

TAIT Environmental Management, Inc.

Environmental - Engineering - Compliance

October 16, 2000

Mr. Mort Calvert Mission Valley Rock Co. 7999 Athenour Way Sunol, CA 94586

RE: THIRD QUARTER REPORT, SEPTEMBER 2000, MISSION VALLEY ROCK COMPANY, 7999 ATHENOUR WAY, SUNOL, CALIFORNIA, 94586

Dear Mr. Calvert:

Tait Environmental Management, Inc. (TEM) is pleased to submit this third quarter 2000 letter report of environmental services conducted at Mission Valley Rock (MVR) located at 7999 Athenour Way in Sunol, California (SITE). The SITE location is shown in Figure 1, <u>SITE Vicinity Map</u>. This report, including field work, figures, tables, and charts, has been prepared by or under the direct supervision of a California registered geologist whose signature and stamp are affixed.

SITE BACKGROUND

In May through June 1996 two (2) diesel Underground Storage Tanks (USTs) and one (1) gasoline UST was removed from the SITE. Tank removal, excavation, and subsequent soil sampling activities are documented in <u>Tank Closure Report, Mission Valley Rock, 7999</u>
<u>Athenour Way, Sunol, CA. 94586</u> by Tank Protect Engineering of Northern California (TPE) in August 1996.

In June 1998, TPE installed and sampled three (3) monitoring wells at the SITE. Commencing in January 1999 until March 2000 TPE conducted quarterly sampling events at the SITE. Quarterly groundwater sampling at the SITE has indicated levels of petroleum constituents above their respective detection limits. Refer to Figure 2, SITE Plan, for locations of former USTs, structures, and monitoring wells MW-1, MW-2, and MW-3.

In June 2000, TEM was contracted by MVR to perform all future technical environmental activities at the SITE. Work conducted prior to June 2000 is documented by reports on file at offices of the Alameda County Health Care Services Agency and the California Regional Water Quality Control Board, San Francisco Bay Region, Mission Valley Rock Company offices, and Tank Protect Engineering, Inc.

WORK CONDUCTED DURING PRESENT QUARTER

Work conducted by TEM during the present third quarter of 2000 included:

- July 28, 2000-Submitted to the client a Second Quarter Report, June 2000, Mission Valley Rock Company, 7999 Athenour Way, Sunol, California, 94586.
- September 14, 2000
 - Removed well caps on all wells to allow depth-to-groundwater to stabilize to atmospheric pressure (if necessary) for groundwater gradient and groundwater elevation determination.
 - Measured depth-to-groundwater in monitoring wells MW-1 through MW-3 for evaluation of groundwater flow direction.
 - Collected groundwater samples from each well for analysis for total petroleum hydrocarbons as diesel (TPH-D); gasoline (TPH-G); methyl-tert-butyl-ether (MTBE); and, benzene, toluene, ethylbenzene, and xylenes (BTEX).

GROUNDWATER SAMPLING PROCEDURES

On September 14, 2000, groundwater samples were collected from monitoring wells MW-1 through MW-3. Before sampling, each well was hand purged of 6 gallons of groundwater (3.1 well volumes) with a dedicated, weighted, polyethylene disposable bailer. Purge water measurements were taken using a Horiba U10 Multiple Meter Sensor which measures pH, electrical conductivity, temperature, turbidity, and dissolved oxygen. Each well was purged until groundwater parameters stabilized as follows: pH within 0.1, temperature within 1° C, and electrical conductivity within 10%.

Because a dedicated bailer was used for each well sampled, no decontamination was necessary between wells. Gasoline, MTBE and BTEX water samples were collected in properly labeled and sterilized 40-milliliter glass Volatile Organic Analysis (VOA) vials having Teflon-lined screw caps using a Volatile Organic Compound (VOC) control flow bottom emptying device to minimize volatilization. Diesel samples were collected in properly labeled and sterilized amber half-liter glass containers having Teflon-lined screw caps. All samples were immediately stored on ice for later transport to California Environmental Protection Agency (Cal-EPA) Certified Acculabs, Inc., located in Davis, California and accompanied by proper chain-of-custody documentation.

All groundwater samples were analyzed for TPH-D by EPA 8015 modified (Extractable) and TPH-G, MTBE, and BTEX by EPA 8015 modified (purgeable) and EPA 8020.

Volume of water purged, calculated well volumes, and field water quality measurements, including dissolved oxygen and turbidity, are summarized in Appendix A, Record of Water Sampling.

Free Product

Each well was checked for floating product using a Waterra Oil/Water Interface Meter Model #HS-1. Observations were as follows:

- MW-1: No free product present. Slight petroleum odor during purging. No sheen observed.
- MW-2: Initial thickness of free product was 0.01 or less (0.1-inch). Product was absent from the disposable bailer after 6 liters of groundwater were purged (six bailer pulls). Strong petroleum odor during remainder of purging event.
- MW-3: No free product present. Very slight petroleum odor during purging. No sheen.

Disposal of Purge Water

Purge water was contained on-site in DOT approved 55-gallon open-ended drums. Drums were labeled to show material stored, company name and address. Purge water will be drummed on-site later disposable by a certified waste hauler.

GROUNDWATER DEPTH MEASUREMENTS

On September 14, 2000, depth-to-groundwater was measured from top of casing (TOC) in wells MW-1 through MW-3. Measurements were taken to the nearest 0.01-foot using a Waterra Interface Meter #HS-1. A minimum of 3 repetitive measurements was made for each level determination to ensure accuracy. If sufficient free product was present, depth-to-groundwater was subtracted from the TOC elevation, measured relative to mean sea level, to calculate the elevation of groundwater level in each well. Table 1 presents groundwater elevation data, including the presence and thickness of free product. Chart 1 pictorially presents historic groundwater elevation measurements above mean sea level for MW-1, MW-2, and MW-3.

LABORATORY ANALYTICAL RESULTS

Analytical results above detection limits are as follows:

- MW-1: TPH-G at 850 micrograms per liter (μ g/l), benzene at 5.4 μ g/l, ethylbenzene at 9.4 μ g/l, xylenes at 2.6 μ g/l, and MTBE at 9.8 μ g/l.
- MW-2: TPH-D at 5,800 μ g/l, TPH-G at 130 μ g/l, xylenes at 0.94 μ g/l and MTBE at 12 μ g/l.
- MW-3: TPH-D at 850 μg/l, TPH-G at 170 μg/l, benzene at 0.81μg/l and MTBE at 68 μg/l.

Analytical results for past and present quarters are summarized in attached Table 2, <u>Summary of Analytical Results</u>, <u>Mission Valley Rock</u>, <u>Sunol</u>, and documented in Appendix B, <u>Certified Laboratory Data Sheets and Chain-of-Custody</u>.



Charts 2A, 2B, and 2C present historic measurements of TPHD, TPHG, and MTBE respectively, and present analytical concentrations for MW-1, MW-2, and MW-3.

DATA INTERPRETATION

Figure 3, Groundwater Potentiometric Surface – Figure 3 indicates that groundwater flow direction was to the southeast toward San Antonio Creek, with an average gradient of 0.02 feet per foot (ft./ft.). The figure indicates that MW-3 is downgradient from the location of the former USTs. This is consistent with past quarterly groundwater flow direction and gradient measurements.

Chart 1, <u>Historical Groundwater Elevation</u>, indicates similar declining water elevation trends in all monitoring wells since they were installed in June 1998.

Figure 4, <u>TPH-D Concentrations in Groundwater</u> – Figure 4 indicates the highest concentration of TPH-D at MW-2 (5,800 μ g/l). Chart 2A, Historical TPH-D Concentrations, indicates this relationship is consistent with 80 percent of the previous quarterly events. A thin layer of free product has consistently been present in this well since the inception of quarterly sampling in September 1999 (Table 1).

