TANK PROTECT ENGINEERING
of Northern California, Inc.

October 26, 1999

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

Re: Third Quarter Report, 1999, Mission Valley Rock, 799 Athenour Way, Sunol, CA 94586

Dear Mr. Calvert:

Tank Protect Engineering of Northern California, Inc. (TPE) is pleased to submit this quarterly letter report of environmental services conducted at the subject site. Work conducted prior to the fourth quarter 1998, is documented in TPE's October 30, 1998 Preliminary Site Assessment Report, Mission Valley Rock, 799 Athenour Way, Sunol, CA 94586.

Work conducted by TPE during fourth quarter, 1998:

- January 5, 1999 - Loosened well caps on all wells to allow depth-to groundwater to stabilize to atmospheric pressure for groundwater gradient determination. Measured depth-to-groundwater in monitoring wells MW-1 through MW-3 for evaluation of groundwater flow direction and gradient. Collected a groundwater sample from each well for analysis for total petroleum hydrocarbons as diesel (TPHD) and gasoline (TPHG); methyl t-butyl ether (MTBE); and benzene, toluene, ethylbenzene, and xylenes (BTEX). Additionally, analyzed a trip blank sample (MW-4) for BTEX.

Work conducted by TPE during first quarter, 1999:

- February 24, 1999 - Submitted to the client a Fourth Quarter Report, 1998, Mission Valley Rock, 799 Athenour Way, Sunol, CA 94586.

- March 29, 1999 - Loosened well caps on all wells to allow depth-to groundwater to stabilize to atmospheric pressure for groundwater gradient determination. Measured depth-to-groundwater in monitoring wells MW-1 through MW-3 for evaluation of groundwater flow direction and gradient. Collected a groundwater sample from each well for analysis for TPHD, TPHG, MTBE, and BTEX. Additionally, analyzed a trip blank sample (MW-4) for TPHD, TPHG, MTBE, and BTEX. Collected one sample (DW) to characterize the on-site drummed water for landfill disposal.

Work conducted by TPE during second quarter, 1999:

- April 2, 1999 - Collected samples to characterize the drill cuttings contained in 55-gallon drums for landfill disposal.

- April 26, 1999 - Checked on-site monitoring well MW-2 for the presence of free product. Removed approximately 25 gallons of petroleum contaminated water using a dedicated polyethylene bailer.

- May 21, 1999 - Checked on-site monitoring well MW-2 for the presence of free product. Removed approximately 20 gallons of petroleum contaminated water using a dedicated polyethylene bailer.

- May 24, 1999 - Disposed of approximately 170 gallons of petroleum contaminated water contained in 55-gallon drums, resulting from sampling and/or bailing events.

- June 10, 1999 - Loosened well caps on all wells to allow depth-to groundwater to stabilize to atmospheric pressure for groundwater gradient determination. Measured depth-to-groundwater in monitoring wells MW-1 through MW-3 for evaluation of groundwater flow direction and gradient. Collected a groundwater sample from each well for analysis for TPHD, TPHG, MTBE, and BTEX. Additionally, analyzed a trip blank sample (MW-4) for TPHG, MTBE, and BTEX.

WORK CONDUCTED BY TPE DURING THIRD QUARTER, 1999:

- September 1, 1999 - Submitted to the client a First Quarter Report, 1999, Mission Valley Rock, 799 Athenour Way, Sunol, CA 94586.

- September 17, 1999 - Loosened well caps on all wells to allow depth-to groundwater to stabilize to atmospheric pressure for groundwater gradient determination. Measured depth-to-groundwater in monitoring wells MW-1 through MW-3 for evaluation of groundwater flow direction and gradient. Collected a groundwater sample from each well for analysis for TPHD, TPHG, MTBE, and BTEX. Additionally, analyzed a trip blank sample (MW-4) for TPHG, MTBE, and BTEX.

- September 22, 1999 - Submitted to the client a Second Quarter Report, 1999, Mission Valley Rock, 799 Athenour Way, Sunol, CA 94586.

Details of the above work are presented below.

Groundwater Gradient

On September 17, 1999, depth-to-groundwater was measured from top of casing (TOC) in wells MW-1 through MW-3 to the nearest 0.01 foot using an electronic Solinst water level meter. A minimum of 3 repetitive measurements were made for each level determination to ensure accuracy. Depth-to-groundwater was subtracted from the TOC elevation, measured relative to mean sea level, to calculate the elevation of the groundwater level in each well (see attached Table 1).

Attached Figure 1 is a groundwater gradient map constructed from the data collected on September 17, 1999. Groundwater flow direction was predominantly to the southeast with an average gradient of about 0.0022 feet per foot.

Based on the groundwater flow direction for the subject quarter, wells MW-1 and MW-2 are located upgradient and well MW-3 is downgradient of the location of the former underground fuel tanks.

Groundwater Sampling and Analytical Results

On September 17, 1999, groundwater samples were collected from monitoring wells MW-1 through MW-3. Before sampling, each well was purged of about 6 to 7 gallons of groundwater with a dedicated polyethylene bailer and until the temperature, conductivity and pH of the water in the wells had stabilized (see attached Records of Water Sampling). Because a dedicated bailer was used for each well sampled, no decontamination was necessary between sampling events. The water samples were collected in laboratory-provided, sterilized, 40-milliliter glass vials having Teflon-lined screw caps; measured for turbidity and labeled with project name, date and time collected, sample number and sampler name. The samples were immediately stored on crushed ice for transport to California State Department of Health Services (DHS) certified CHROMALAB, INC. located in Pleasanton, California accompanied by chain-of-custody documentation.

All groundwater samples were analyzed for TPHD and TPHG by Environmental Protection Agency (EPA) Methods 3510/8015M and 5030/8015M, respectively and for MTBE and BTEX by EPA Method 8020. The trip blank sample MW-4 was analyzed for TPHG, MTBE, and BTEX.

Each well was checked for floating product using a dedicated, disposable polyethylene bailer. **Hydrocarbon odor was noted in well MW-3. A hydrocarbon sheen was observed in MW-2** (see attached Table 2).

Purge water was stored on site in 55-gallon drums labeled to show material stored, date filled, company name, contact person and telephone number.

See attached protocols for TPE's sample handling, groundwater monitoring well sampling and quality assurance and quality control procedures.

Analytical results for wells MW-1, MW-2, and MW-3 detected TPHD at concentrations of 62 parts per billion (ppb), 24,000 ppb, and 1,500 ppb, respectively. TPHG was detected in wells MW-1, MW-2, and MW-3 at concentrations of 180 ppb, 1,400 ppb, and 230 ppb, respectively. MTBE was detected in wells MW-2 and MW-3 at concentrations of 27 ppb and 89 ppb, respectively. No BTEX chemicals were detected

in any well. The trip blank sample MW-4 detected TPHG and MTBE at concentrations of 430 ppb and 110 ppb, respectively.

Analytical results are summarized in attached Table 3 and documented in an attached certified analytical report and chain-of-custody.

