

440-505 = 0.4



Chevron

March 23, 1995

Chevron U.S.A. Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

Ms. Eva Chu
Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Marketing - Northwest Region
Phone 510 842 9500

Re: Former Chevron Service Station No. 9-7127
Highway I-580 and Grantline Rd., Tracy, California

Dear Ms. Chu :

Enclosed is the latest monitoring and sampling report from Sierra Environmental Services dated March 14, 1995. Please refer to the enclosed report for the latest groundwater information.

Based on our meeting on January 26, 1995, Chevron will install one or two additional monitoring wells. A copy of the work plan will be sent to your office. In addition, Chevron will sample the water supply well on an annual basis.

If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

LKAN/MacFile 9-7127R12

Enclosure

cc: Person in Charge of Tracy (Alameda County), RWQCB-Central Valley Region
3443 Routier Rd., Sacramento, CA 95827-3098

William S. Carnazzo M.D., Carnazzo Land Company, Inc.
P.O. Box 6031, Atascadero, CA 93423

Mr. & Mrs. Joe Jess, Jess Ranch
Route 5, Box 704-A, Tracy, CA 95376

Ms. Bette Owen, Chevron U.S.A. Products Co.

Mr. John Randall, Chevron U.S.A. Products Co.

- ① Increasing concentration at new f. MW SW of MW1 as if needed, see sight plan for possible mutations
- ② Check into Card distance off scale. Is TDS high?
- ③ Check flow direction other times. Is it usually W. NW? yes
- ④ If upgrading irrigation well has had contam, a DG well in deeper aquifer may be required.



March 14, 1995

Kenneth Kan
Chevron USA Products Company
P.O. Box 5004
San Ramon, CA 94583

Re: Former Chevron Service Station #9-7127
Interstate 580 at Grant Line Road
Altamont Pass, California
SES Project #1-369-04

Dear Mr. Kan:

This report presents the results of the monthly water level measurements and the quarterly ground water sampling for the first quarter of 1995 at former Chevron Service Station #9-7127, located at the intersection of Interstate 580 and Grant Line Road in the Altamont Pass Area of California. Four wells, MW-2 through MW-5, and the onsite domestic water supply, were sampled (Figure 1).

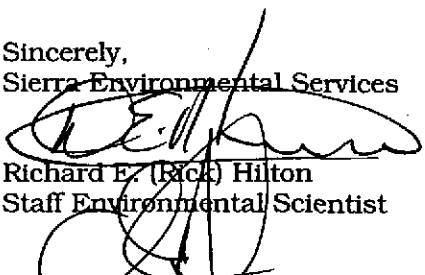
On December 21, 1994, January 5, 1995 and February 9, 1995, SES personnel visited the site. Water level measurements were collected in all site wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were present in one of the site wells, MW-1. Water level data are shown in Table 1 and ground water elevation contours are included on Figures 1, 2, and 3.

The ground water samples were collected on February 9, 1995 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). The field water sampling forms for this event are included. All analyses were performed by GTEL of Concord, California. Analytic results for ground water are presented in Table 1. The chain of custody document and laboratory analytic reports are attached. SES is not responsible for laboratory omissions or errors.

Thank you for allowing us to provide services to Chevron. Please call if you have any questions.



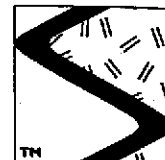
Sincerely,
Sierra Environmental Services