Figure 5, <u>TPH-G Concentrations in Groundwater</u> – Figure 5 indicates the highest concentration of TPH-G at MW-1 (850 µg/l), upgradient from the former UST locations, but closest to the former gasoline UST location. The lowest TPH-G concentration was recorded in downgradient MW-3. Chart 2B, <u>Historical TPH-G Concentrations</u>, indicates this relationship is consistent with 40 percent of the previous quarterly events.

Figure 6, MTBE Concentrations in Groundwater – Figure 6 indicates the highest concentration of MTBE at downgradient MW-3 (68 µg/l), the lowest validated concentration at upgradient MW-1. Chart 2C, Historical MTBE Concentrations, indicates this relationship is consistent with 50 percent of the previous quarterly events.

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.

CONCLUSIONS AND RECOMMENDATIONS

Initial thickness of free product in MW-2 was measured at 0.01 feet.

Chemical analysis detected the following analytes above their respective detection limits:

- MW-1: TPH-G at 850 micrograms per liter (μg/l), benzene at 5.4 μg/l, ethylbenzene at 9.4 μg/l, xylenes at 2.6 μg/l, and MTBE at 9.8 μg/l.
- MW-2: TPH-D at 5,800 μg/l, TPH-G at 130 μg/l, xylenes at 0.94 μg/l and MTBE at 12 μg/l.

MW-3: TPH-D at 850 μg/l, TPH-G at 170 μg/l, benzene at 0.81μg/l and MTBE at 68 μg/l.

Groundwater flow direction was to the southeast toward San Antonio Creek, with an average gradient of 0.02 feet per foot (ft./ft.).

Groundwater elevations have been declining consistently in all monitoring wells since their installation in June 1998.

TPH-D, TPH-G, and MTBE have shown an overall decrease since groundwater sampling began in June 1998.

TEM recommends the following:

- Continue monitoring all wells for floating product, sheen and odors.
- Continued quarterly groundwater sampling to evaluate gradient and to monitor contaminant concentrations.
- Resumption of monthly purging of MW-2 for free product which was discontinued in May 1999 or the use of downhole absorbent socks for product recovery between quarterly sampling events.
- Installation of three (3) additional groundwater monitoring wells. One within the excavation area, one east of MW-3, and one south of MW-2. All new wells will be screened between 3 and 15 feet.

The next sampling event is scheduled for December 2000.

CLOSURE

Two additional copies of this letter report have been included for your delivery to:

- Mr. Scott Seery
 Alameda County Health Care Services Agency
 Environmental Health Services
 1131 Harbor Bay Parkway, Suite 250
 Alameda, CA 94502-6577
- California Regional Water Quality Control Board San Francisco Bay Region Toxics Cleanup Division 1515 Clay Street, Suite 1400 Oakland, CA 94612

TEM recommends that this quarterly letter report be submitted with a cover letter from Mission Valley Rock Company. According to Alameda County Water District (ACWD) groundwater monitoring guidelines, the cover letter must be signed by an authorized representative and state, at a minimum, the following:

"I declare under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct."

If you have any questions, please call TEM at (714) 560-8200 or by fax at (714) 560-8235.

Very Truly Yours,

TAIT ENVIRONMENTAL MANAGEMENT, INC.

Greg Buchanan Staff Geologist

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

Ed Batlle Director

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES

The overall objectives of the field-sampling program include generation of reliable data that will support development of a remedial action plan. Sample quality will be checked by the use of proper sampling, handling, and testing methods. Additional sample quality control methods may include the use of background samples, equipment rinsate samples, and trip and field blanks. Chain-of-custody forms, use of a state-certified laboratory, acceptable detection limits and proper sample preservation and holding times also provide assurance of accurate analytical data.

TEM will follow a quality assurance and quality control (QA/QC) program in the field to ensure that all samples collected and field measurements taken are representative of actual field and environmental conditions and that data obtained are accurate and reproducible. These activities and laboratory QA/QC procedures are described below.

<u>Field Samples</u>: Additional samples may be taken in the filed to evaluate both sampling and analytical methods. Three basic categories of QA/QC samples that may be collected are trip blanks, field blanks, and duplicate blanks.

Trip Blanks: Trip blanks are a check for cross-contamination during sample collection, shipment, and laboratory analysis. Thy are water samples that remain with the collected samples during transportation and are analyzed along with the field samples to check for residual contamination. Analytically confirmed organic-free water will be used for organic parameters and deionized water for metal parameters. The laboratory supplying the sample containers will prepare blanks. The blanks will be numbered, packaged and sealed in the same manner as the other samples. One trip blank will be used for each sample set of less than 20 samples. At least 5% blanks will be used for sets greater than 20 samples. The trip blank is not to be opened by field personnel.

<u>Field Blanks</u>: The field blank is a water sample that is taken into the field and is opened and exposed at the sampling point to detect contamination from air exposure. The water sample is poured into appropriate containers to simulate actual sampling conditions. Contamination due to air exposure can vary considerable from site to site.

The laboratory will not be informed about the presence of trip and field blanks, and false identifying numbers will be put on the labels. Full documentation of these collecting and decoy procedures will be made in the site logbook.

<u>Duplicate Samples</u>: Duplicate samples are identical sample pairs (collected in the same place and at the same time), and placed in identical containers. For soils, adjacent sample liners will be analyzed. For the purpose of data reporting, one is arbitrarily designated the sample, and the other is designated as a duplicate sample. Both sets of results are reported to give an indication of the precision of sampling and analytical methods.

The laboratory's precision will be assessed without the laboratory's knowledge by labeling one of the duplicates with false inditifying information. Data quality will by evaluated on the basis of the duplicate results.

Laboratory QA/QC

Execution of a strict QA/QC program is an essential ingredient in high-quality analytical results. By using accredited laboratory techniques and analytical procedures, estimates of the experimental values can be very close to the actual value of the environmental sample. The experimental value is monitored for its precision and accuracy by performing QC tests designed to measure the amount of random and systematic errors and to signal when correction of these errors in needed.

The QA/QC program describes methods for performing QC tests. These methods involve analyzing method blanks, calibration standards, check standards (both independent and the United States Environmental Protection Agency-certified standards), duplicates, replicates, and sample spikes. Internal QC also requires adherence to written methods procedural documentation and to the observance of good laboratory practices.

MISSION VALLEY / ROCK COMPANY

ROCK COMPANY ASPHALT COMPANY READY MIX COMPANY

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

October 23, 2000

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

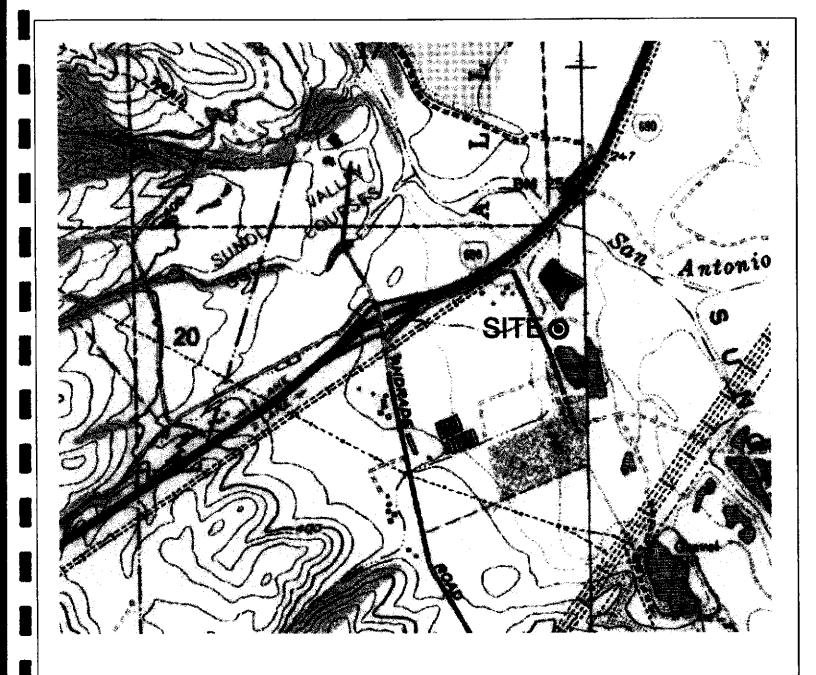
Dear Mr. Seery:

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

Thank You,
MISSION VALLEY ROCK CO.

