.	0 14	7.7	53			1.15	-90		
												-		
		, , , , , , , , , , , , , , , , , , ,					80%	Ī						
Purge Start Purge End Time Time			ge Flow Total Gallons Volu pm) Purged Pur		mes \	Recovery /ater Level Depth	at Sa	er Level Samp sampling Collect e (ft-bmp) Time		tion	Sam	ple Identifica	tion	
13'.02	13:31		مالا	7.5	3.0	۲ د	80,1	6.	99	13:	35			
Notes:			,								13	3.47		:



Page \_\_of\_\_

**Project Name:** 3-3-06 Date: Project No.: Prepared By: 58 MW-70 Well Identification: Weather: Cioudy Screen: **Measurement Point Description:** TOC NOTTH Pump Intake: /4" Water Three (3) Depth to Depth to Above **Well Total Depth** Column **LNAPL Thickness** Casing One (1) Casing Screen LNAPL Static Water Screen (ft-bmp) Height Volume (gallons) Volumes Volume (ft-bmp) (ft-bmp) Level (ft-bmp) Volume (ft) (gallons) 5.10 22,57 Mo NO 17.47 8,38 2.79 Gallons/Foot Solinst Field Equipment: Well Diameter (in) 0.75 4 6 WALterA Pump **Purge Method:** 0.75 6 0.02 0.16 0.65 1.47 **Well Condition:** OK (SOFT Bottom) Volume Water Dissolved Flow Rate ORP Conductivity Temperature **Turbidity** Casing Screen Time Purged Level Ρh Oxvaen Observations (5/m) (mV) (gpm) (°C) (NTU) (gallons) (ft-bmp) (mg/L) 3.0 1350 7999 1.0 ,33 16.1 GREY Casoiline Smell .79 -103 10.15 7.81 2.0 13:56 600 7999 11 11 21 15.8 4.23 10,00 .17 104 14:43 90 11 De 43 11:05 6.9 ₹6.0 7999 .15 3.81 it 11 VI -105 80% **Total Casing** Water Level Sample Purge Start Purge End Average Flow Total Gallons Recovery Sample Identification Volumes at Sampling Collection Time Time (gpm) Purged Water Level Purged Time (ft-bmp) Time Depth 9.0 3.0 14:03 .41 8/6 14:20 13:41 Notes: 4,95 13.97



Page \_\_ of \_\_

TAIT Environmental Management, Inc.

Project Nai	ne:						Date	. Q.	3-06						
Project No.															
	ication: 🎢							her: (	Cloudy		Sc	reen:			
Measureme	nt Point De	scription	: Toc	NorTH			Pum	Prepared By:  Weather: Cloudy Screen: —  Pump Intake: 'G''							
Depth to LNAPL (ft-bmp)	Static	th to Water (ft-bmp)		tal Depth omp)	Wate Colum Heigh (ft)	ın L	NAPL Thick (ft-bmp)	ness	One (1) Volume	Casing	Thre Cas Volu (gall	ing mes	Above Screen Volume	Screen Volume	
	0.	95	8.3	8	7.43	3	MAR N	lo	BNBN	2 1,18					
Well Dia	meter (in)		Gallo	ns/Foot	•	Field	Equipment	Sol	inst	·					
	(111)	0.75	$\sqrt{2}$	4	6	Purge	e Method:	WAL	tera Po	mp					
0.75 2	4 6	0.02	0.16	0.65	1.47	Well	Condition:		(Soft 1		)	,		<del></del>	
Time (	Casing Screen	Volume Purged (gallons)	Flow Ra (gpm)	1 1 21/	ei F	rh -	Temperature (°C)	Turbidi (NTU)	ty Condu	otivity C	issolved Oxygen (mg/L)	ORP (mV)	Obs	ervations	
14:33	1,0	1,0	.33	1.5	7.0	c	16.3	83	.9,	1	6.98	-100	Clear	J	
14:36	3.0	2.0	, 33	1.6	0 7.	0	16.5	50	. 2	3	5.01	-110	Clear	<b>***</b>	
14:39	3.0	3.0	, 33	1,6	3 .7	.1	16.1	98	(۵	· ·	3,33	- 98	Clent		
		ė.					•						*		
		<u>.</u>											*	Çe <sup>i</sup>	
Purge Start Time	Purge End Time		ge Flow	otal Gallons Purged	Total C Volu Purç	mes	80% Recovery Water Leve Depth	, at S	iter Level Sampling e (ft-bmp)	Sampl Collection	on	Sam	ple Identifica	tion	
14:36	14:39	,3	3	3.0	3,0	3	2.44	0	.10	14:50	_				
Notes:	11/01	13	J		0.1			1		11750		5,	g 4	*	