Richard E. (Rick) Hilton
Staff Environmental Scientist


Chris J. Bramer
Professional Engineer #C48846

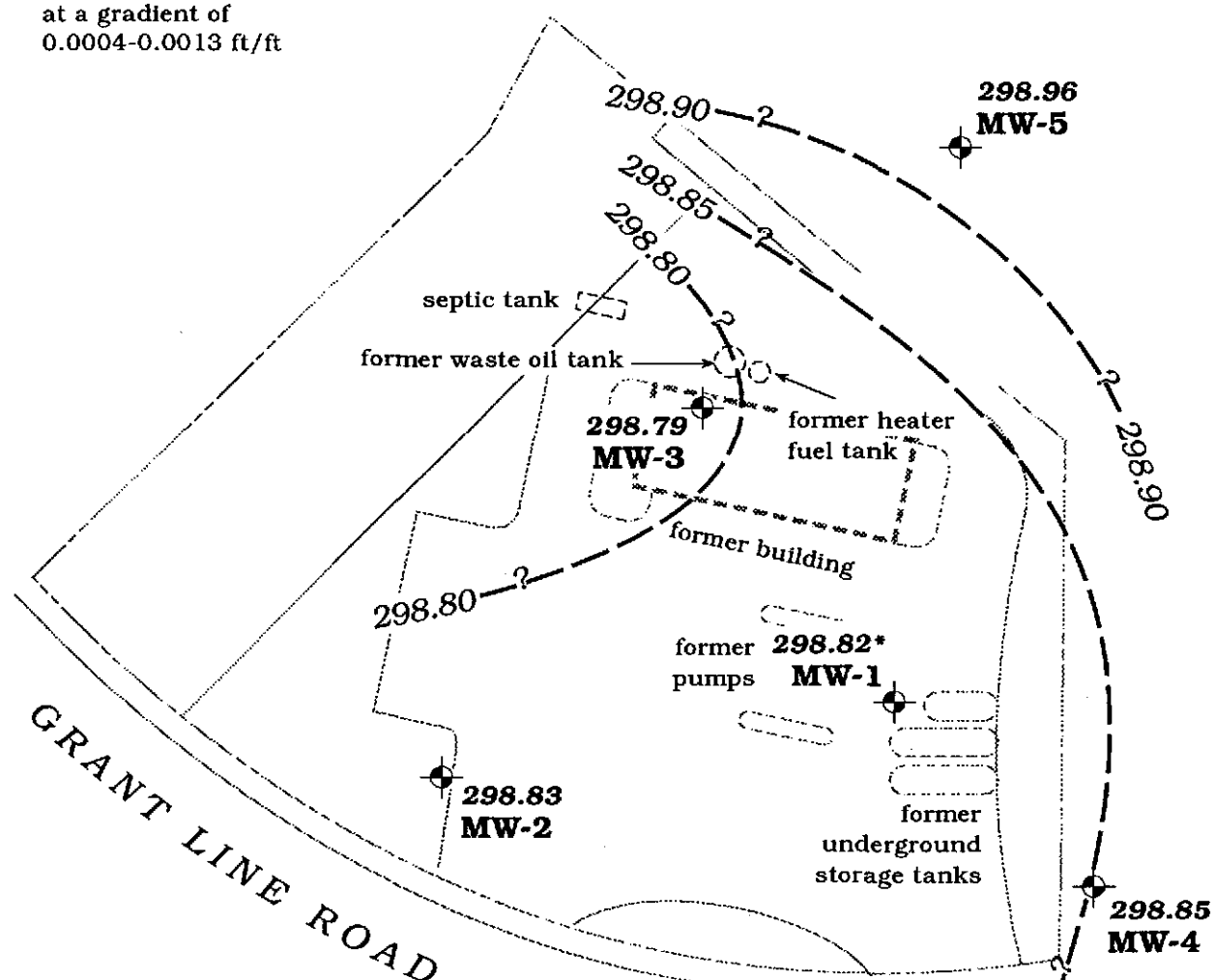
REH/CJB/lmo
36904QM.MR5

- Attachments
- Figures
- Table
- SES Standard Operating Procedure
- Field Water Sampling Forms
- Chain of Custody Document and Laboratory Analytic Reports



SIERRA

←
Approximate
ground water
flow direction
at a gradient of
0.0004-0.0013 ft/ft



EXPLANATION



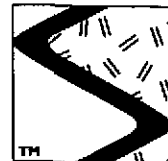
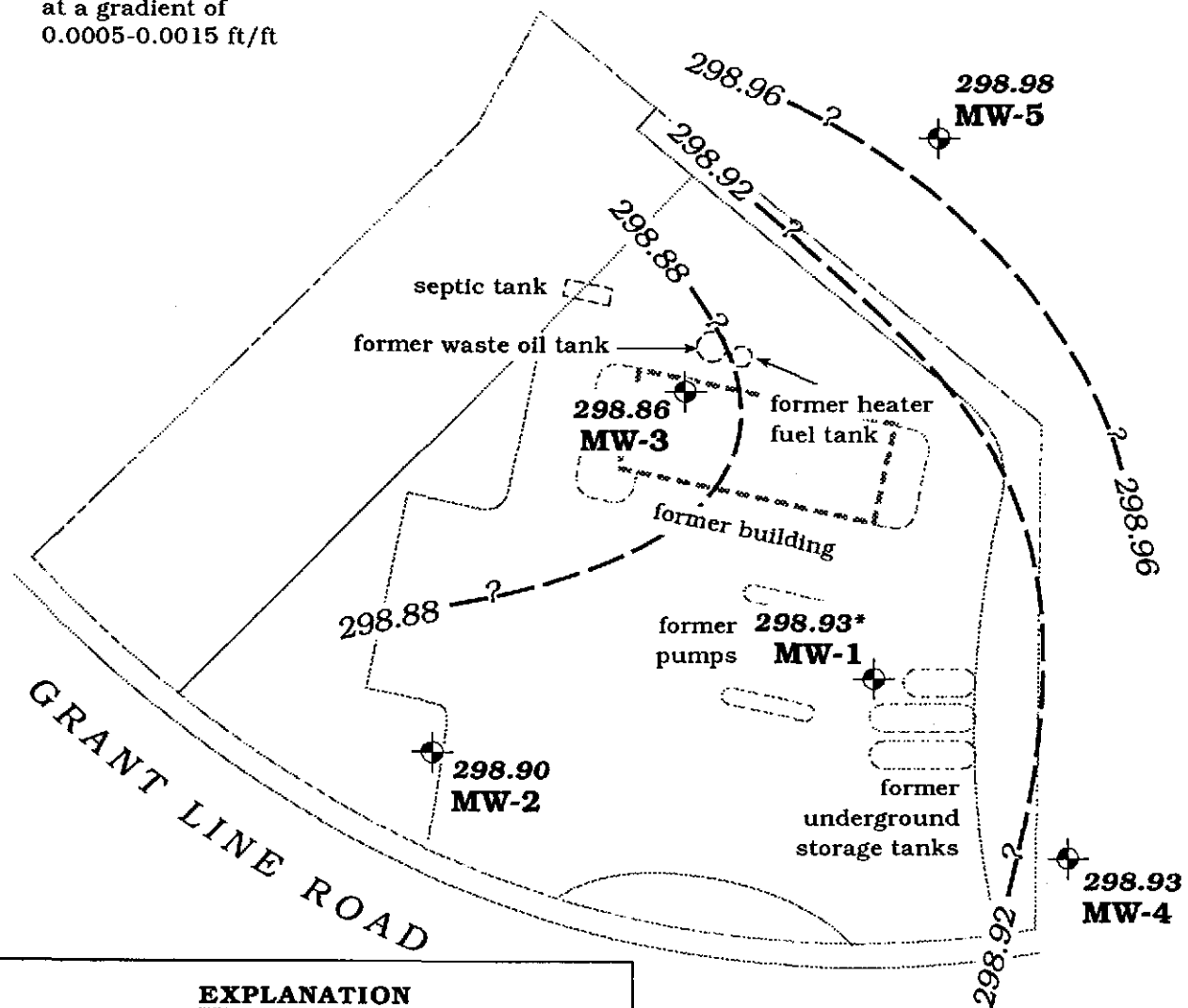
-  **MW-5** Monitoring well
- 298.96** Ground water elevation, in feet
- *** Ground water elevation corrected for presence of free-phase hydrocarbons using the formula shown in Table 1
-  **298.85** Ground water elevation contour, dashed where inferred, queried where uncertain

Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map - December 21, 1994 - Former Chevron Service Station #9-7127, Interstate 580 and Grant Line Road, Altamont Pass, California



SIERRA

←
Approximate
ground water
flow direction
at a gradient of
0.0005-0.0015 ft/ft



EXPLANATION



MW-5

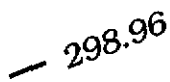
Monitoring well

298.98

Ground water elevation, in feet

*

Ground water elevation corrected
for presence of free-phase hydro-
carbons using the formula shown
in Table 1



Ground water elevation contour,
dashed where inferred, queried
where uncertain

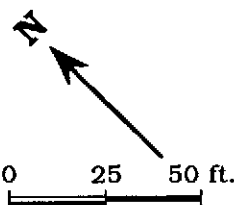
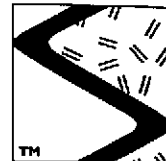
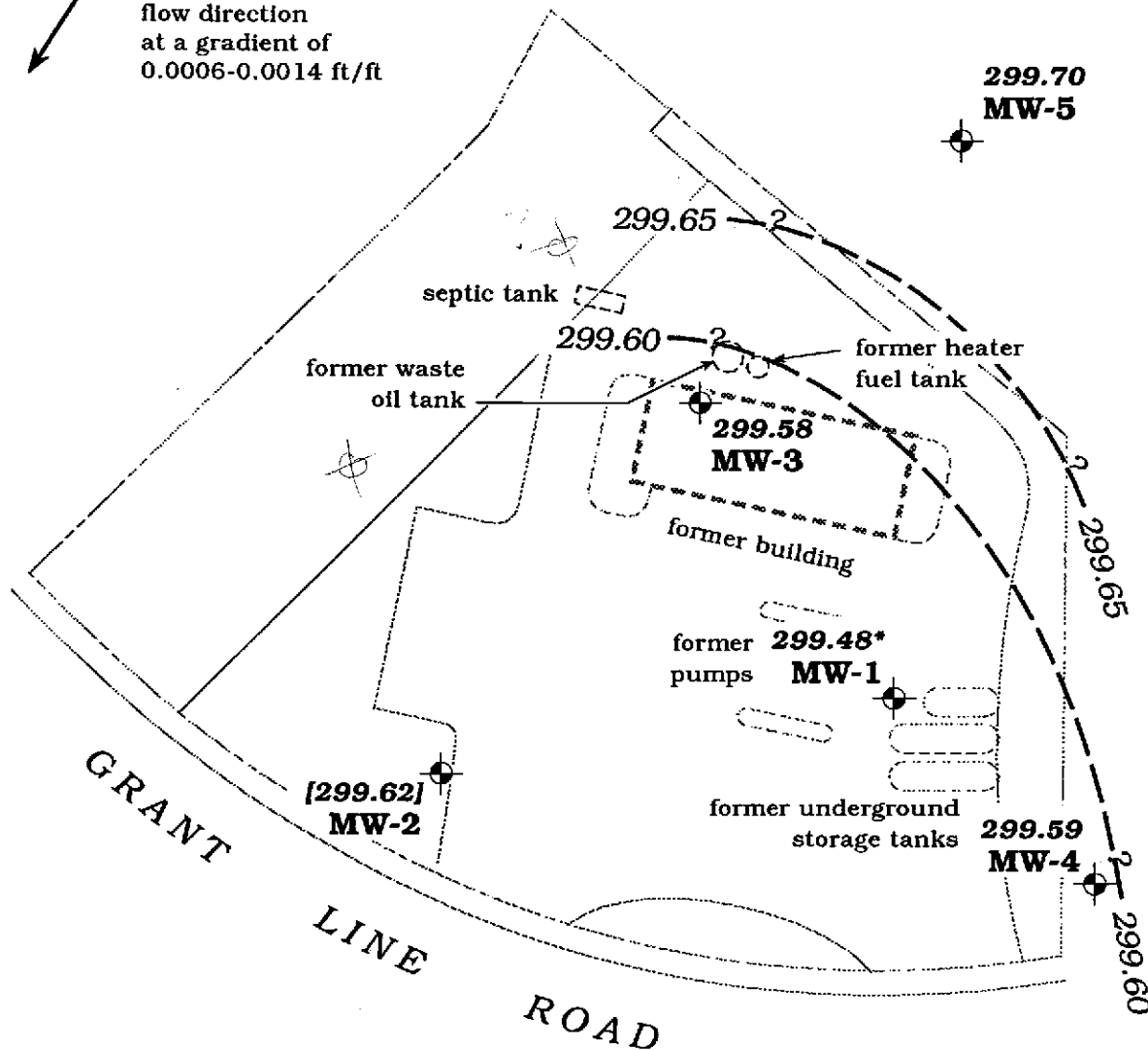


Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map - January 5, 1995 - Former Chevron Service Station #9-7127, Interstate 580 and Grant Line Road, Altamont Pass, California




SIERRA

Approximate
ground water
flow direction
at a gradient of
0.0006-0.0014 ft/ft



EXPLANATION

-  **MW-5** Monitoring well
299.70 Ground water elevation, in feet
[299.62] Ground water elevation not used in contouring

 * Ground water elevation corrected for presence of free-phase hydrocarbons using the formula shown in Table 1

 - 290.00 Ground water elevation contour, dashed where inferred, queried where uncertain

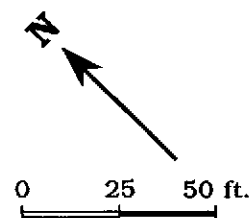
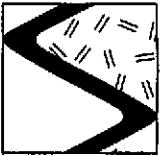


Figure 3. Monitoring Well Locations and Ground Water Elevation Contour Map - February 9, 1994 - Former Chevron Service Station #9-7127, Interstate 580 and Grant Line Road, Altamont Pass, California

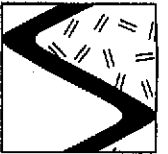


SIERRA

Table 1. Water Level Data and Ground Water Analytic Results - Former Chevron Service Station #9-7127, Interstate 580 at Grant Line Road, Altamont Pass Area, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) B T E X				
						←-----ppb-----→				
MW-1/ 329.17	2/15/94	29.77	299.40	0	8015/8020	99,000	20,000	24,000	2,000	9,800
	4/21/94	29.85	299.32	0	---	---	---	---	---	---
	6/1/94	29.92	299.25	0	8015/8020	56,000	12,000	15,000	1,100	5,800
	6/28/94	30.15	299.02	0	---	---	---	---	---	---
	7/19/94	20.30	308.87	0	---	---	---	---	---	---
	9/2/94	30.61	298.96 ¹	0.5	---	---	---	---	---	---
	9/12/94	31.66	298.04 ¹	0.66	---	---	---	---	---	---
	10/12/94	31.70	298.70 ¹	1.54	---	---	---	---	---	---
	11/30/94	29.95	299.84 ¹	0.77	---	---	---	---	---	---
	12/21/94	31.39	298.82¹	1.30	---	---	---	---	---	---
	1/5/95	31.20	298.93 ¹	1.20	---	---	---	---	---	---
	2/9/95	29.87	299.48 ¹	0.22	---	---	---	---	---	---
				2.64 ¹¹	---	---	---	---	---	---
MW-2/ 327.22	2/15/94	27.09	300.13	0	8015/8020	83	21	6	1	3
	4/21/94	27.81	299.41	0	---	---	---	---	---	---
	6/1/94	27.98	299.24	0	8015/8020	<50	1.3	0.5	<0.5	<0.5
	6/28/94	28.17	299.05	0	---	---	---	---	---	---
	7/19/94	28.35	298.87	0	---	---	---	---	---	---
	9/2/94	28.52	298.70	0	8015/8020	82	13	16	3.6	14
	9/12/94	28.56	298.66	0	---	---	---	---	---	---
	10/12/94	28.62	298.60	0	---	---	---	---	---	---
	11/30/94	28.38	298.84	0	8015/8020	<50	3.6	4.5	1.0	4.5
	12/21/94	28.39	298.83	0	---	---	---	---	---	---
	1/5/95	28.32	298.90	0	---	---	---	---	---	---
	2/9/95	27.60	299.62	0	8015/8020	<50	1.7	3.6	1.5	6.1
MW-3/ 329.28	2/15/94	29.87	299.41	0	8015/8020	23,000	11,000	1,700	540	1,000
	4/21/94	29.96	299.32	0	---	---	---	---	---	---
	6/1/94	30.11	299.17	0	8015/8020	27,000	12,000	2,600	600	2,200
	6/28/94	30.31	298.97	0	---	---	---	---	---	---
	7/19/94	30.50	298.78	0	---	---	---	---	---	---
	9/2/94	30.61	298.67	0	8015/8020	34,000	16,000	4,100	770	3,000
	9/12/94	30.65	298.63	0	---	---	---	---	---	---
	10/12/94	30.74	298.54	0	---	---	---	---	---	---