CONCLUSIONS AND RECOMMENDATIONS

TPHD was detected in all wells ranging in concentration from 62 ppb in well MW-1 to 24,000 ppb in well MW-2. TPHG was detected in wells MW-1, MW-2, and MW-3 at concentrations of 180 ppb, 1,400 ppb, and 230 ppb, respectively. MTBE was detected in wells MW-2 and MW-3 at concentrations of 27 ppb and 89 ppb, respectively. No BTEX chemicals were detected in the wells.

Figures 2, 3, and 4 present groundwater concentration contour maps for diesel, gasoline, and benzene.

TPE recommends that all wells continue to be monitored for floating product, sheen and odors.

TPE recommends continued quarterly groundwater sampling to evaluate gradient and to monitor contaminant concentrations.

The next sampling event is due in December, 1999.

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
2101 Webster Street, Suite 500
Oakland, CA 94612

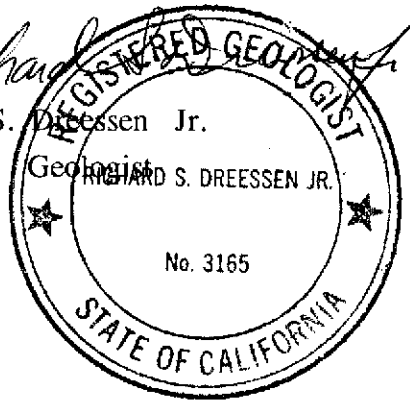
TPE recommends that this quarterly letter report be submitted with a cover letter from Mission Valley Rock. According to Alameda County Water District (ACWD) groundwater monitoring guidelines, the cover letter must be signed by an authorized representative and state, at a minimum, the following:

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

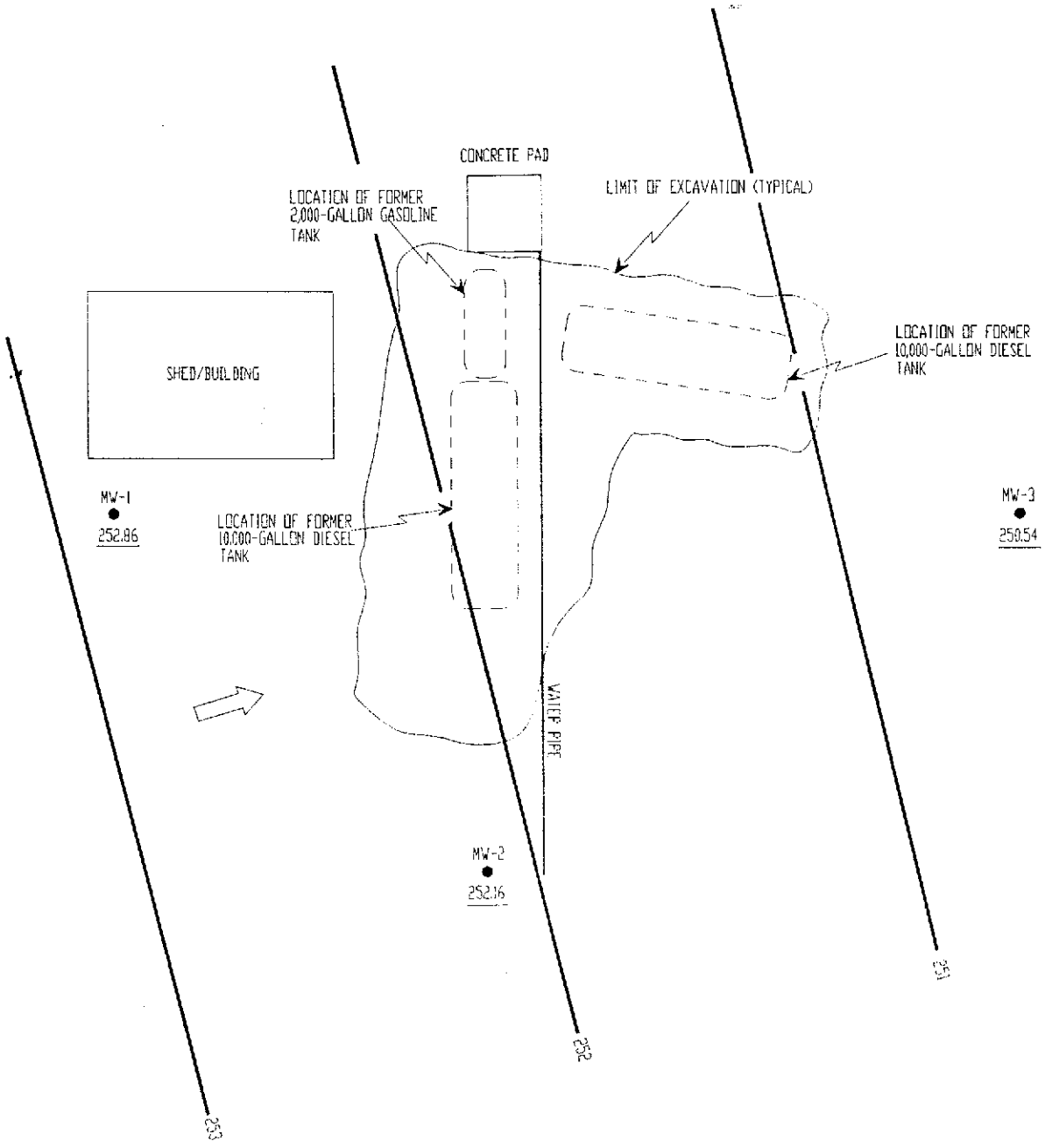
If you have any questions, please call TPE at (510) 429-8088.