TAIT Environmental Management, Inc

Page \_\_ of \_\_

Project Na Project No	Ems	Pol	Alley Ro	cK			Date Prep		3-06 y: 5-R					
Well Identi	fication:	nw-					Wea		Bran	* Cloud	\ <b>y</b> S	creen:	Pol	
Measurem	ent Point Des	cription	Toc	Nort	<u> H</u>		Pum	p Intak			<b>9—1</b>			
Depth to LNAPL (ft-bmp)	Static	Water	Well Tota (ft-bi	•	Water Colum Heigh (ft)	n LNA	PL Thick (ft-bmp)		One (1 Volume	l) Casin (gallor	g Cas ns) Volu	ee (3) sing ımes lons)	Above Screen Volume	Screer Volume
N	יב,ב ס	1	8,50	>	6.26		NID		1.0	0	3.0	00	<b>-</b>	~
Well Dis	meter (in)		Gallon	s/Foot		Field Eq	uipment:	Sol	inst					<u> </u>
Well bla	meter (IN)	0.75	2	4	6	Purge M	ethod:	WAL	tera Pe		4. 2.1			<del></del>
0.75 2	4 6	0.02	0.16	0.65	1.47	Well Con	dition:	ΟK	(SOFT	•	(~	<del></del>		
		Volume Purged (gallons)	Flow Rate (gpm)	Wate Leve (ft-bm	el Pi		perature (°C)	Turbidit (NTU)		luctivity	Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervations
INVENIOR	1.0	1.0	. اله	3,50		3 13	3.8	460	1.5	26	8.17	102	Clove	J.,
11:10	2.0	2,0	.25	3.80			. 8	460		76	6.36	7/08		
11:15	3.0	<u>3,0</u>	<u>, , ,                                 </u>	3.82	2 6.0	14	. 8	320	. 2	7	7.87	7//3	10	"
Durgo Start	Dures 5 - 1				Total C	asing	80%	\A/a	ter Level	Sar	nple			
Purge Start Time	Purge End Time		ge Flow To om)	tal Gallons Purged	Volun Purg	nes W	Recovery /ater Leve Depth	at S	Sampling e (ft-bmp)	Colle	ection me	San	nple Identifica	tion
11:00	11:15	<u> </u>		0,8	3.0		3,5	2.	.45	11:	26			
lotes:	-		, <del>V</del>			,					5.0	Þ		