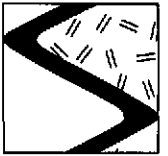
12
22
24
267



SIERRA

Table 1. Water Level Data and Ground Water Analytic Results - Former Chevron Service Station #9-7127, Interstate 580 at Grant Line Road, Altamont Pass Area, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	←-----ppb-----→				
						TPPH(G)	B	T	E	X
MW-3 (cont)	11/30/94	30.44	298.84	0	8015/8020	33,000	16,000	3,000	740	2,400
	12/21/94	30.49	298.79	0	---	---	---	---	---	---
	1/5/95	30.42	298.86	0	---	---	---	---	---	---
	2/9/95	29.70	299.58	0	8015/8020	8,000	5,100	290	230	200
MW-4/ 329.44	5/21/93	---	---	---	8015/8020	<50	12	2	<0.5	1
	11/5/93	---	---	---	8015/8020	300	56	10	0.8	3
	2/15/94	29.90	299.54	0	8015/8020	260	47	12	2	4
	4/21/94	29.99	299.45	0	---	---	---	---	---	---
	6/1/94	30.14	299.30	0	8015/8020	860	200	23	2.8	9.6
	6/28/94	30.32	299.12	0	---	---	---	---	---	---
	7/19/94	30.50	298.94	0	---	---	---	---	---	---
	9/2/94	30.62	298.82	0	8015/8020	1,700	250	27	6.4	15
	9/12/94	30.69	298.75	0	---	---	---	---	---	---
	10/12/94	30.75	298.69	0	---	---	---	---	---	---
	11/30/94	30.51	298.93	0	8015/8020	830	350	29	8.1	22
	12/21/94	30.59	298.85	0	---	---	---	---	---	---
	1/5/95	30.51	298.93	0	---	---	---	---	---	---
	2/9/95	29.85	299.59	0	8015/8020	3,300^s	1,800	110	36	91
MW-5 312.88	5/25/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	0.9
	11/5/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	2/15/94	25.10	287.78	0	8015/8020	<50	<0.5	1	<0.5	1
	4/21/94	13.21	299.67	0	---	---	---	---	---	---
	6/1/94	13.39	299.49	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/28/94	13.73	299.15	0	---	---	---	---	---	---
	7/19/94	13.80	299.08	0	---	---	---	---	---	---
	9/2/94	14.02	298.86	0	8015/8020	<50	3.2	1.8	<0.5	2.1
	9/12/94	14.03	298.85	0	---	---	---	---	---	---
	10/12/94	14.15	298.73	0	---	---	---	---	---	---
	11/30/94	13.91	298.97	0	8015/8020	<50 ²	<0.5 ²	<0.5 ²	<0.5 ²	<0.5 ²
	12/21/94	13.92	298.96	0	---	---	---	---	---	---
1/5/95	13.90	298.98	0	---	---	---	---	---	---	
2/9/95	13.18	299.70	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	



SIERRA

Table 1. Water Level Data and Ground Water Analytic Results - Former Chevron Service Station #9-7127, Interstate 580 at Grant Line Road, Altamont Pass Area, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) -----ppb----->	B	T	E	X
Domestic Water Supply	2/9/95	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
Trip Blank TB-LB	2/15/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/1/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/2/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	11/30/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	2/9/95	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
Bailer Blank BB	2/15/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5

EXPLANATION:

DTW = Depth to water
 TOC = Top of casing elevation
 GWE = Ground water elevation
 msl = Measurements referenced relative to mean sea level
 TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes
 ppb = Parts per billion
 --- = Not analyzed/Not applicable

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)
 8020 = EPA Method 8020 for BTEX

NOTES:

All top of casing elevations were surveyed by Tronoff Land Surveying, Davis, California on November 2, 1993.

* Product thickness was measured on and after February 15, 1994 with an MMC flex-dip interface probe. Analytic data prior to February 15, 1994 compiled from the Well Installation Report prepared for Chevron by Pacific Environmental Group, Inc., December 3, 1993.

¹ GWE corrected for the presence of free-phase hydrocarbons using: $GWE = [(TOC - DTW) + (0.8)(Product\ Thickness)]$. 0.8 is the assumed specific gravity of free-phase hydrocarbons.

² Estimated concentration. TFT surrogate recovery demonstrated sample specific matrix effect. Benzene and Toluene are estimated values due to low recovery of (TFT) surrogate. The (BFB) surrogate had acceptable recovery. Low surrogate recovery can be attributed to sample effervescence (GTEL).

³ Uncategorized compounds are not included in gasoline concentration (GTEL).



SES STANDARD OPERATING PROCEDURE GROUND WATER SAMPLING

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed $\pm 0.5^{\circ}\text{F}$, 0.1 or 5%, respectively).

The purge water is taken to Chevron's Richmond Refinery for disposal.

Ground water samples are collected from the wells with Chevron designated disposable bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C) for transport under chain of custody to the laboratory.

The chain of custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

A trip blank accompanies each sampling set, or 5% trip blanks are included for sets of greater than 20 samples. The trip blank is analyzed for some or all of the same compounds as the ground water samples.