W.M. Calvert

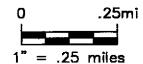
ON OCT 25 PH 3:





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





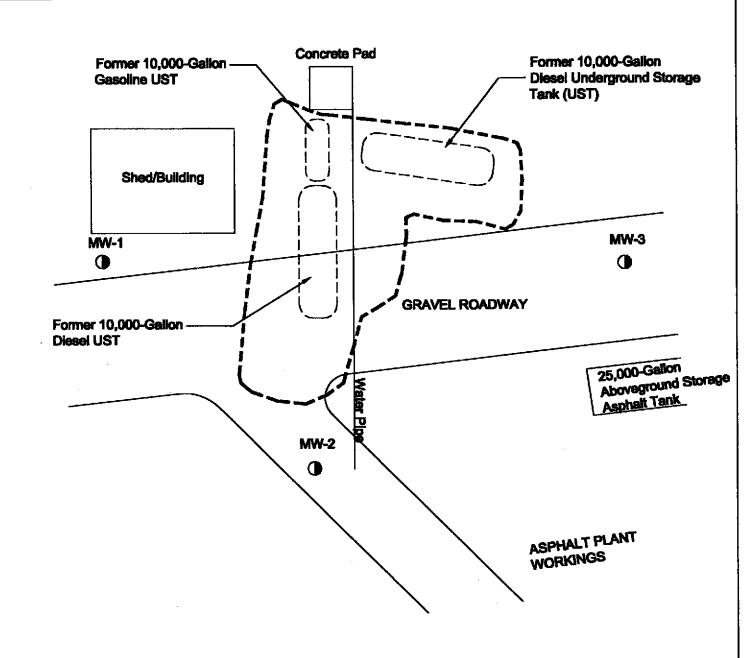


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SITE VICINITY MAP

MISSION VALLEY ROCK CO. 7999 ATHENOUR WAY SUNOL, CALIFORNIA

PROJECT NO. EM-5009



BASE MAP TAKEN FROM TANK PROTECT ENGINEERING

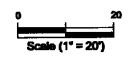
ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

EXPLANATION:

MW-2 GROUNDWATER MONITORING WELL LOCATION

(AND DESIGNATION

--- LIMITS OF EXCAVATION





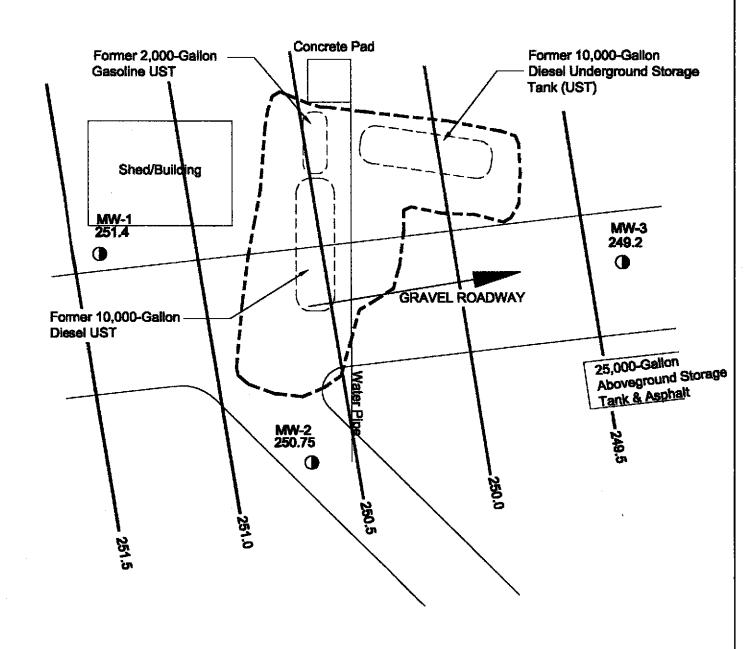


701 NORTH PARKCENTER DRIVE SANTA ANA, CA 92705 (714) 580-8200 (714) 580-8235 FAX

ENVIRONMENTAL MANAGEMENT, INC.

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

PROJECT NO. EM-5009



BASE MAP TAKEN FROM TANK PROTECT ENGINEERING

ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

EXPLANATION:

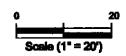
GROUNDWATER MONITORING WELL LOCATION MW-2 249.2 AND DESIGNATION WITH POTENTIOMETRIC

ELEVATION IN FEET ABOVE MEAN SEA LEVEL

250.0 — POTENTIOMETRIC CONTOUR

GROUNDWATER FLOW DIRECTION

LIMITS OF EXCAVATION







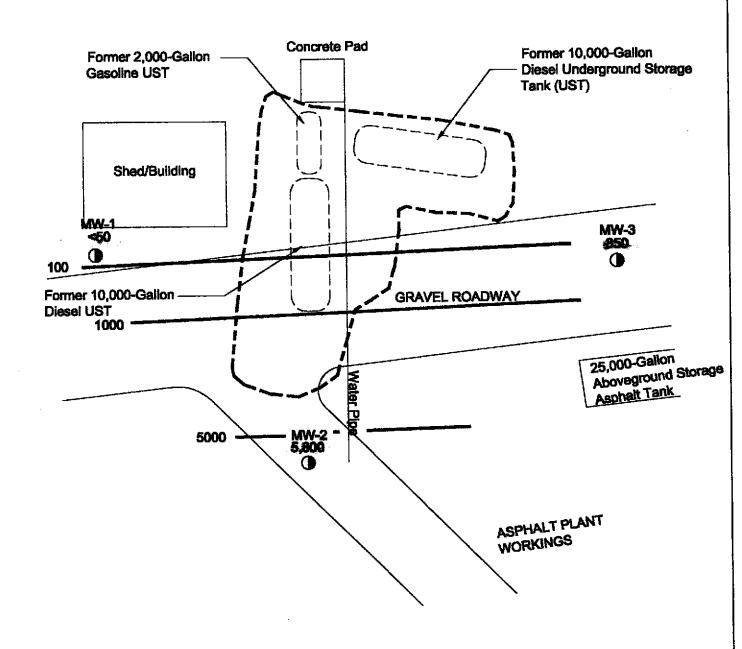
701 NORTH PARKCENTER DRIVE SANTA ANA, CA 92705 (714) 680-8200 (714) 580-8235 FAX

ENVIRONMENTAL MANAGEMENT, INC.

GROUNDWATER POTENTIOMETRIC SURFACE

MISSION VALLEY ROCK CO. 7999 ATHENOUR WAY **SUNOL. CALIFORNIA**

PROJECT NO. EM-5009



BASE MAP TAKEN FROM TANK PROTECT ENGINEERING

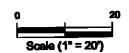
ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

EXPLANATION:

GROUNDWATER MONITORING WELL LOCATION
AND DESIGNATION WITH TOTAL PETROLEUM
HYDROCARBONS AS DIESEL (TPH-D)
CONCENTRATIONS IN MICROGRAMS PER LITER
(ug/L)