Sincerely,

Richard S. Dreessen Jr.
Registered Geologist



Jeff Farhoomand, M.S.
Principal Engineer



LEGEND

MW-1 ● GROUNDWATER MONITORING WELL LOCATIONS

256 POTENTIOMETRIC ELEVATION

251 POTENTIOMETRIC CONTOUR

GROUNDWATER FLOW DIRECTION

0 20

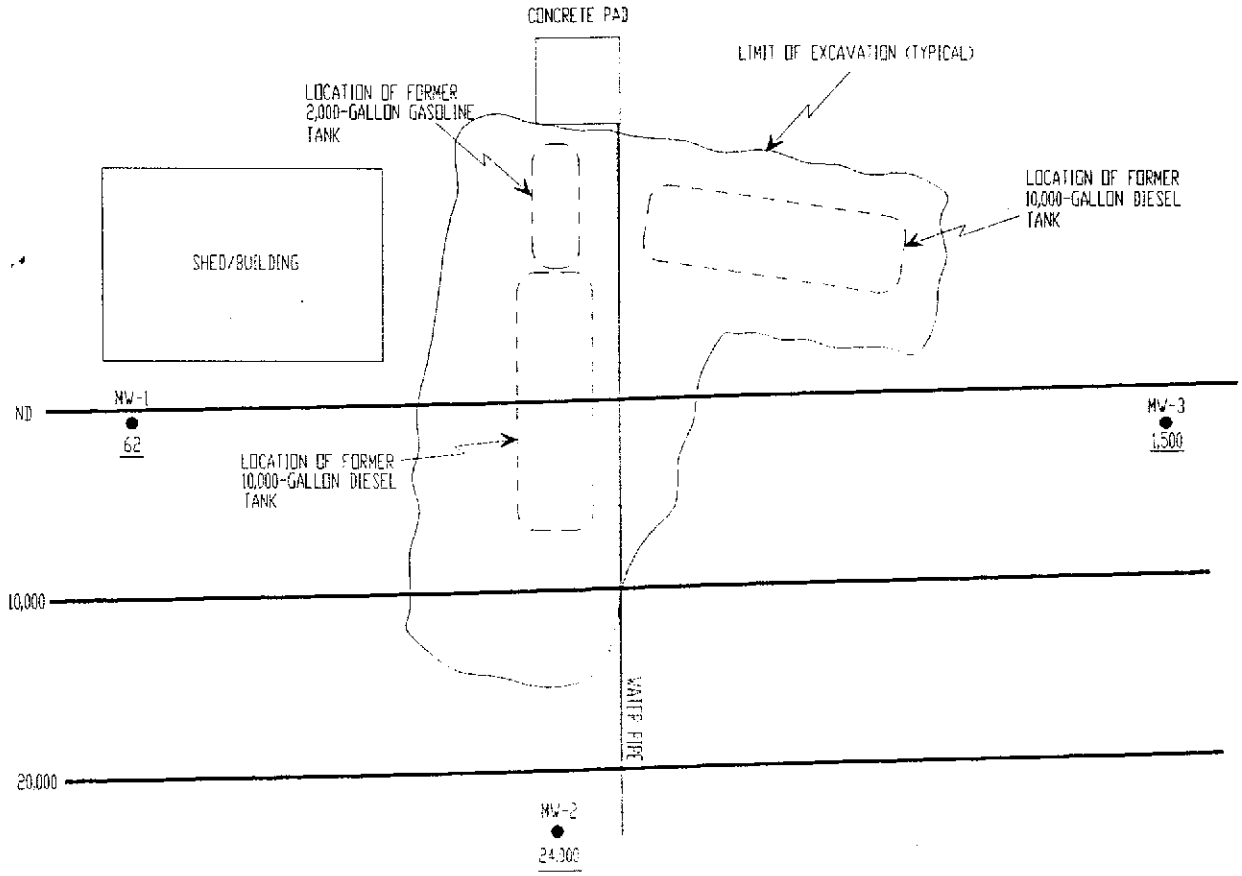
APPROXIMATE SCALE IN FEET

TANK PROTECT ENGINEERING

SITE PLAN:
GROUNDWATER ELEVATION AND GRADIENT MAP (09/17/99)

MISSION VALLEY ROCK
799 ATHENOUR WAY
SUNOL, CA 94586

DATE	10/15/99
FIGURE	1
FILE #	384-001-T
DRAWN BY	VK
CHECKED BY	RD



LEGEND

MW-1 ● GROUNDWATER MONITORING WELL LOCATIONS

62 CONCENTRATION (ppb)

0 20

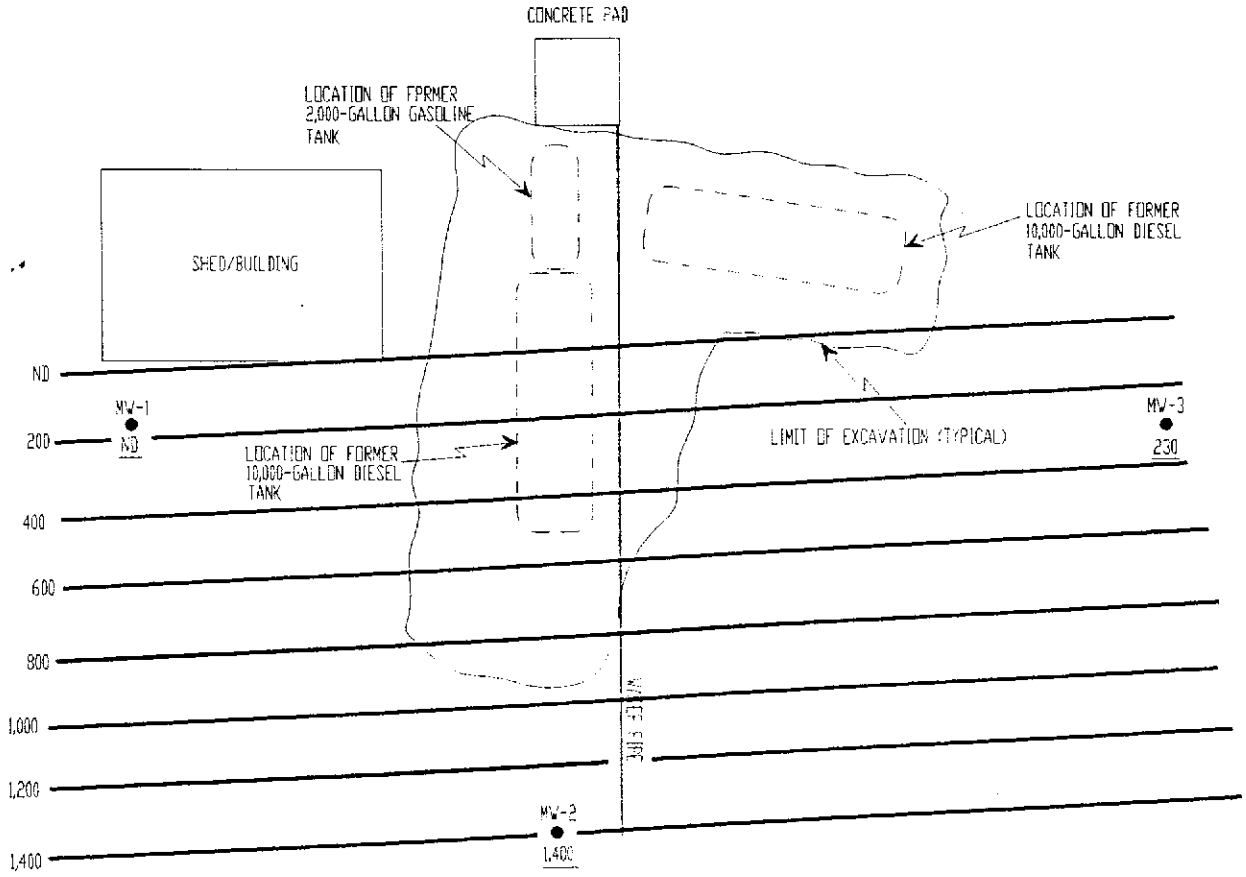
APPROXIMATE SCALE IN FEET

TANK PROTECT ENGINEERING

SITE PLAN:
TPHD CONCENTRATIONS (09/17/99)