Page \_\_ of \_\_

Project Na		ion VF	illey F	loc1<			Date	3-:	-06					
Project No.							Prep	ared By	V: SR					
Well Identi		- WM		<u>-</u>			Weat	her: 🤇	BURRY	RAini	ua Sc	creen:		
Measurem	ent Point De	scription	F TOC	NOFTH			Pum	o Intak	e: ဥ <b>ိ</b> ျုံ					
Depth to LNAPL (ft-bmp)	Statio	th to Water (ft-bmp)		otal Depth -bmp)	Wate Colun Heigi (ft)	ın LI	NAPL Thick (ft-bmp)	ness	One (1) Volume	_	g Cas s) Volu	e (3) sing mes ons)	Above Screen Volume	Screer Volume
14	, b a.	مال	29	.43	27.2	1	Nlo		4.3	6	13,	08	-	_
Wall Dia	meter (in)		Gall	ons/Foot		Field	Equipment:	Sol	inst		,			
Well Dia	imeter (in)	0.75	$\sqrt{2}$	4	6	Purge	Method:	WAL	tera P	ump				********
0.75	4 6	0.02	0.16	0.65	1.47	Well (	Condition:	٥K		Rotto	~)			
Time	Casing/ Screen	Volume Purged (gallons)	Flow F		el F	h T	emperature (°C)	Turbidi (NTU)		ictivity	Dissolved Oxygen (mg/L)	ORP (mV)	Obs	ervations
12:20	1.0	4.0	.44	3,4	15 7	. 5	14,4	39,0		26	7.16	7//3	Clove	14
12:30	2.0	8.0	٠,4	3.50	0 6.	9	/ <u>s</u> .3	180	• <	24	1.55	-126	11	11
19:41	3.0	12.0	ا3ر	3,5	5 6	9	15.7	160	, ä	24	3,74	-/21	11	71
		<del></del>												
Purge Start Time	Purge End Time		ge Flow pm)	Total Gallons Purged	Total ( Volu Pur	mes	80% Recovery Water Leve Depth	at S	iter Level Sampling e (ft-bmp)	Sam Colle Tin	ction	San	nple Identifica	tion
12:11	12:41	,	4	12,0	3,	$\lceil$ o	7.42	2	.18	12:	50	-		
Notes:		• • • • • • • • • • • • • • • • • • • •					<del></del>				1.81			

# APPENDIX B CERTIFICATE OF DISPOSAL



INTEGRATED WASTESTREAM MANAGEMENT, INC. 1945 CONCOURSE DRIVE, SAN JOSE, CA 95131 PHONE: 408.433.1990 FAX: 408.433,9521

### CERTIFICATE OF DISPOSAL

Generator Name:	Mission Valley Rock Co.	Facility Name:	Mission Valley Rock	
Address:	7999 Athenour Way	Address:	7999 Athenour Way	_
	Sunol, CA 94586		Sunol, CA	-
Contact:	Mort Calvert	Facility Contact:	Paul McCarter, Tait Environmental	_
Phone:	925-862-2257	Phone:	714-560-8612	-

 IWM Job #:
 95875-DW

 Description of Waste:
 2 Drums of

 Non-Hazardous
 Water

 Removal Date:
 03/23/06

 Ticket #:
 SP230306-MISC

Transp	orter Information	Dispos	al Facility Information
Name: Address:	IWM, Inc. 1945 Concourse Drive	Name: Address:	Scaport Refining & Environmental
7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	San Jose, CA 95131		675 Seaport Blvd Redwood City, CA 94063
Phone:	(408) 433-1990	Phone:	(650) 364-1024

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon Walliam 2.	Ce. Form	03/23/06
Authorized Representative (Print Name a	and Signature)	Date

# APPENDIX C LABORATORY REPORT

#### 09 March 2006

Paul McCarter Tait Environmental 701 N. Parkcenter Drive Santa Ana, CA 92705

RE: Mission Valley Rock

Enclosed are the results of analyses for samples received by the laboratory on 03/06/06 15:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jennifer Stack

**Project Manager** 

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter

**Reported:** 03/09/06 15:47

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2M	T600246-01	Water	03/03/06 11:55	03/06/06 15:10
MW-4S	T600246-02	Water	03/02/06 12:58	03/06/06 15:10
MW-4D	T600246-03	Water	03/02/06 12:35	03/06/06 15:10
MW-6D	T600246-04	Water	03/02/06 10:15	03/06/06 15:10
MW-5S	T600246-05	Water	03/03/06 15:10	03/06/06 15:10
MW-6S	T600246-06	Water	03/03/06 10:40	03/06/06 15:10
MW-8	T600246-07	Water	03/02/06 11:52	03/06/06 15:10
MW-5D	T600246-08	Water	03/02/06 14:45	03/06/06 15:10
MW-3	T600246-09	Water	03/02/06 13:55	03/06/06 15:10
MW-1	T600246-10	Water	03/03/06 13:35	03/06/06 15:10
MW-2D	T600246-11	Water	03/03/06 12:50	03/06/06 15:10
MW-2S	T600246-12	Water	03/03/06 11:20	03/06/06 15:10
MW-7D	T600246-13	Water	03/03/06 14:20	03/06/06 15:10
MW-7S	T600246-14	Water	03/03/06 14:50	03/06/06 15:10