1000 ---- TPH-D CONTOURS WITH CONCENTRATIONS IN ug/L

-- LIMITS OF EXCAVATION

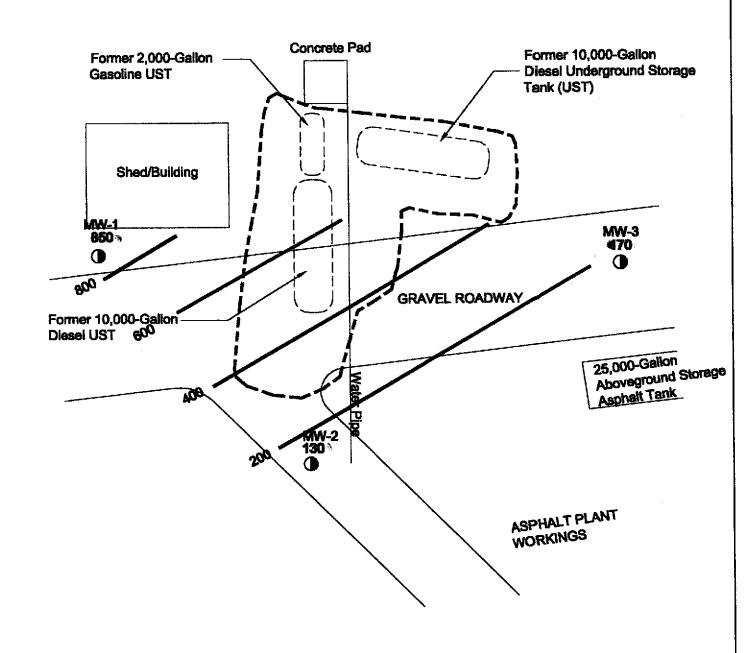






IPH-DICONCENTRATIONS
IN GROUNDWATER
MISSION VALLEY ROCK CO.
7999 ATHENOUR WAY
SUNOL, CALIFORNIA

PROJECT NO. EM-5009



BASE MAP TAKEN FROM TANK PROTECT ENGINEERING

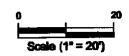
ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

EXPLANATION:

GROUNDWATER MONITORING WELL LOCATION
AND DESIGNATION WITH TOTAL PETROLEUM
HYDROCARBONS AS GASOLINE (TPH-G)
CONCENTRATIONS IN MICROGRAMS PER LITER
(ug/L)

800 ---- TPH-G CONTOURS WITH CONCENTRATIONS IN ug/L

--- LIMITS OF EXCAVATION







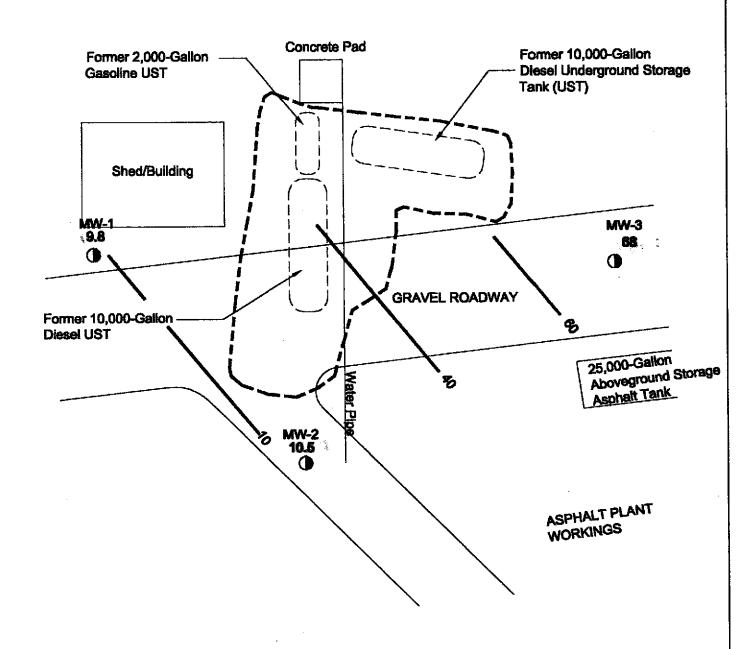
IN GROUNDWATER

MISSION VALLEY ROCK CO.

7999 ATHENOUR WAY

SUNOL, CALIFORNIA

PROJECT NO. EM-5009



BASE MAP TAKEN FROM TANK PROTECT ENGINEERING

ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

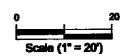
EXPLANATION:

GROUNDWATER MONITORING WELL LOCATION MW-2 AND DESIGNATION WITH METHYL-TERT-BUTYL 68

ETHER (MTBE) CONCENTRATIONS IN \bullet MICROGRAMS PER LITER (ug/L)

MTBE CONTOURS WITH CONCENTRATIONS IN ug/L

LIMITS OF EXCAVATION







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MTBE CONCENTRATIONS IN GROUNDWATER MISSION VALLEY ROCK CO. 7999 ATHENOUR WAY SUNOL, CALIFORNIA

PROJECT NO. EM-5009

TABLE 1
SUMMARY OF GROUNDWATER DATA (in feet)
MISSION VALLEY ROCK, SUNOL

WELL	DATE	DEPTH TO WATER	GROUNDWATER ELEV.	PRODUCT THICKNESS
MW-1	Jun-98	-1.32	255.19	0
TOC=256.51' msl	Jan-99	-2.28	254.23	0
Screen: 5'-20' bgs	Mar-99	-1.88	254.63	o ·
ľ	Jun-99	-3.35	253.16	o
	Sep-99	-3.66	252.86	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
MW-2	Jun-98	-1.72	254.98	0.005
TOC=256.70' msl	Jan-99	-2.69	254.01	4.00
Screen: 5'-20' bgs	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 5.05	252.08	0.02
	Sep-00	-5.95	250.75	>0.01
MW-3	Jun-98	-2.66	254.06	0
TOC=256.72' msl	Jan-99	-4.47	252.25	SLIGHT ODOR
Screen: 5'-20' bgs	Mar-99	-3.96	252.76	SHEEN
1	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
1	Jun-00	-6.35	250.37	VERY SLIGHT ODOR
	Sep-00	-7.3	249.42	VERY SLIGHT ODOR

TOC = Top of Casing surveyed above mean seal level.

GROUNDWATER ELEVATION = Measured above mean seal level.