Product Bailed Only



GRANT LINE Rd. WATER SAMPLING DATA

Job Name 103 W. 11TH ST. TRACY Job Number 1-369-04
1-299-04
 Well Number MW-1 Date 12/21/94
 Sampler J.C.
 Well Diameter 4"
 Sample Point Location/Description _____ Well Depth (spec.) 38
 Depth to Water (static) 31.39 Well Depth ^{To Product} (sounded) 29.99
 Initial height of water in casing 1.4 Volume .91 gallons
 Volume to be purged: Disposable Bail 3 gallons
 Purged With Sub pump Sampled With DISPOSABLE BAIL
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
~~V_c casing = 0.103 gal/ft~~
~~V_s casing = 0.367 gal/ft~~
~~V_d casing = 0.653 gal/ft~~
 V_c casing = 0.826 gal/ft
 V_s casing = 1.47 gal/ft
 V_d casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1:30	1:31	1					
	1:32	1					
	1:33	1					

Product Bailed
Only

SAMPLES COLLECTED Time _____ Total volume purged (gal.) 5 GAL. of product & WATER
 Water color Yellow Odor Hydrocarbon
 Description of sediments or material in sample: DARK BROWN GREASY
 Additional Comments: _____

Product Bailed Only

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-5	2	1	—	HCL	Y	GTEK	g/BTEX

Product Bailed
Only

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
 5 = Other _____ ; 6 = Other _____

Product BAIL only
 No SAMPLE



WATER SAMPLING DATA

Job Name Altamont Pass Job Number 1-369-04 Sampler J.C.
 Well Number MW-1 Date 1/5/95 Well Diameter 4"
 Sample Point Location/Description ON SITE mid lot Well Depth (spec.) 38
 Depth to Water (static) 31.20 Well Depth (sounded) TO PRODUCT 30.00
 Initial height of water in casing 1.2 Volume .78 gallons
 Volume to be purged 2.35 gallons
 Purged With DISPOSABLE BAITER Sampled With DISPOSABLE BAITER
 Pumped or Bailed Dry? Yes No Time After gallons
 Water level at sampling Percent Recovery

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 V_{2"} casing = 0.163 gal/ft
 V_{3"} casing = 0.367 gal/ft
 V_{4"} casing = 0.653 gal/ft
 V_{4.5"} casing = 0.826 gal/ft
 V_{5"} casing = 1.47 gal/ft
 V_{6"} casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
2:12pm	2:15pm	1	1				
	2:18pm	2.5	3.5				
	2:20pm	1	4.5				

NOTE: Purged 4.5 GAL. OF PRODUCT & WATER
 Total volume purged (gal.) Product BAIL only
 Odor Hydrocarbon ODDOR

SAMPLES COLLECTED Time
 Water color DARK GOLDEN BROWN
 Description of sediments or material in sample: GREASY BLACK SED.
 Additional Comments: NO SAMPLE Product BAIL ONLY
 NOTE: Purged 4.5 GALS. OF Product & WATER

Sample ID	# of Cont.	Container Type	Filtered (size. u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
 5 = Other ; 6 = Other



No sample
Product Bail only

WATER SAMPLING DATA

Job Name Grant Line Rd. Job Number 1-369-04 Sampler J.C.
 Well Number MW-1 Date 8/19/95 Well Diameter 4"
 Sample Point Location/Description on site south of I-580 mid. lot Well Depth (spec.) 38
 Depth to Water (static) 29.87 Well Depth ^{to Product} (sounded) 29.65
 Initial height of water in casing 22 Volume .14 gallons
 Volume to be purged .5 gallons
 Purged With Sub pump / MC Bailex Sampled With Disposable Bailex
 Pumped or Bailed Dry? Yes No: Time After gallons
 Water level at sampling Percent Recovery

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 ~~$V_{1.0}$ casing = 0.163 gal/ft~~
 ~~$V_{1.5}$ casing = 0.367 gal/ft~~
 ~~$V_{2.0}$ casing = 0.653 gal/ft~~
 ~~$V_{2.5}$ casing = 0.826 gal/ft~~
 ~~$V_{3.0}$ casing = 1.47 gal/ft~~
 ~~$V_{3.5}$ casing = 2.61 gal/ft~~

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/c
3:20	3:22	.25					
	3:24	.25					
	3:26	.25					
NO SAMPLE PRODUCT BAIL							

SAMPLES COLLECTED Time Total volume purged (gal.) .75 out of product
 Water color Dark Brown Odor Hydrocarbon WATER
 Description of sediments or material in sample: Some Sed.
 Additional Comments: NO SAMPLE Product Bail only

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-1	2	1	—	HCL	Y	BTEL	g/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify s
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify s
 5 = Other; ; 6 = Other



WATER SAMPLING DATA

Job Name Grant Line Rd. Job Number 1-369-84 Sampler J.C.
 Well Number MW-2 Date 8/9/95 Well Diameter 2"
 Sample Point Location/Description ON SITE EAST of Grant Line Rd. South of I-580 Well Depth (spec.) 38
 Depth to Water (static) 27.60 Well Depth (sounded) _____
 Initial height of water in casing 10.4 Volume 1.69 gallons
 Volume to be purged: _____ gallons
 Purged With Sub pump / MC BAILEX Sampled With Disposable BAILEX
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 $V_{2.5" \text{ casing}} = 0.163 \text{ gal/ft}$
 $V_{3" \text{ casing}} = 0.367 \text{ gal/ft}$
 $V_{4" \text{ casing}} = 0.653 \text{ gal/ft}$
 $V_{5" \text{ casing}} = 0.826 \text{ gal/ft}$
 $V_{6" \text{ casing}} = 1.47 \text{ gal/ft}$
 $V_{8" \text{ casing}} = 2.61 \text{ gal/ft}$