MISSION VALLEY ROCK
799 ATHENOUR WAY
SUNOL, CA 94586

DATE	10/15/99
FIGURE	2
FILE #	384-0021
DRAWN BY	VK
CHECKED BY	RD



LEGEND

MW-1 ● GROUNDWATER MONITORING WELL LOCATIONS

180 CONCENTRAION (ppm)

0 30

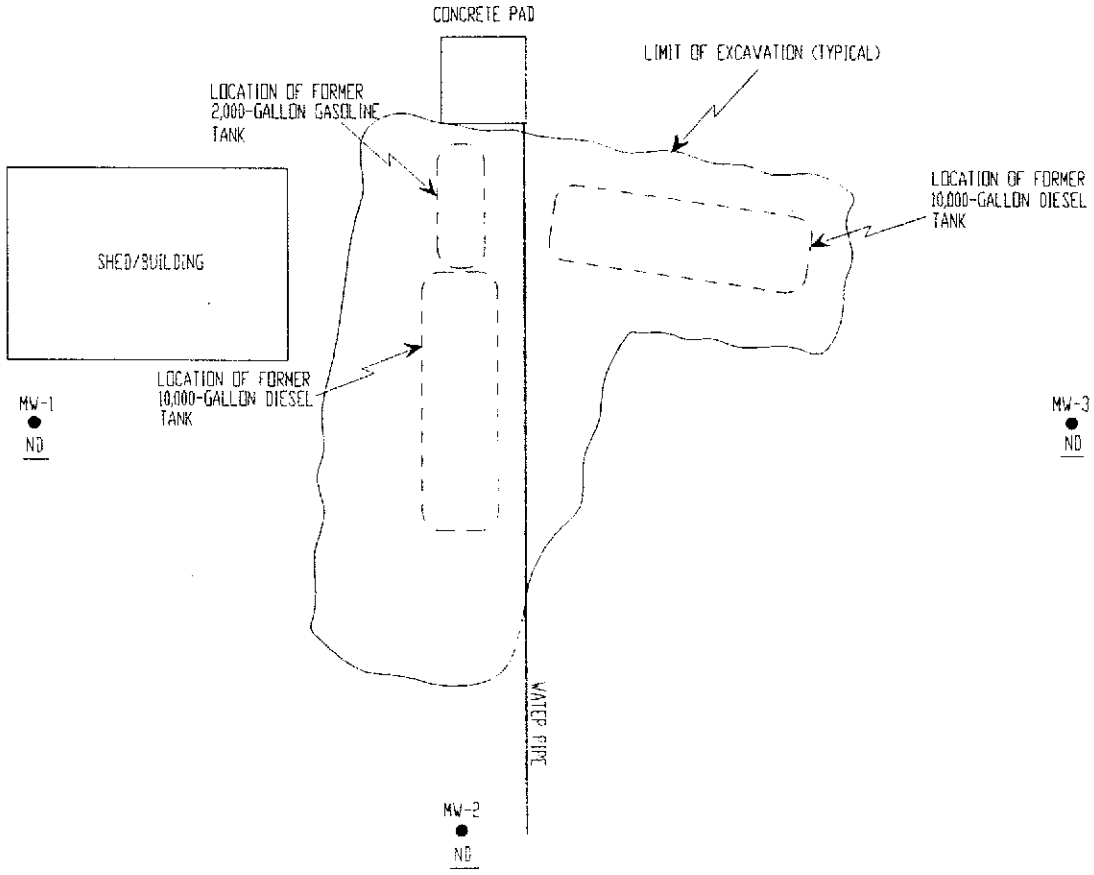
APPROXIMATE SCALE IN FEET

TANK PROTECT ENGINEERING

SITE PLAN:
TPHG CONCENTRATIONS (09/17/99)

MISSION VALLEY ROCK
799 ATHENDUR WAY
SUNOL, CA 94586

DATE	10/15/99
FIGURE	3
FILE #	384-003T
DRAWN BY	VK
CHECKED BY	RD



LEGEND

MW-1 ● GROUNDWATER MONITORING WELL LOCATIONS

ND CONCENTRATION (ppb)

0 20

APPROXIMATE SCALE IN FEET

TANK PROTECT ENGINEERING

SITE PLAN:
BENZENE CONCENTRATIONS (09/17/99)

MISSION VALLEY ROCK
799 ATHENOUR WAY
SUNOL, CA 94586

DATE	10/15/99
FIGURE	4
FILE #	384-004-T
DRAWN BY	VK
CHECKED BY	RD

TABLE 1
GROUNDWATER ELEVATION

Well Name	Elevation TOC[1] (Feet MSL[2])	Date	Depth-to-Water From TOC	Groundwater Elevation (Feet MSL)
MW-1	256.51[2]	06/23/98	1.32	255.19
		01/05/99	2.28	254.23
		03/29/99	1.88	254.63
		06/10/99	3.35	253.16
		09/17/99	3.66	252.86
MW-2	256.70[2]	06/23/98	1.72	254.98
		01/05/99	2.69[3]	254.01
		03/29/99	2.50	254.20
		06/10/99	4.0	252.70
		09/17/99	4.54	252.16
MW-3	256.72[2]	06/23/98	2.66	254.06
		01/05/99	4.47	252.25
		03/29/99	3.96	252.76
		06/10/99	5.54	251.18
		09/17/99	6.18	250.54

[1] TOP-OF-CASING

[2] TOC SURVEYED 10/09/98 BY PROFESSIONAL ENGINEER. ELEVATION BASED ON ONSITE BENCHMARK ELEVATION 257.10,NATIONAL GEODETIC VERTICAL DATUM (NGVD), ESTABLISHED 1929.

[3] CORRECTED FOR FREE PRODUCT

TABLE 2
SUMMARY OF FLOATING PRODUCT THICKNESS

Well Name	Date	Depth-to-Water From TOC[1] (Feet)	Depth-to-Product From TOC (Feet)	Product Thickness (Feet)
MW-1	06/23/98	1.32	ND[2]	---
	01/05/99	2.28	ND	---
	03/29/99	1.88	ND	---
	06/10/99	3.35	ND	---
	09/17/99	3.66	ND	---
MW-2	06/23/98	1.72	1.715	.005
	01/05/99	2.69 (5.3[3])	1.33	4
	03/29/99	2.50	ND	---
	06/10/99	4.0	ND	SHEEN
	09/17/99	4.54	4.04	0.5
MW-3	06/23/98	2.662	ND	---
	01/05/99	4.47	ND	---
	03/29/99	3.96	ND	SHEEN
	06/10/99	5.54	ND	---
	09/17/99	6.18	ND	SHEEN

[1] TOP-OF-CASING.
[2] NOT DETECTED.
[3] CORRECTED FOR FREE PRODUCT THICKNESS; ACTUAL FIELD MEASUREMENT IN PARENTHESIS

TABLE 3
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
(ppb)[1]