TABLE 2 SUMMARY OF ANALYTICAL RESULTS MISSION VALLEY ROCK, SUNOL

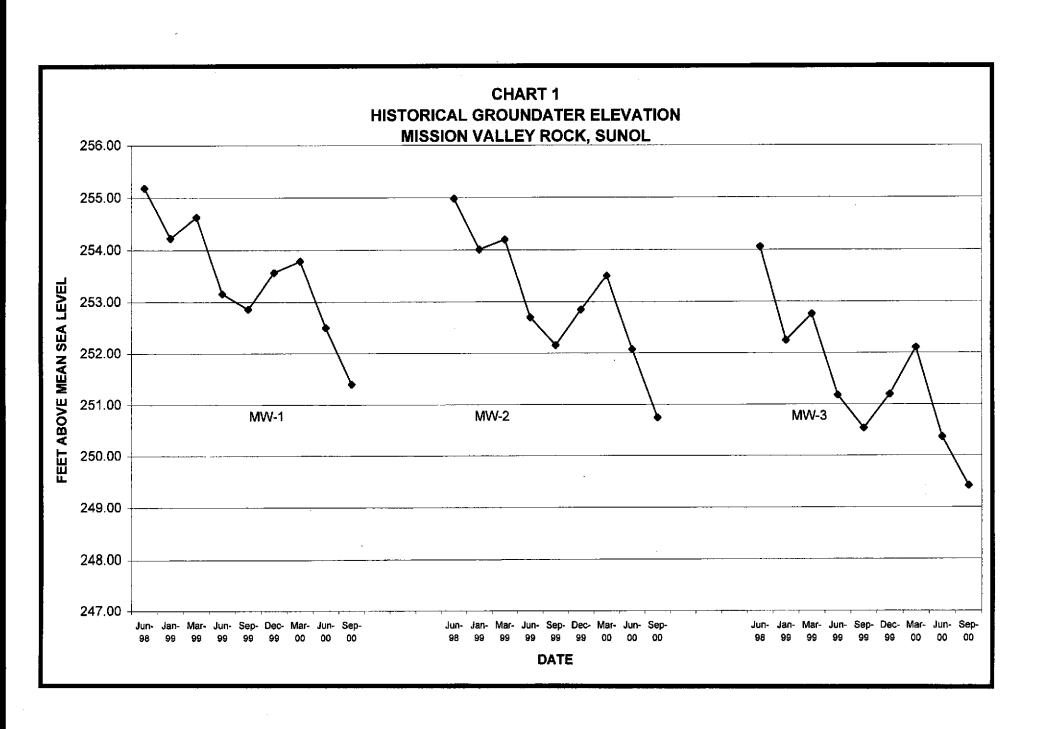
WELL	DATE	IPHD	<u>TPHG</u>	MTBE	<u>Benzene</u>	<u>Toluene</u>	Ethyl-benz	Xylenes	BTEX SUM
MW-1	Jun-98	<50	3100	110	19	2.3	91	48	160.3
	Oct-98	<50	2300	<0.5	3.1	4.2	5	15	27.3
	Dec-98	350	<50	<0.5	12	7.5	20	6.2	45.7
	Mar-99	190	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Jun-99	210	1800	<0.5	1.2	0.9	1.5	4.6	8.2
	Sep-99	62	180	<0.5	< 0.5	<0.5	<0.5	<0.5	0
	Dec-99	290	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
•	Mar-00	86	<50	<0.5	<0.5	<,0.5	<0.5	<0.5	0
	Jun-00	70	450	7.6	2.1	<0.5	2.1	1.4	5.6
	Sep-00	<50	850	9.8	5.4	<0.5	9.4	2.6	17.4
MVV-2	Jun-98	12000	2500	14	0.68	<0.5	1.2	0.57	2.45
	Oct-98	4300	<50	<0.5	<0.5	<0.5	<0.5	<0.5	o
	Dec-98	38000	<5000	<500	<50	<50	51	190	241
	Mar-99	580	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Jun-99	4500	24000	<0.5	38	27	41	98	204
	Sep-99	24000	1400	27	<0.5	<0.5	<0.5	<0.5	0
	Dec-99	2300	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Mar-00	620	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Jun-00	1700	270	17	<0.5	<0.5	<0.5	<0.5	0
	Sep-00	5800	130	12	<.5	<.5	<.5	0.94	0.94
MW-3	Jun-98	12000	300	150	0.8	<0.5	<0.5	<0.5	0.8
	Oct-98	6400	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Dec-98	5600	<100	- 110	1.6	1.4	<1	<1	- 3
	Mar-99	150	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Jun-99	620	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Sep-99	1500	230	89	<0.5	<0.5	<0.5	<0.5	0
	Dec-99	58	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Mar-00	94	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0
	Jun-00	240	170	100	<0.5	0.52	<0.5	<0.5	0.52
	Sep-00	850	170	68	0.81	<0.5	<0.5	<0.5	0.81

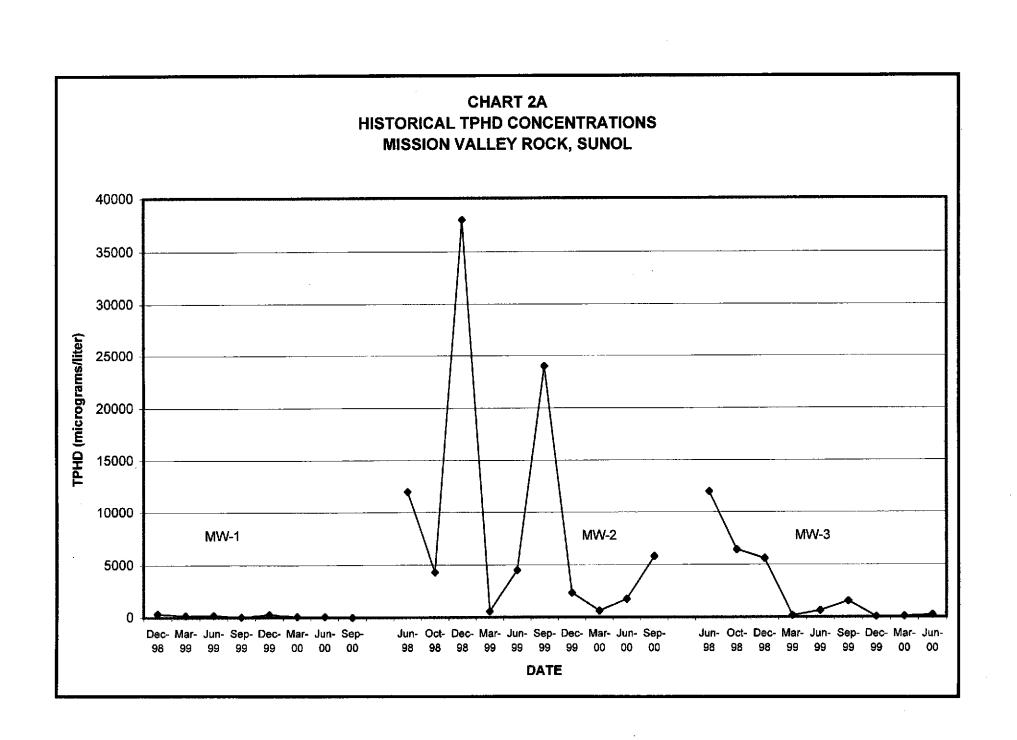
TPHD = Total Petroleum Hydrocarbons as Diesel. <= Detection Reporting Limit EPA Method 8015 MOD. (Extractable).

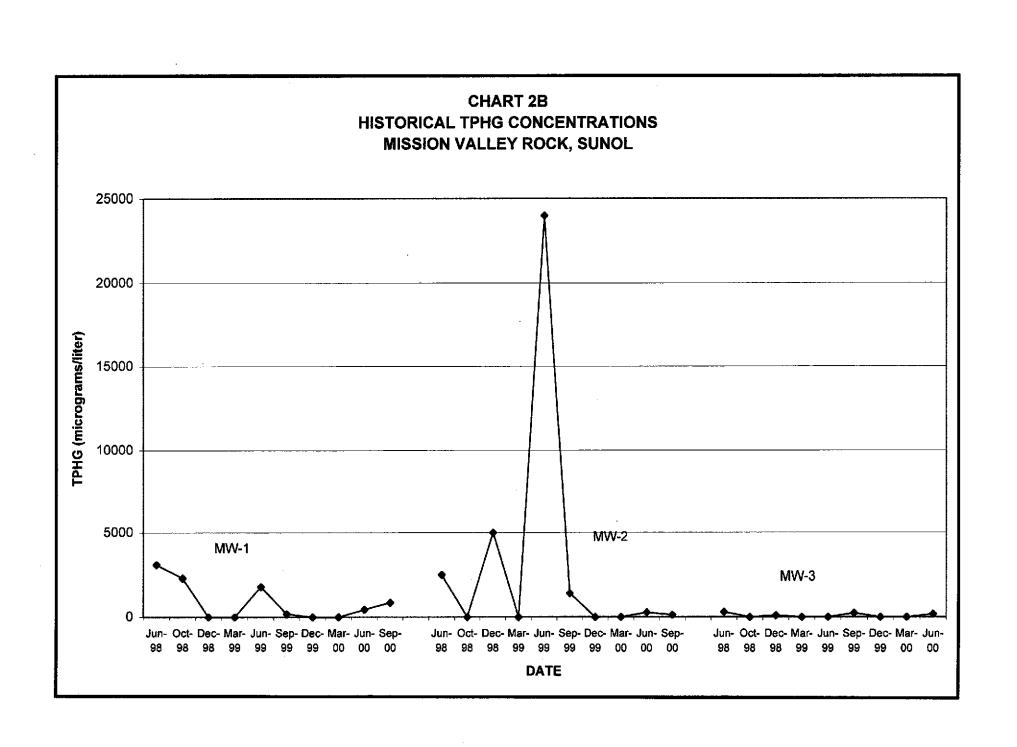
TPHG = Total Petroleum Hydrocarbons as Gasoline. <= Detection Reporting Limit EPA Method 8015 MOD. (Purgeable).