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-2M T600246-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbon	s by EPA 8015m	1							
C6-C12 (GRO)	290	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		80.8 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocarbo	ons by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
Volatile Organic Compounds by EI	PA Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	0.54	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	17	1.0	"	"	"	"	"	m .	
Surrogate: Toluene-d8		110 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		115 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-4S T600246-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborator	ies, Inc.					
<b>Purgeable Petroleum Hydrocarbons</b>	by EPA 8015m	1							
C6-C12 (GRO)	ND	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		85.2 %	65-	135	"	"	"	"	
<b>Extractable Petroleum Hydrocarbon</b>	s by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by EP</b>	A Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		108 %	87.6-	-115	"	"	"	11	
Surrogate: 4-Bromofluorobenzene		91.5 %	80-1	112	"	"	"	"	
Surrogate: Dibromofluoromethane		116 %	78.6-	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-4D T600246-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborator	ries, Inc.					
Purgeable Petroleum Hydrocarbons	by EPA 8015m	1							
C6-C12 (GRO)	ND	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		84.4 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocarbon	ns by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by EP</b>	A Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	m .	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	m .	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	n	
Surrogate: Toluene-d8		108 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.2 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		120 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-6D T600246-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborator	ries, Inc.					
<b>Purgeable Petroleum Hydrocarbons l</b>	by EPA 8015m	1							
C6-C12 (GRO)	310	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		80.4 %	65-	135	"	"	"	"	
<b>Extractable Petroleum Hydrocarbons</b>	s by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by EPA</b>	Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	93	1.0	"	"	"	"	"	m .	
Surrogate: Toluene-d8		106 %	87.6	-115	"	"	"	"	·
Surrogate: 4-Bromofluorobenzene		102 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		111 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-5S T600246-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aboratoi	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ns by EPA 8015m								
C6-C12 (GRO)	ND	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		81.0 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocarb	oons by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by E</b>	EPA Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		109 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.2 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		115 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-6S T600246-06 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborator	ies, Inc.		-	•		
<b>Purgeable Petroleum Hydrocarbons</b>	by EPA 8015n	1							
C6-C12 (GRO)	940	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		81.8 %	65-	135	"	"	"	"	
<b>Extractable Petroleum Hydrocarbon</b>	s by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by EP</b>	A Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	4.9	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	60	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		104 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		112 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		118 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-8 T600246-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aboratoi	ries, Inc.					
Purgeable Petroleum Hydrocarbon	s by EPA 8015m								
C6-C12 (GRO)	ND	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		86.6 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocarbo	ons by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by El</b>	PA Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	H .	
Surrogate: Toluene-d8		111 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		121 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-5D T600246-08 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ies, Inc.					
Purgeable Petroleum Hydrocarbo	ns by EPA 8015m	ı							
C6-C12 (GRO)	ND	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		85.2 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocark	oons by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by I</b>	EPA Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	4.7	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		109 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		116 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-3 T600246-09 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ns by EPA 8015n	1							
C6-C12 (GRO)	ND	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		86.6 %	65-	135	"	"	"	"	
<b>Extractable Petroleum Hydrocarb</b>	ons by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by F</b>	EPA Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	140	1.0	"	"	"	"	"	H .	
Surrogate: Toluene-d8		106 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.5 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		118 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Tait Environmental 701 N. Parkcenter Drive