Sample ID Name	Date	TPHD	TPHG	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-1	06/23/98	<1.0	3,100	110	19	2.3	91	48
	10/08/98	<50	2,300	<0.50	3.1	4.2	5.0	15
	12/01/98	350	<50	<0.50	12	7.5	20	6.2
	03/29/99	190	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	06/10/99	210	1,800	<0.50	1.2	0.9	1.5	4.6
	09/17/99	62	180	<5.0	<0.50	<0.50	<0.50	<0.50
MW-2	06/23/98	12,000	2,500	14	0.68	<0.50	1.2	0.57
	10/08/98	4,300	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/01/98	38,000	<5,000	<500	<0.50	<0.50	<0.50	<0.50
	03/29/99	580	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	06/10/99	4,500	24,000	<0.50	38	27	41	98
	09/17/99	24,000	1,400	27	<0.50	<0.50	<0.50	<0.50
MW-3	06/23/98	12,000	300	150	0.80	<0.50	<0.50	<0.50
	10/08/98	6,400	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/01/98	5,600	<100	110	1.6	1.4	<1.0	<1.0
	03/29/99	150	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	06/10/99	620	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/17/99	1,500	230	89	<0.50	<0.50	<0.50	<0.50
MW-4	06/23/98	NA[2]	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50
	10/08/98	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/01/98	NA	NA	NA	<0.50	<0.50	<0.50	<0.50
	03/29/99	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	06/10/99	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/17/99	NA	430	110	<2.5	<2.5	<2.5	<2.5

[1] PARTS PER BILLION
[2] NOT ANALYZED

RECORD OF WATER SAMPLING

PROJECT NO.: 284 DATE: 17 Sept 99

PROJECT NAME: Mission Valley Rock / Sunset

PROJECT LOCATION: 799 Athena Way / Sunset

SAMPLER: Roger Bapler

ANALYSES: BTEX MTBE & Diesel

WELL DEPTH (from construction detail): 18.10 ft

WELL DEPTH (measured): NM SOFT BOTTOM?: --

DEPTH TO WATER: 3.06 TIME: 12:00

PRESSURE (circle one)?: YES OR NO ~~Undetermined~~

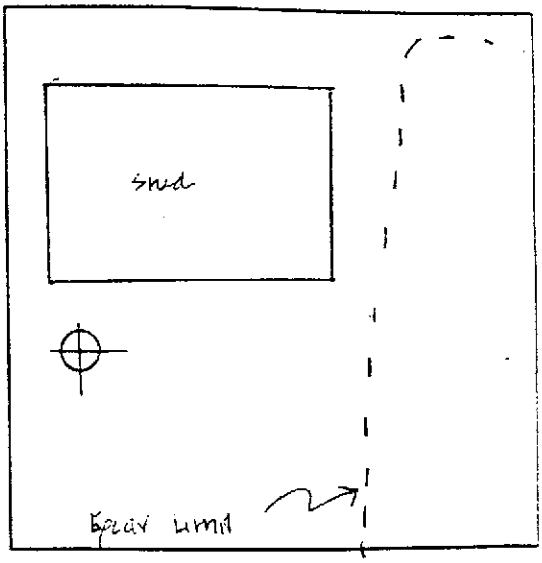
IF YES, WAS PRESSURE (circle one): POSITIVE OR NEGATIVE?

WELL NO.: MW-1

WELL DIAMETER: 2"

TOC ELEV:

LOCK NO.:



LOCATION MAP

WATER VOLUME IN WELL: 1.32 gal

[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]

CALCULATED PURGE VOL. (GAL): 10.96 (L): ACTUAL PURGE VOL. (GAL): 7° (L):

PURGE METHOD: Hand Bail SAMPLE METHOD: Disposable Teflon Bailer

FIELD MEASUREMENTS

Time	Depth to Water (FT)	Vol ~~(L)~~ g	Temp (Deg. F)	pH	EC x1000	Clarity	Turbidity (NTU)	Remarks
14:35	NM	0.25	80.4	7.87	3.21	Clear	NM	No sheen
14:40		2.25	73.7	7.75	1.15	Lt. brown		
14:45		4.50	73.0	8.00	1.00	"		
14:50	"	6.75	72.0	7.80	1.20	"	"	

SIGNATURE:

WATER VOL. IN DRUM:

NEED NEW DRUM?:

RECORD OF WATER SAMPLING

PROJECT NO.: 384 DATE: 17 Sept 99 WELL NO.: MW-2

PROJECT NAME: Mission Valley Rock WELL DIAMETER: 2"

PROJECT LOCATION: ~~737~~ Athenour Wy / Sunol TOC ELEV: ______

SAMPLER: Roger Papler LOCK NO.: ______

ANALYSES: TPG BTEX MTBE & Diesel

WELL DEPTH (from construction detail): 19.16' toc

WELL DEPTH (measured): NM SOFT BOTTOM?: --

DEPTH TO WATER: 4^{54} TIME: 12^{04}

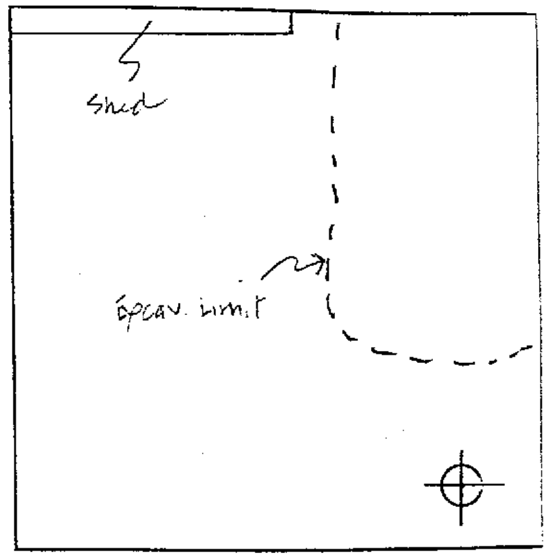
PRESSURE (circle one)?: YES OR NO

IF YES, WAS PRESSURE (circle one): POSITIVE OR NEGATIVE?

WATER VOLUME IN WELL: 2^{33} gal

[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]



LOCATION MAP

CALCULATED PURGE VOL. (GAL): 7^{0} (L): ______ ACTUAL PURGE VOL. (GAL): 7^{25} (L): ______

PURGE METHOD: Hand Bail SAMPLE METHOD: Disposable bailer

FIELD MEASUREMENTS

Time	Depth to Water (FT)	Vol ~~(L)~~ gal	Temp (Deg. F)	pH	EC x1000	Clarity	Turbidity (NTU)	Remarks
16^{40}	NM	$0.^{25}$	$74.^{2}$	$7.^{21}$	0.73	Brown	NM	0.5" Free Product
16^{45}	|	2^{25}	$73.^{9}$	$7.^{14}$	0.76	"	|	
16^{50}	|	4^{50}	$73.^{1}$	$7.^{00}$	0.78	Lt brn	|	
17^{00}	↓	6^{75}	72.7	$6.^{94}$	0.79	Lt brn	↓	
								Sampled MW-2

SIGNATURE: ______

WATER VOL. IN DRUM: ______

NEED NEW DRUM?: ______

RECORD OF WATER SAMPLING

PROJECT NO.: 384 DATE: 17 Sept 99

PROJECT NAME: Mission Valley Rock

PROJECT LOCATION: 7999 Athens Wy / Sunol

SAMPLER: Roger Papler

ANALYSES: Gas BTEX MTBE & Diesel

WELL DEPTH (from construction detail): 18.70' toc

WELL DEPTH (measured): NM SOFT BOTTOM?: --

DEPTH TO WATER: 6.18 TIME: 12:03

PRESSURE (circle one)?: YES OR NO

IF YES, WAS PRESSURE (circle one): POSITIVE OR NEGATIVE?