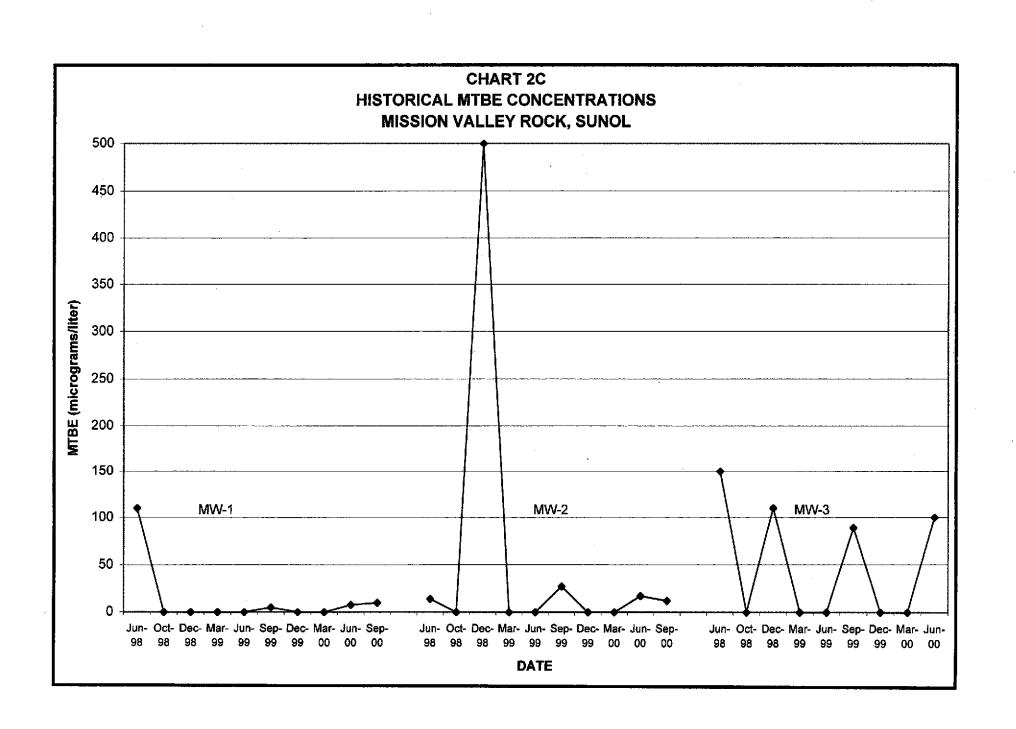
MTBE = Methyl-t-butyl-Ether. < = Detection Reporting Limit. EPA Method 8020.

Benzene, Toluene, Ethyl Benzene, Xylenes . <= Detection Reporting Limit. EPA Method 8020.









APPENDIX A
WELL SAMPLING FORMS

RECORD OF WATER SAMPLING

PROJECT NUMBER EW-5009 DATE: 9-14 PROJECT NAME: MISSION Valley Rock PROJECT LOCATION: Suggestion	1-00	WELL NO. Mw-/ WELL DIA: 2" TO ELEV:
SAMPLER RS D	LOCK NO.	
WELL DEPTH (from construction details) WELL DEPTH (measured/date) 16.32(4/00) SOFT BOTTOM? NO DEPTH TO WATER 5.1141. TIME 035 PRESSURE (circle one) YES OR SO	Sted	
IF YES, WAS PRESSURE (circle one): POSITIVE OR NEGATIVE WATER VOLUME IN WELL:	◆ mw-1	. mm-3
[2-INCH CASING=0.16 GAL/FT] [4-INCH CASING=0.65 GAL/FT] [6-INCH CASING=1.47 GAL/FT] [1 GAL=3.78 L]		25,000 AGST
	ASPHALT	•
V	TUAL PURGE VOL. (GAL	_
FIELD MEASURE	MENTS	

Time	Water Removed	Temp.* (F. or C.)	PH*	EC*	Turbidity (NTU)	Dissolved Oxygen	Remarks
1/42		20,6	8.33	1.17	13	3.9/	CLR. SLT, ODOR
1151	N	20.0	8.45	1.19	3/	9.69	No Shem
1157	4	19.8	8,38	1,21	177	9.7/	
1203	6	19.7	8.38	1.23	30	9.63	
			Sa	mpled	@ 121	0	
			<u> </u>				
			-				
		<u> </u>		 		1	
·							

* pH within 0.1, To within TC, BC within 10%

WATER VOLUME IN DRUM 18901
NEED NEW DRUM? NO

RECORD OF WATER SAMPLING

RECORD OF WATER	DIMINI DING
PROJECT NUMBER (W 5009 DATE: 9-14 PROJECT NAME: MISSION Valley Rock PROJECT LOCATION: 5 0 no 1 SAMPLER RS D ANALYSES: DIESUL, GAS MISTEX WELL DEPTH (from construction details)	
WELL DEPTH (measured/date) 19.58(40) SOFT BOTTOM? DEPTH TO WATER 5.95 ft TIME 10.35 PRESSURE (circle one) YES OR TIME 10.35 IF YES, WAS PRESSURE (circle one): POSITIVE OR NEGATIVE WATER VOLUME IN WELL: 2 cl.	mw.
[2-INCH CASING=0.16 GAL/FT] [4-INCH CASING=0.65 GAL/FT] [6-INCH CASING=1.47 GAL/FT] [1 GAL=3.78 L]	ASPHALT WORKINGS
CALCULATED PURGE VOL. (GAL) 6.6 (L) ACT PURGE METHOD Hand Ball SAN FIELD MEASURES	TUAL PURGE VOL. (GAL) & (L) MPLE METHOD DES POSSI LLA BALLA MENTS

Time	Water Removed	Temp.* (F. or C.)	PH*	EC*	Turbidity (NTU)	Dissolved Oxygen	Remarks
1235	29al	22.2	8,36	1.48	31	8.79	then film (4.10) product
1242	4	22.4	829	1.55	32	8.74	
1245	4	22.4	8.32	1.58	792	3.81	
			Coor	pled	@ 129	19	
				,			
		·					

SIGNATURE: RSD JUNEOU	WATER VOLUME IN DRUM / Sal	
pH within 0.1, To within 1°C, EC within 10%	NEED NEW DRUM?	_

RECORD OF WATER SAMPLING

PROJECT NUMBER FWG-5009 DATE: 9-19 PROJECT NAME: MISSION Valley Rock PROJECT LOCATION: Sumal	WELL NO. MW - 3 WELL DIA: 2" TOC FLEV:
SAMPLER ZSB	LOCK NO.
ANALYSES: Tohd Toha MBTEX	
WELL DEPTH (from construction details)	SHED
WELL DEPTH (measured/date) 17,8(4/66) SOFT BOTTOM? No	
DEPTH TO WATER 177.3 ft TIME 1035	
PRESSURE (circle one) YES OR	&mw-1
IF YES, WAS PRESSURE (circle one): POSITIVE OR NEGATIVE	mu-3
WATER VOLUME IN WELL: 168 gal	-6-
[2-INCH CASING=0.16 GAL/FT] [4-INCH CASING=0.65 GAL/FT] [6-INCH CASING=1.47 GAL/FT] [1 GAL=3.78 L]	WM-5 WARL SE OND
	ASPHALT PLANT
	TUAL PURGE VOL. (GAL) 6 (L) TPLE METHOD Despisable Barles
FIELD MEASUREN	MENTS

Time	Water Removed	Temp.* (F. or C.)	PH*	EC*	Turbidity (NTU)	Dissolved Oxygen	Remarks
1058	Ø	22.4	8.67	1.21	/	1.39mg/L	
1104	Z	20.9	8.29	1.02	31	9,48	Cloudy
	4	21.3	8,29	1.16	723	1.97	
1109 1115	6	21.5	8.34	1.16	3/	9,25	
					SAMPO	EP //20	