Project: Mission Valley Rock

Santa Ana CA, 92705

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-1 T600246-10 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aboratoi	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ns by EPA 8015m	1							
C6-C12 (GRO)	310	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		99.2 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocarb	ons by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by E</b>	CPA Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		110 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.2 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		109 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-2D T600246-11 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborator	ries, Inc.					
<b>Purgeable Petroleum Hydrocarbons</b>	by EPA 8015m	ı							
C6-C12 (GRO)	140	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		79.0 %	65-	135	"	"	"	"	
<b>Extractable Petroleum Hydrocarbon</b>	s by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
<b>Volatile Organic Compounds by EP</b>	Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	m .	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	38	1.0	"	"	"	"	"	n	
Surrogate: Toluene-d8		109 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.8 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		113 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-2S T600246-12 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aboratoi	ries, Inc.					
Purgeable Petroleum Hydrocarboi	ns by EPA 8015m	l							
C6-C12 (GRO)	160	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		78.6 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocarb	ons by 8015								
Diesel Range Hydrocarbons	5.9	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
Volatile Organic Compounds by E	PA Method 8260	В							
Benzene	ND	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	21	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		107 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		117 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-7D T600246-13 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ns by EPA 8015n	1							
C6-C12 (GRO)	71000	2500	ug/l	50	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		91.4 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocark	oons by 8015								
Diesel Range Hydrocarbons	45	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	D-02
Volatile Organic Compounds by I	EPA Method 8260	В							
Benzene	420	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	2400	12	"	25	"	"	03/08/06	"	
Ethylbenzene	4400	12	"	"	"	"	"	"	
m,p-Xylene	9100	100	"	100	"	"	03/08/06	"	
o-Xylene	2200	12	"	25	"	"	03/08/06	"	
Tert-amyl methyl ether	ND	2.0	"	1	"	"	03/07/06	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		96.0 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.8 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		96.8 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

#### MW-7S T600246-14 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aboratoi	ries, Inc.					
Purgeable Petroleum Hydrocarbon	ns by EPA 8015m								
C6-C12 (GRO)	630	50	ug/l	1	6030711	03/07/06	03/08/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		83.0 %	65-	135	"	"	"	"	
Extractable Petroleum Hydrocarb	ons by 8015								
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	6030608	03/06/06	03/09/06	EPA 8015m	
Volatile Organic Compounds by E	PA Method 8260	В							
Benzene	1.1	0.50	ug/l	1	6030712	03/07/06	03/07/06	EPA 8260B	
Toluene	9.0	0.50	"	"	"	"	"	"	
Ethylbenzene	31	0.50	"	"	"	"	"	"	
m,p-Xylene	64	1.0	"	"	"	"	"	"	
o-Xylene	14	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		106 %	87.6	-115	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	80-	112	"	"	"	"	
Surrogate: Dibromofluoromethane		118 %	78.6	-122	"	"	"	"	

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

# Purgeable Petroleum Hydrocarbons by EPA 8015m - Quality Control SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6030711 - EPA 5030 GC										
Blank (6030711-BLK1)				Prepared:	03/07/06	Analyzed	1: 03/08/06			
Surrogate: 4-Bromofluorobenzene	44.7		ug/l	50.0		89.4	65-135			
C6-C12 (GRO)	ND	50	"							
LCS (6030711-BS1)				Prepared:	03/07/06	Analyzed	1: 03/08/06			
Surrogate: 4-Bromofluorobenzene	45.8		ug/l	50.0		91.6	65-135			
C6-C12 (GRO)	6420	50	"	5500		117	75-125			
Matrix Spike (6030711-MS1)	Sour	ce: T60024	6-08	Prepared:	03/07/06	Analyzed	1: 03/08/06			
Surrogate: 4-Bromofluorobenzene	43.5		ug/l	50.0		87.0	65-135			
C6-C12 (GRO)	6120	50	"	5500	ND	111	65-135			
Matrix Spike Dup (6030711-MSD1)	Sour	ce: T60024	6-08	Prepared:	03/07/06	Analyzed	1: 03/08/06			
Surrogate: 4-Bromofluorobenzene	43.5		ug/l	50.0		87.0	65-135			
C6-C12 (GRO)	6590	50	"	5500	ND	120	65-135	7.40	20	

SunStar Laboratories, Inc.