WATER VOLUME IN WELL: 2.0 gal

[2-INCH CASING = 0.16 GAL/FT] [4-INCH CASING = 0.65 GAL/FT]

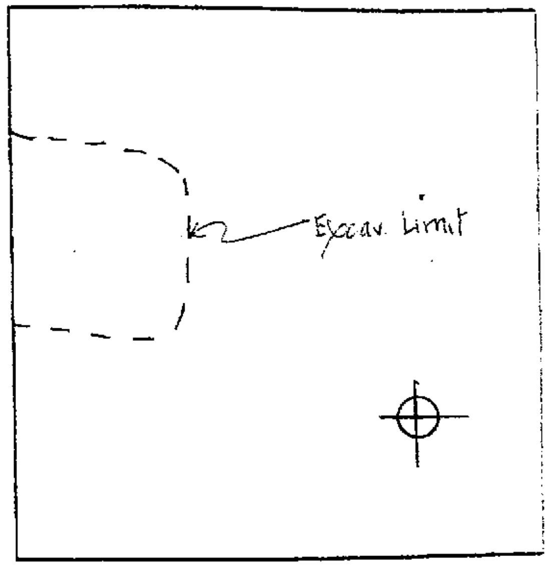
[6-INCH CASING = 1.47 GAL/FT] [1 GAL = 3.78 L]

WELL NO.: MW-3

WELL DIAMETER: 2"

TOC ELEV:

LOCK NO.:



LOCATION MAP

CALCULATED PURGE VOL. (GAL): 6.0 (L): ACTUAL PURGE VOL. (GAL): 6.0 ~~7.25~~ (L):

PURGE METHOD: Hand Bail SAMPLE METHOD: Disposable bailer

FIELD MEASUREMENTS

Time	Depth to Water (FT)	Vol ~~(L)~~ g	Temp (Deg. F)	pH	EC x1000	Clarity	Turbidity (NTU)	Remarks
13:05	NM	0.25	76.4	6.75	8.26	clear	NM	Ambient PHC (asphalt) odors
13:10	NM	1.75	72.9	~~6.44~~ 6.5	2.28	lt grey		fr/ Asphalt plant
13:15		3.75	73.2	6.70	2.15	"		Sl. sheen
13:20		5.75	73.4	6.40	1.70	"		

SIGNATURE:

WATER VOL. IN DRUM:

NEED NEW DRUM?:

SAMPLE HANDLING PROCEDURES

Soil and groundwater samples will be packaged carefully to avoid breakage or contamination and will be delivered to the laboratory in an iced-cooler. The following sample packaging requirements will be followed.

- Sample bottle/sleeve lids will not be mixed. All sample lids will stay with the original containers and have custody seals affixed to them.

- Samples will be secured in coolers to maintain custody, control temperature and prevent breakage during transportation to the laboratory.

- A chain-of-custody form will be completed for all samples and accompany the sample cooler to the laboratory.

- Ice, blue ice or dry ice (dry ice will be used for preserving soil samples collected for the Alameda County Water District) will be used to cool samples during transport to the laboratory.

- Water samples will be cooled with crushed ice. In the Alameda County Water District, water samples will be buried in the crushed ice with a thermometer, and the laboratory will be requested to record thermometer temperature at the time of receipt.

- Each sample will be identified by affixing a pressure sensitive, gummed label or standardized tag on the container(s). This label will contain the site identification, sample identification number, date and time of sample collection and the collector's initials.

- Soil samples collected in brass tubes will be preserved by covering the ends with Teflon tape and capping with plastic end-caps. The tubes will

be labeled, sealed in quart size bags and placed in an iced-cooler for transport to the laboratory.

All groundwater sample containers will be precleaned and will be obtained from a State Department of Health Services certified analytical laboratory.

Sample Control/Chain-of-Custody: All field personnel will refer to this workplan to verify the methods to be employed during sample collection. All sample gathering activities will be recorded in the site file; all sample transfers will be documented in the chain-of-custody; samples will be identified with labels; all sample bottles will be custody-sealed. All information is to be recorded in waterproof ink. All TPE field personnel are personally responsible for sample collection and the care and custody of collected samples until the samples are transferred or properly dispatched.

The custody record will be completed by the field technician or professional who has been designated by the TPE project manager as being responsible for sample shipment to the appropriate laboratory. The custody record will include, among other things, the following information: site identification, name of person collecting the samples, date and time samples were collected, type of sampling conducted (composite/grab), location of sampling station, number and type of containers used and signature of the TPE person relinquishing samples to a non-TPE person with the date and time of transfer noted. The relinquishing individual will also put all the specific shipping data on the custody record.

Records will be maintained by a designated TPE field employee for each sample: site identification, sampling location, station number, date, time, sampler's name, designation of the sample as a grab or composite, notation of the type of sample (e.g., groundwater, soil boring, etc.), preservatives used, onsite measurement data and other observations or remarks.

GROUNDWATER MONITORING WELL SAMPLING PROCEDURES

Groundwater monitoring wells will not be sampled until at least 24 to 72 hours (according to local regulatory guidelines) after well development. Groundwater samples will be obtained using a bladder pump, clear Teflon bailer or dedicated polyethylene bailer. Prior to collecting samples, the sampling equipment will be thoroughly decontaminated to prevent introduction of contaminants into the well and to avoid cross-contamination. Monitoring wells will be sampled after 3 to 10 wetted casing volumes of groundwater have been evacuated and pH, electrical conductivity and temperature have stabilized as measured with a Hydac Digital Tester. If the well is emptied before 3 to 10 well volumes are removed, the sample will be taken when the water level in the well recovers to 80% or more of its initial water level.

When a water sample is collected, turbidity of the water will be measured and recorded with a digital turbidimeter. Degree of turbidity will be measured and recorded in nephelometric turbidity units (NTU).

TPE will also measure the thickness of any floating product in the monitoring wells using an interface probe or clear Teflon or polyethylene bailer. The floating product will be measured after well development but prior to the collection of groundwater samples. **If floating product is present in the well, TPE will recommend to the client that product removal be commenced immediately and reported to the appropriate regulatory agency.**

Unless specifically waived or changed by the local, prevailing regulatory agency, water samples will be handled and preserved according to the latest United States Environmental Protection Agency methods as described in the Federal Register (Volume 44, No. 233, Page 69544, Table ll) for the type of analysis to be performed.

Development and/or purge water will be stored on site in labeled containers. The disposal of the containers and development and/or purge water is the responsibility of the client.

MEASUREMENTS

Purged Water Parameter: During purging, discharged water will be measured for the following parameters.

Parameter	Units of Measurement
pH	None
Electrical Conductivity	Micromhos
Temperature	Degrees F or C
Depth to Water	Feet/Hundredths
Volume of Water Discharged	Gallons
Turbidity	NTU

Documentation: All parameter measurements will be documented in writing on TPE development logs.

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 qualified laboratory, acceptable detection limits and proper sample preservation and holding times also provide assurance of accurate analytical data.

TPE 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.

Field Samples: Additional samples may be taken in the field 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 samples.

Trip blanks are a check for cross-contamination during sample collection, shipment, and laboratory analysis. They 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. Blanks will be prepared by the laboratory supplying the sample containers. 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 either the sample collectors or the handlers.