SIGNATURE: Z	2/2	user
* pH within	was to wi	

WATER VOLUME IN DRUM	10gal
DRUM?	No

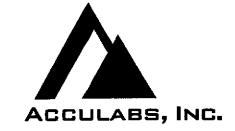
APPENDIX B
LABORATORY DATA SHEETS AND CHAIN-OF-CUSTODY

													ı	F87:	33 F	lev	В
Acculabs Inc. [] 1725 W. 17th. St. Tempe AZ 85281 [] 4455 S. Park Ave. Tucson AZ 85714 [] 2029 N. 4th St. Flagstaff AZ 86004		5 5	20-807 20-774	-1310 F -3801 F	ax 80)7-380 74-764	13 18		R	b Nu eport ue Da	2	-1	7	89			
1046 Olive Drive Davis CA 95616 [] 75 Suttle St. Durango CO 81301 [] 4663 Table Mountain Dr. Golden CO 80 [] 992 Spice Islands Dr. Sparks NV 89431		9 3 7	70-247 03-277 75-355	-0920 F -4220 F -9514 F -0202 F	ax 2 ax 2 ax 3	47-422 77-951	27 12 17			0) <u>, , , , , , , , , , , , , , , , , , ,</u>	Ī,			of.		
Client TAIT ENVIRONMENT Address 275 PARAISO D			EМ	EN	<u></u>		F	ax Re		and the second	A 201 S 188 S	programme and the	age IPPL	Yelly	of FOR	MAT	(o)
City, State & Zip DANNLLE, CA	1. 94						\top	ysten		ne		1					
Contact / CK D CESSER Phone (925) 899-3473	Collector's	Name J	Zick	200	1487C	ir		WS N				1	Repoi DWR		tate/E	PA_	YN
Fax (925/837-1156	Project Nar	77					≺	ollec		oint							
P.O. Number EM - 5009 SAMPLETYPE CODES DW = drinking water TB = travel blank VW = waste water SD = solid MW = mazardous waste SL = sludge	Compli Monito	iance oring N	S a p p	500 C 0 0 1 a	Ana	lyses ested		ocatio	on (C	ity)	/	//	//	7	//	7	
TURNAROUND TIME REQUING A STATE OF THE PROPERTY OF THE PROPERT	Lab Ma Appro	nager oval	T Y P	n e e s	/j	1 × 1 × 1	(X)				//			//	//		Spl. No.
MW-1	9/14		MW	70A	X	, l	_	-	+	\dashv				_		k'	<u>) (</u>
MW-1 MW-2	9/14		MW	Nters Voc	X	X	\dashv	-	+	\dashv	-		_			-	92
	9/14	1249		2 Liters		*											
mw-2 mw-3 mw-3	9/14	1/20	MM	K ₂ V _P	Υ		_	_			_				\downarrow		23
m W-3	9/14	1/20	MM	Lites		4		_			-				\dashv	_	
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Instructions/Comments/Special Require	ments:		L	<u></u>	<u> </u>										1		
SAMPLERECEIPT	₩ Date	Time		Samp	les F	Relinc	i Juisl	h ed l	Эу.							ved I	ي پيچون
Received Cold (N	7-1400	1440	ļ	<u> </u>							7	y	<u> </u>	U	12.	8	*
Custody Seals Y N	<u> </u>		-						 .								

Acculabs terms are Net 40 (Payment must be received by the date shown on the Invoice or any discount is void)

To the maximum extent permitted by law, the Client agrees to limit the liability of Acculabs Inc. for the Client's damages to the total compensation received unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

No. of Containers



Sample Log 21789 September 22, 2000

Rick Dreessen
Tait Environmental Management
275 Paraiso Drive
Danville, CA 94526

Subject:

3 Water samples

Project Name:

Mission Valley Rock

Project Number :

EM-5009

P.O. Number:

EM-5009

Dear Mr. Dreessen,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Acculabs - Davis is certified by the State of California (# 2330), the State of Arizona (AZ0583) and the State of Nevada (CA00039-2000-32). If you have any questions regarding procedures or results, please call me at 530-757-0920.

Sincerely,

Tom Kwoka

Tom Kwok



September 22, 2000 Sample Log 21789

MTBE (Methyl-t-butyl ether) By EPA Method 8020/602

From : Mission Valley Rock (Proj. # EM-5009)

Sampled: 09/14/00 Received: 09/14/00 Matrix: Water

SAMPLE	Date Analyzed	(MRL) ug/t	Measured Value wg/L
MW-1	09/22/00	(5.0)	9.8
MW-2	09/22/00	(5.0)	12
MW-3	09/21/00	(5.0)	68

Approved By:

Tom (Kwoka Lab Qirector



Sample Log 21789 21789-01

Sample: MW-1

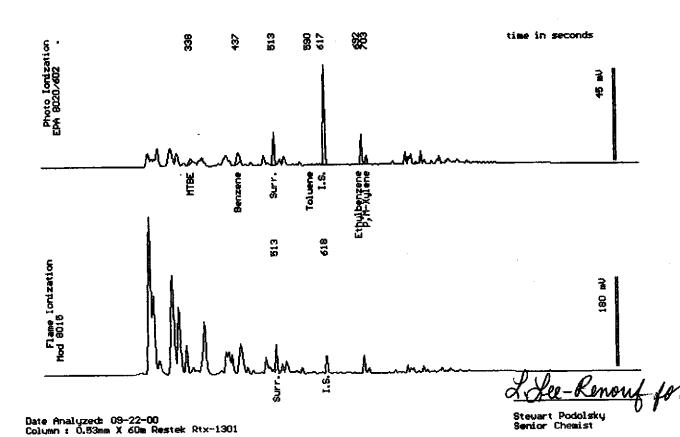
From : Mission Valley Rock (Proj. # EM-5009)

Sampled: 09/14/00

Dilution: 1:1

Run Log: 2195N

Parameter	(MRL) wg/L	Measured Value
B	(.50)	5.4
Benzene Toluene	(.50)	<.50
Ethylbenzene	(.50)	9.4
Total Xylenes	(.50)	2.6
TPH as Gasoline	(50)	
Surrogate Recovery	4	108 %





Sample Log 21789 21789-02

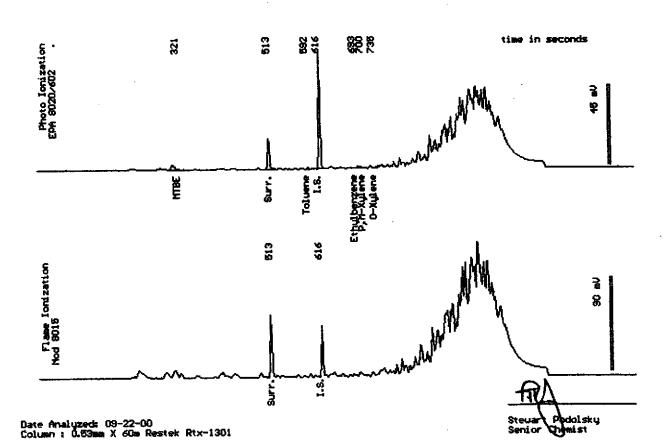
Sample: 199-2 ...