Tait EnvironmentalProject: Mission Valley Rock701 N. Parkcenter DriveProject Number: EM5009Reported:Santa Ana CA, 92705Project Manager: Paul McCarter03/09/06 15:47

# Extractable Petroleum Hydrocarbons by 8015 - Quality Control SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6030608 - EPA 3510C GC										
Blank (6030608-BLK1)				Prepared:	03/06/06	Analyzed	: 03/09/06			
Diesel Range Hydrocarbons	ND	0.050	mg/l							
<b>Matrix Spike (6030608-MS1)</b>	Sou	rce: T60024	6-01	Prepared:	03/06/06	Analyzed	: 03/09/06			
Diesel Range Hydrocarbons	18.7	0.050	mg/l	20.0	ND	93.5	75-125			
Matrix Spike Dup (6030608-MSD1)	Sou	rce: T60024	6-01	Prepared:	03/06/06	Analyzed	: 03/09/06			
Diesel Range Hydrocarbons	16.8	0.050	mg/l	20.0	ND	84.0	75-125	10.7	20	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jennifer Stack, Project Manager

Project: Mission Valley Rock

Spike

Source

%REC

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

**RPD** 

## Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6030712 - EPA 5030 GCMS										
Blank (6030712-BLK1)				Prepared	& Analyz	ed: 03/07/	/06			
Surrogate: Toluene-d8	43.6		ug/l	40.0		109	87.6-115			
Surrogate: 4-Bromofluorobenzene	38.5		"	40.0		96.2	80-112			
Surrogate: Dibromofluoromethane	48.0		"	40.0		120	78.6-122			
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Tert-amyl methyl ether	ND	2.0	"							
Tert-butyl alcohol	ND	10	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Methyl tert-butyl ether	ND	1.0	"							
LCS (6030712-BS1)				Prepared	& Analyz	ed: 03/07/	/06			
Surrogate: Toluene-d8	42.4		ug/l	40.0		106	87.6-115			
Surrogate: 4-Bromofluorobenzene	42.3		"	40.0		106	80-112			
Surrogate: Dibromofluoromethane	39.0		"	40.0		97.5	78.6-122			
Benzene	109	0.50	"	100		109	75-125			
Toluene	110	0.50	"	100		110	75-125			
Matrix Spike (6030712-MS1)	So	urce: T60024	6-08	Prepared	& Analyz	ed: 03/07/	/06			
Surrogate: Toluene-d8	42.4		ug/l	40.0		106	87.6-115			
Surrogate: 4-Bromofluorobenzene	42.0		"	40.0		105	80-112			
Surrogate: Dibromofluoromethane	39.2		"	40.0		98.0	78.6-122			
Benzene	115	0.50	"	100	ND	115	75-125			
Toluene	114	0.50	"	100	ND	114	75-125			

SunStar Laboratories, Inc.

Project: Mission Valley Rock

Project Number: EM5009 Project Manager: Paul McCarter **Reported:** 03/09/06 15:47

## Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch 6030712 - EPA 5030 GCMS

Matrix Spike Dup (6030712-MSD1)	Source: T600246-08			Prepared a					
Surrogate: Toluene-d8	41.5		ug/l	40.0		104	87.6-115		
Surrogate: 4-Bromofluorobenzene	41.1		"	40.0		103	80-112		
Surrogate: Dibromofluoromethane	38.6		"	40.0		96.5	78.6-122		
Benzene	121	0.50	"	100	ND	121	75-125	5.08	20
Toluene	121	0.50	"	100	ND	121	75-125	5.96	20

SunStar Laboratories, Inc.

Tait EnvironmentalProject: Mission Valley Rock701 N. Parkcenter DriveProject Number: EM5009Reported:Santa Ana CA, 92705Project Manager: Paul McCarter03/09/06 15:47

#### **Notes and Definitions**

D-02 Hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

SunStar Laboratories, Inc.