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 considerably 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 collection and decoy procedures will be made in the site log book.

Duplicate samples are identical sample pairs (collected in the same place and at the same time), 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 identifying information. Data quality will be 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 is 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 the observance of good laboratory practices.

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-09-0283

Gas/BTEX and MTBE

Tank Protect Engineering	2821 Whipple Road Union City, CA
Attn: Jeff Farhooman	Phone: (800) 523-8088 Fax: (510) 429-8089
Project #: 384	Project: Mission Valley Rock / Sunol

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	09/17/1999	1
MW-2	Water	09/17/1999	2
MW-3	Water	09/17/1999	3
MW-4	Water	09/17/1999	4

To: **Tank Protect Engineering**

Attn.: Jeff Farhooman

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-1**	Lab Sample ID:	**1999-09-0283-001**
Project:	384 Mission Valley Rock / Sunol	Received:	09/17/1999 18:25
		Extracted:	09/24/1999 13:27
Sampled:	09/17/1999	QC-Batch:	1999/09/24-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	180	50	ug/L	1.00	09/24/1999 13:27	g
Benzene	ND	0.50	ug/L	1.00	09/24/1999 13:27	
Toluene	ND	0.50	ug/L	1.00	09/24/1999 13:27	
Ethyl benzene	ND	0.50	ug/L	1.00	09/24/1999 13:27	
Xylene(s)	ND	0.50	ug/L	1.00	09/24/1999 13:27	
MTBE	ND	5.0	ug/L	1.00	09/24/1999 13:27	
Surrogate(s)						
Trifluorotoluene	88.3	58-124	%	1.00	09/24/1999 13:27	
4-Bromofluorobenzene-FID	90.1	50-150	%	1.00	09/24/1999 13:27	

To: **Tank Protect Engineering**

Attn.: Jeff Farhooman

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-2**	Lab Sample ID:	**1999-09-0283-002**
Project:	384 Mission Valley Rock / Sunol	Received:	09/17/1999 18:25
		Extracted:	09/27/1999 14:09
Sampled:	09/17/1999	QC-Batch:	1999/09/27-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1400	50	ug/L	1.00	09/27/1999 14:09	g
Benzene	ND	0.50	ug/L	1.00	09/27/1999 14:09	
Toluene	ND	0.50	ug/L	1.00	09/27/1999 14:09	
Ethyl benzene	ND	0.50	ug/L	1.00	09/27/1999 14:09	
Xylene(s)	ND	0.50	ug/L	1.00	09/27/1999 14:09	
MTBE	27	5.0	ug/L	1.00	09/27/1999 14:09	
Surrogate(s)						
Trifluorotoluene	96.3	58-124	%	1.00	09/27/1999 14:09	
4-Bromofluorobenzene-FID	102.0	50-150	%	1.00	09/27/1999 14:09	

To: **Tank Protect Engineering**

Attn.: Jeff Farhooman

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-3**	Lab Sample ID:	**1999-09-0283-003**
Project:	384 Mission Valley Rock / Sunol	Received:	09/17/1999 18:25
		Extracted:	09/24/1999 15:47
Sampled:	09/17/1999	QC-Batch:	1999/09/24-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	230	50	ug/L	1.00	09/24/1999 15:47	g
Benzene	ND	0.50	ug/L	1.00	09/24/1999 15:47	
Toluene	ND	0.50	ug/L	1.00	09/24/1999 15:47	
Ethyl benzene	ND	0.50	ug/L	1.00	09/24/1999 15:47	
Xylene(s)	ND	0.50	ug/L	1.00	09/24/1999 15:47	
MTBE	89	5.0	ug/L	1.00	09/24/1999 15:47	
Surrogate(s)						
Trifluorotoluene	95.0	58-124	%	1.00	09/24/1999 15:47	
4-Bromofluorobenzene-FID	90.3	50-150	%	1.00	09/24/1999 15:47	

To: **Tank Protect Engineering**

Attn.: Jeff Farhooman

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-4**	Lab Sample ID:	**1999-09-0283-004**
Project:	384 Mission Valley Rock / Sunol	Received:	09/17/1999 18:25
		Extracted:	09/24/1999 16:16
Sampled:	09/17/1999	QC-Batch:	1999/09/24-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	430	250	ug/L	5.00	09/24/1999 16:16	g
Benzene	ND	2.5	ug/L	5.00	09/24/1999 16:16	
Toluene	ND	2.5	ug/L	5.00	09/24/1999 16:16	
Ethyl benzene	ND	2.5	ug/L	5.00	09/24/1999 16:16	
Xylene(s)	ND	2.5	ug/L	5.00	09/24/1999 16:16	
MTBE	110	25	ug/L	5.00	09/24/1999 16:16	
Surrogate(s)						
Trifluorotoluene	96.8	58-124	%	1.00	09/24/1999 16:16	
4-Bromofluorobenzene-FID	86.8	50-150	%	1.00	09/24/1999 16:16	

To: **Tank Protect Engineering**

Attn.: Jeff Farhooman

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 1999/09/24-01.01**

MB: 1999/09/24-01.01-001

Date Extracted: 09/24/1999 06:15

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	09/24/1999 06:15	
Benzene	ND	0.5	ug/L	09/24/1999 06:15	
Toluene	ND	0.5	ug/L	09/24/1999 06:15	
Ethyl benzene	ND	0.5	ug/L	09/24/1999 06:15	
Xylene(s)	ND	0.5	ug/L	09/24/1999 06:15	
MTBE	ND	5.0	ug/L	09/24/1999 06:15	
Surrogate(s)					
Trifluorotoluene	91.6	58-124	%	09/24/1999 06:15	
4-Bromofluorobenzene-FID	74.2	50-150	%	09/24/1999 06:15	

To: **Tank Protect Engineering**

Attn.: Jeff Farhooman

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 1999/09/27-01.01**

MB: 1999/09/27-01.01-001

Date Extracted: 09/27/1999 15:34

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	09/27/1999 15:34	
Benzene	ND	0.5	ug/L	09/27/1999 15:34	
Toluene	ND	0.5	ug/L	09/27/1999 15:34	
Ethyl benzene	ND	0.5	ug/L	09/27/1999 15:34	
Xylene(s)	ND	0.5	ug/L	09/27/1999 15:34	
MTBE	ND	5.0	ug/L	09/27/1999 15:34	
Surrogate(s)					
Trifluorotoluene	88.8	58-124	%	09/27/1999 15:34	
4-Bromofluorobenzene-FID	83.0	50-150	%	09/27/1999 15:34	

To: **Tank Protect Engineering**

Attn: Jeff Farhooman

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 1999/09/24-01.01**

LCS: 1999/09/24-01.01-002 Extracted: 09/24/1999 06:42 Analyzed: 09/24/1999 06:42

LCSD: 1999/09/24-01.01-003 Extracted: 09/24/1999 07:10 Analyzed: 09/24/1999 07:10