From : Mission Valley Rock (Proj. # EM-5009)

Sampled: 09/14/00

Dilution: 1:1 Run Log: 2195P

Parameter	(MRL) ug/L	Measured Value wg/L
Benzene	(.50)	<.50
		<.50
		<.50
		.94
Parameter (MRL) ug/L Benzene (.50) Toluene (.50) Ethylbenzene (.50) Total Xylenes (.50) TPH as Gasoline (50) Surrogate Recovery * Product is not typical gasoline.	130 *	
		111 %





Sample Log 21789 21789-03

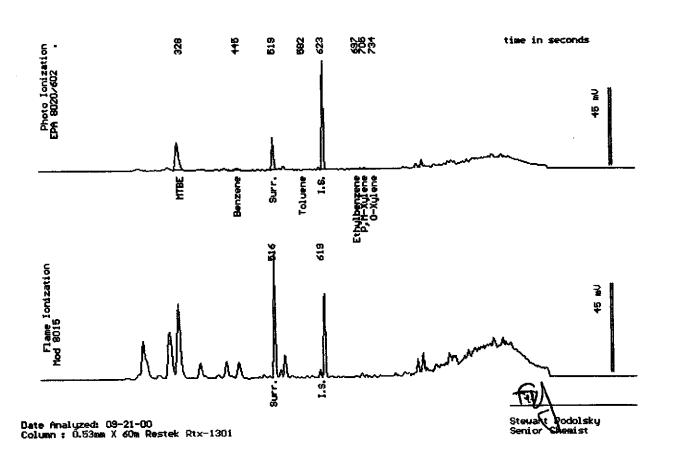
Sample: MW-3

From : Mission Valley Rock (Proj. # EM-5009)

Sampled: 09/14/00

Dilution: 1:1 Run Log: 2195M

Parameter	(MRL) ug/L	Measured Value
Benzene	(.50)	.81
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	170
Surrogate Recovery	7	102 %





September 22, 2000 Sample Log 21789

QC Report for EPA 8020 & Modified EPA 8015

Run Log: 2195M, N

From : Mission Valley Rock (Proj. # EM-5009)

Sample(s) Received: 09/14/00

Parameter	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery	RPD *	
Benzene	119	130	9	
Ethylbenzene	111	135	20	

No gasoline spike recovery due to high gas in spiked sample.

* RPD = Relative Percent Difference

Parameter	Laboratory Control Sample % Recovery
Benzene Ethylbenzene Gasoline	92 91 99
Parameter	Method Blank
Benzene Toluene Ethylbenzene Total Xylenes	<0.50 ug/L <0.50 ug/L <0.50 ug/L <0.50 ug/L
TPH as Gasoline	<50 ug/L

L. Lee Row for Ton Hocks
Lab Director



Sample Log 21789 21789-01

Sample: MW-1

From : Mission Valley Rock (Proj. # EM-5009)

Sampled : 09/14/00

Extracted: 09/19/00 Q

Dilution: 1:1

QC Batch : DW000905

Run Log : 7476H

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
трн as Diesel	(50)	<50

EPA Mod 8015

Date: 09-20-00 Time: 09:00:07 Column: 0.53mm ID X 15m DB1 (J&W Scientific) 10 mV

Stevar Podolsky Senior Chemist



Sample Log 21789 21789-02

Sample: MM-2

From : Mission Valley Rock (Proj. # EM-5009)

Sampled: 09/14/00

Extracted: 09/19/00

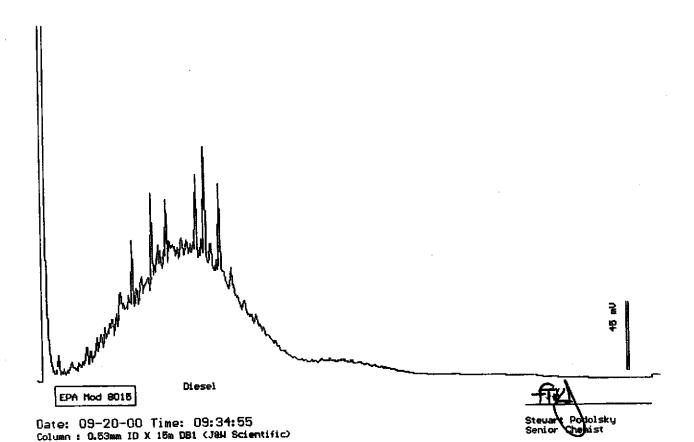
QC Batch : DW000905

Dilution: 1:1

Run Log : 7476H

Matrix : Water

Measured Value was (MRL) ug/L Parameter 5800₄ (50) TPH as Diesel





Sample Log 21789

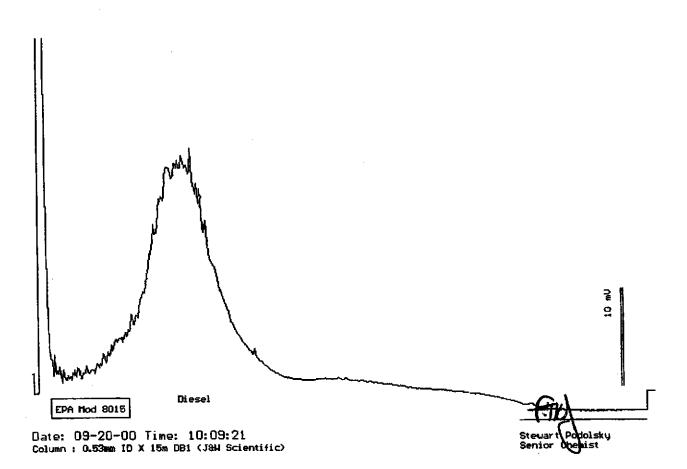
Sample: MW-3

From : Mission Valley Rock (Proj. # EM-5009)

Sampled : 09/14/00

Extracted: 09/19/00 QC Batch : DW000905 Dilution : 1:1 Run Log : 7476H

Parameter	(MRL) ug/L	Measured Value ug/L		
TPH as Diesel	(50)	850		





Acculabs Inc. - Davis

TPH Diesel by 8015 Mod QC Report

Matrix: Water

Date Extracted: 9/18/00

QC Batch: DW000905

Date Analyzed: 9/18/00

QC Limits Set: 7/27/00

	Spike Conc	LCS	LCSD	
Parameter	ug/L	% Rec	% Rec	RPD
TPH as Diesel	1000	107	95	11.9

Control Chart Limits				
Lower	Upper			
66	127			

	MDL	Measured value				
Method Blank	ug/L	ug/L				
TPH as Diesel	(50)	<50				
TPH as Motor Oil	(100)	<100				

Ton Kwoka

Laboratory Director

SEP-15-00 FRI 09:58 AM ACCULARS DAVIS

FAX NO. 530 753 6091

P.02

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Acculabs Inc.								Lab	Numb	Š	70	a	
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[] 4455 S. Park Ave, Tucson AZ 85714		5	20-807	-3001 Fe	x 807:	-3803			port	0	-21	-21	
[] 2029 N. 4th St. Flagstelf AZ 88004		-		∟7843 Fe				Date	Date:	7	- A		
hel 1048 Olive Drive Davis CA 98516		_		7-0920 Fi									
1 76 Suttle St. Durango CO 61301				-4220 Fe									
[] 4653 Table Mountain Dr. Golden CO I [] 992 Spice letends Dr. Sparks NV 8943				1-9514 Fi 3-0202 Fi									
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Cay, State & Zip DAMILLE C.		526						n Name					
Contact / Rick Dreesse							PWS	No.		_			PA Y N
none (925) 899-3473	Collector's						POE I	No.		0	WR No		
** [925] 837-1156	Project Ne	mo Mis	5000	Velle	L	<u>r/</u>	Coffee	tion Po	int		····		
0. Number ENV-5009	Project Nu			-50ó			Locati	ion (CSt	v),,			,	· / - / · · ·
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DW + drinking water TB = travel blank				+# Ex	edaei	rred//	ሬሃ	[[1.	/ /	/ /	/ / /
W = waste water SD = solid	Monit	orag §	r i	直移		16	Y /	/ /	/ /	/ /		/ /	//
monitoring well SO = soil	0	N		5		10	/ /		/ /			/ /	///
W = hazardous waste SL = studge		180-160 2 80			1		./	//	<i>f</i>		/ /		/ / /
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MW-1	9/14	12,0	MM	V-B	X							1 1	<u> </u>
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MW-2	19/1Y	1219	WW	YOA	X .	۰	1		_ _			\downarrow	02
MW-2	9/14	1249	W	Like)						<u> </u>	$\downarrow \downarrow$	
MW-3	9/14	1/20	MW	4/49	<u> </u>						_		03
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Instructions/Comments/Special Requi	(Allianter:		<u> </u>										
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