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	460	497	500	500	92.0	99.4	7.7	75-125	20		
Benzene	97.4	84.1	100.0	100.0	97.4	84.1	14.7	77-123	20		
Toluene	95.3	83.2	100.0	100.0	95.3	83.2	13.6	78-122	20		
Ethyl benzene	95.4	82.6	100.0	100.0	95.4	82.6	14.4	70-130	20		
Xylene(s)	283	246	300	300	94.3	82.0	14.0	75-125	20		
Surrogate(s)											
Trifluorotoluene	476	426	500	500	95.2	85.2		58-124			
4-Bromofluorobenzene-FI	474	491	500	500	94.8	98.2		50-150			

To: **Tank Protect Engineering**

Attn: Jeff Farhooman

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 1999/09/27-01.01**

LCS: 1999/09/27-01.01-002 Extracted: 09/27/1999 08:33 Analyzed: 09/27/1999 08:33

LCSD: 1999/09/27-01.01-003 Extracted: 09/27/1999 09:01 Analyzed: 09/27/1999 09:01

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	495	516	500	500	99.0	103.2	4.2	75-125	20		
Benzene	98.7	82.3	100.0	100.0	98.7	82.3	18.1	77-123	20		
Toluene	97.2	82.2	100.0	100.0	97.2	82.2	16.7	78-122	20		
Ethyl benzene	97.6	81.4	100.0	100.0	97.6	81.4	18.1	70-130	20		
Xylene(s)	290	243	300	300	96.7	81.0	17.7	75-125	20		
Surrogate(s)											
Trifluorotoluene	500	407	500	500	100.0	81.4		58-124			
4-Bromofluorobenzene-FI	496	475	500	500	99.2	95.0		50-150			

To: **Tank Protect Engineering**

Attn:Jeff Farhooman

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Diesel

Tank Protect Engineering

2821 Whipple Road
Union City, CA

Attn: Jeff Farhooman

Phone: (800) 523-8088 Fax: (510) 429-8089

Project #: 384

Project: Mission Valley Rock / Sunol

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	09/17/1999	1
MW-2	Water	09/17/1999	2
MW-3	Water	09/17/1999	3

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-09-0283

To: **Tank Protect Engineering**
Attn.: Jeff Farhooman

Test Method: 8015m
Prep Method: 3510/8015M

Diesel

Sample ID:	**MW-1**	Lab Sample ID:	**1999-09-0283-001**
Project:	384 Mission Valley Rock / Sunol	Received:	09/17/1999 18:25
		Extracted:	09/21/1999 08:00
Sampled:	09/17/1999	QC-Batch:	1999/09/21-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	62	50	ug/L	1.00	09/21/1999 19:53	ndp
Surrogate(s)						
o-Terphenyl	87.8	60-130	%	1.00	09/21/1999 19:53	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-09-0283

To: **Tank Protect Engineering**
Attn.: Jeff Farhooman

Test Method: 8015m
Prep Method: 3510/8015M

Diesel

Sample ID: **MW-2**
Lab Sample ID: **1999-09-0283-002**

Project: 384
Mission Valley Rock / Sunol

Received: 09/17/1999 18:25

Extracted: 09/21/1999 08:00

Sampled: 09/17/1999

QC-Batch: 1999/09/21-01.10

Matrix: Water

Sample/Analysis Flag: shc (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	24000	500	ug/L	10.00	09/22/1999 21:46	
Surrogate(s)						
o-Terphenyl	229.2	60-130	%	10.00	09/22/1999 21:46	

To: **Tank Protect Engineering**
Attn.: Jeff Farhooman

Test Method: 8015m
Prep Method: 3510/8015M

Diesel

Sample ID: **MW-3**
Project: 384
Mission Valley Rock / Sunol
Sampled: 09/17/1999
Matrix: Water

Lab Sample ID: **1999-09-0283-003**
Received: 09/17/1999 18:25
Extracted: 09/21/1999 08:00
QC-Batch: 1999/09/21-01.10

Sample/Analysis Flag: shc (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1500	50	ug/L	1.00	09/21/1999 20:40	ad
Surrogate(s)						
o-Terphenyl	196.3	60-130	%	1.00	09/21/1999 20:40	

To: **Tank Protect Engineering**
Attn.: Jeff Farhooman

Test Method: 8015m
Prep Method: 3510/8015M

Batch QC Report
Diesel

Method Blank | **Water** | **QC Batch # 1999/09/21-01.10**

MB: 1999/09/21-01.10-001 | Date Extracted: 09/21/1999 09:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	09/21/1999 22:29	
Surrogate(s)					
o-Terpheny!	93.0	60-130	%	09/21/1999 22:29	

To: **Tank Protect Engineering**

Attn: Jeff Farhooman

Test Method: 8015m

Prep Method: 3510/8015M

Batch QC Report

Diesel

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 1999/09/21-01.10**

LCS: 1999/09/21-01.10-002 Extracted: 09/21/1999 09:00 Analyzed: 09/21/1999 16:57

LCSD: 1999/09/21-01.10-003 Extracted: 09/21/1999 09:00 Analyzed: 09/21/1999 17:30

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	837	801	1250	1250	67.0	64.1	4.4	60-130	25		
Surrogate(s)											
o-Terphenyl	25.1	21.2	20.0	20.0	125.5	106.0		60-130			

To: **Tank Protect Engineering**
Attn:Jeff Farhooman

Test Method: 8015m
Prep Method: 3510/8015M

Legend & Notes

Diesel

Analysis Flags

shc

Surrogate recoveries biased high due to hydrocarbon co-elution

Analyte Flags

ad

Hydrocarbon reported has characteristics of weathered/aged Diesel

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756
510/484-1919 • Facsimile 510/484-1096

Chain of Custo

DATE 17 Sept 99 PAGE 1 OF 1

PROJ. MGR Jeff Farnsworth
COMPANY Tank Protect Eng.
ADDRESS 2821 Whipple
Union City, CA
SAMPLERS (SIGNATURE)
(PHONE NO.) (510) 429-8083 / 222-7838
(FAX NO.) (510) 429-8089 / 222-6488

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020) MTBE	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				
MW-1	17 Sept 99		WATER			✓	✓																	5
MW-2						✓	✓																	5
MW-3						✓	✓																	3
MW-4						✓																		3
																								18

PROJECT INFORMATION

PROJECT NAME: Mission Valley Rock / Sunol
PROJECT NUMBER: 384
P.O. #:

TAT: STANDARD 5-DAY | 24 | 48 | 72 | OTHER

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS
HEAD SPACE
REC'D GOOD CONDITION/COLD
CONFORMS TO RECORD

SPECIAL INSTRUCTIONS/COMMENTS:
Please FAX results & COC to both FAX #s
5.0°C

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) 1730 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1820 (TIME)
Roger W Parker (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	B Morrow 9.17.99 (PRINTED NAME) (DATE)
Tank Protect Eng (COMPANY)	(COMPANY)	Chromalab (COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) 1730 (TIME)	(SIGNATURE) (TIME)	Denise Harrington (SIGNATURE) (TIME)
B Morrow 9.17.99 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	D. Harrington 1825 (PRINTED NAME) (DATE)
Chromalab (COMPANY)	(COMPANY)	Chromalab 9/17/99 (LAB)