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/c
1:52	1:53	1	1	6.5	66	READING	
	1:55	2	3	6.6	64	OFF	
	1:57	2	5	6.7	63	SCALE	

SAMPLES COLLECTED Time 2:04 Total volume purged (gal.) 5
 Water color CLEAR Odor NONE
 Description of sediments or material in sample: NONE
 Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requester
MW-2	2	1	—	HCl	Y	BTEL	J/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify s
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify s
 5 = Other; _____; 6 = Other _____



WATER SAMPLING DATA

Job Name Grant Line Rd. Job Number 1-369-04 Sampler J.C.
 Well Number MW-3 Date 8/9/95 Well Diameter 2"
 Sample Point Location/Description ON site South of E-580 Well Depth (spec.) 41
 Depth to Water (static) 29.70 Well Depth (sounded)
 Initial height of water in casing 11.3 Volume 1.84 gallons
 Volume to be purged gallons
 Purged With Sub pump / MC BAILEX Sampled With DISPOSABLE BAILEX
 Pumped or Bailed Dry? Yes No Time After gallons
 Water level at sampling Percent Recovery

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 V₁ casing = 0.163 gal/ft
 V₂ casing = 0.367 gal/ft
 V₃ casing = 0.653 gal/ft
 V₄ casing = 0.826 gal/ft
 V₅ casing = 1.47 gal/ft
 V₆ casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/c
2:41	2:43	2	2	6.8	75	READING	
	2:45	2	4	6.4	72	OFF	
	2:47	2	6	6.5	70	SCALE	

SAMPLES COLLECTED Time 2:55 Total volume purged (gal.) 6
 Water color Cloudy Odor Hydrocarbon
 Description of sediments or material in sample: light sandy sed.
 Additional Comments:

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-3	2	1	—	HCL	Y	BTEL	g/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify s
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify s
 5 = Other, _____; 6 = Other _____



WATER SAMPLING DATA

Job Name GRANT LINE Rd. Job Number 1-369-04 Sampler J.C.
 Well Number MW-4 Date 8/9/95 Well Diameter 2"
 Sample Point Location/Description ON SITE EAST OF GRANT LINE Rd. Well Depth (spec.) 40
 Depth to Water (static) 29.85 Well Depth (sounded) _____
 Initial height of water in casing 10.15 Volume 1.05 gallons
 Volume to be purged : _____ gallons
 Purged With Sub pump / PVC BAILEX Sampled With Disposable BAILEX
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 $vol. in cyl. = \pi r^2 h$
 $7.48 gal/ft^3$
 $V_{2"} casing = 0.163 gal/ft$
 $V_{3"} casing = 0.367 gal/ft$
 $V_{4"} casing = 0.653 gal/ft$
 $V_{4.5"} casing = 0.826 gal/ft$
 $V_{5"} casing = 1.47 gal/ft$
 $V_{6"} casing = 2.61 gal/ft$

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/c
2:15	2:16	1	1	7.3	75	Reading	
	2:18	2	3	7.2	73	OFF	
	2:20	2	5	7.0	71	SCALE	

SAMPLES COLLECTED Time 2:30 Total volume purged (gal.) 5
 Water color cloudy Odor Hydrocarbon
 Description of sediments or material in sample: NONE
 Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-4	2	1	—	HCL	Y	BTEL	g/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify s
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify s
 5 = Other, _____; 6 = Other _____



WATER SAMPLING DATA

Job Name GRANT LINE Rd. Job Number 1-369-04 Sampler J.C.
 Well Number MW-5 Date 8/19/85 Well Diameter 2"
 Sample Point Location/Description ON site North East of Hwy. I-580 ON Ramp. Well Depth (spec.) 28
 Depth to Water (static) 13.18 Well Depth (sounded)
 Initial height of water in casing 14.82 Volume 2.41 gallons
 Volume to be purged 7 gallons
 Purged With Sub pump PVC Bailor Sampled With Disposable Bailor
 Pumped or Bailed Dry? Yes No Time After gallons
 Water level at sampling Percent Recovery

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 $V_{2" \text{ casing}} = 0.163 \text{ gal/ft}$
 $V_{3" \text{ casing}} = 0.367 \text{ gal/ft}$
 $V_{4" \text{ casing}} = 0.653 \text{ gal/ft}$
 $V_{5" \text{ casing}} = 0.826 \text{ gal/ft}$
 $V_{6" \text{ casing}} = 1.47 \text{ gal/ft}$
 $V_{8" \text{ casing}} = 2.61 \text{ gal/ft}$

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1:25	1:28	2	2	7.6	67	Reading	
	1:32	3	5	7.4	66	OFF	
	1:35	2	7	7.2	69	SCALE	

SAMPLES COLLECTED Time 1:42 Total volume purged (gal.) 7
 Water color Clear Odor NONE
 Description of sediments or material in sample: NONE
 Additional Comments:

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-5	2	1	—	HCl	Y	BTEL	g/BTEL

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
 5 = Other; 6 = Other



Sample only

WATER SAMPLING DATA

Job Name Grant Line Rd. Job Number 1-369-04 Sampler J.C.
 Well Number Water supply unit Date 8/9/95 Well Diameter 2"
 Sample Point Location/Description on site South East of Hwy-580 on LA-1 Well Depth (spec.) _____
 Depth to Water (static) _____ Well Depth (sounded) _____
 Initial height of water in casing _____ Volume _____ gallons
 Volume to be purged _____ gallons
 Purged With Sub pump / MC BAILEY Sampled With DISPOSABLE BAILEY
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 V_{10}^* casing = 0.163 gal/ft
 V_{20}^* casing = 0.367 gal/ft
 V_{30}^* casing = 0.653 gal/ft
 V_{40}^* casing = 0.826 gal/ft
 V_{50}^* casing = 1.47 gal/ft
 V_{60}^* casing = 2.61 gal/ft

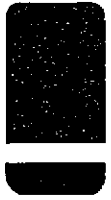
CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/c
SAMPLE ONLY							

SAMPLES COLLECTED Time 1:20 Total volume purged (gal.) SAMPLE ONLY
 Water color CLEAR Odor NONE
 Description of sediments or material in sample: NONE
 Additional Comments: SAMPLE ONLY

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
AA-1 Water supply unit	2	1	—	HCL	Y	BTEL	g/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify s
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify s
 5 = Other, _____; 6 = Other _____



GTEL

ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region

4080-C Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California
(510) 825-0720 (FAX)

February 16, 1995

Ed Morales
Sierra Environmental Services
P.O. Box 2546
Martinez, CA 94553

RE: GTEL Client ID: SIE01CHV08
Login Number: C5020119
Project ID (number): 1-369-04
Project ID (name): Chevron/#9-7127/I-580 at Grant Line Rd., Altamont Pass

Dear Ed Morales:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 02/09/95.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the Department of Health Service under Certification Number E1075.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Rashmi Shah
Laboratory Director

GTEL Client ID: SIE01CHV08
 Login Number: C5020119
 Project ID (number): 1-369-04
 Project ID (name): Chevron/#9-7127/I-580 at Grant Line Rd., Altamont Pass

ANALYTICAL RESULTS

Volatile Organics
 Method: EPA 8020
 Matrix: Aqueous

GTEL Sample Number	C5020119-01	C5020119-02	C5020119-03	C5020119-04
Client ID	TB-LB	MW-5	MW-2	MW-4
Date Sampled	02/09/95	02/09/95	02/09/95	02/09/95
Date Analyzed	02/12/95	02/12/95	02/12/95	02/12/95
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting		Concentration:			
	Limit	Units				
Benzene	0.5	ug/L	< 0.5	< 0.5	1.7	1800
Toluene	0.5	ug/L	< 0.5	< 0.5	3.6	110
Ethylbenzene	0.5	ug/l	< 0.5	< 0.5	1.5	86
Xylenes (total)	0.5	ug/L	< 0.5	< 0.5	6.1	91
TPH as GAS	50	ug/L	< 50	< 50	< 50	3300
BFB (Surrogate)	--	%	84.4	85.5	88.2	92.3

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

C5020119-04:

Uncategorized compounds are not included in gasoline concentration. Data obtained from multiple dilutions. Dilution factor noted represents the dilution used for majority of results.

GTEL Concord, CA
 C5020119:1



GTEL Client ID: SIE01CHV08
 Login Number: C5020119
 Project ID (number): 1-369-04
 Project ID (name): Chevron/#9-7127/I-580 at Grant Line Rd., Altamont Pass

ANALYTICAL RESULTS

Volatile Organics
 Method: EPA 8020
 Matrix: Aqueous

GTEL Sample Number	C5020119-05	C5020119-06	--	--
Client ID	MW-3 WATER SUPPLY UNIT		--	--
Date Sampled	02/09/95	02/09/95	--	--
Date Analyzed	02/15/95	02/12/95	--	--
Dilution Factor	10.0	1.00	--	--

Analyte	Reporting		Concentration:		
	Limit	Units			
Benzene	0.5	ug/L	5100	< 0.5	--
Toluene	0.5	ug/L	290	< 0.5	--
Ethylbenzene	0.5	ug/L	230	< 0.5	--
Xylenes (total)	0.5	ug/L	200	< 0.5	--
TPH as GAS	50	ug/L	8000	< 50	--
BFB (Surrogate)	--	%	94.4	87.3	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

C5020119-05:

Data obtained from multiple dilutions. Dilution factor noted represents the dilution used for majority of results.

GTEL Concord, CA
 C5020119:2



GTEL Client ID: SIE01CHV08
Login Number: C5020119
Project ID (number): 1-369-04
Project ID (name): Chevron/#9-7127/I-580 at Grant Line Rd., Altamont Pass

QUALITY CONTROL RESULTS

Volatile Organics
Method: EPA 8020
Matrix: Aqueous

Method Blank Results

QC Batch No: Q021195-1
Date Analyzed: 11-FEB-95

Analyte	Method: EPA 8020	Concentration: ug/L
Benzene	< 0.30	
Toluene	< 0.30	
Ethylbenzene	< 0.30	
Xylenes (Total)	< 0.50	
TPH as Gasoline	< 10.0	

Notes:

GTEL Client ID: SIE01CHV08
 Login Number: C5020119
 Project ID (number): 1-369-04
 Project ID (name): Chevron/#9-7127/I-580 at Grant Line Rd., Altamont Pass

QUALITY CONTROL RESULTS

Volatile Organics
 Method: EPA 8020
 Matrix: Aqueous

Matrix Spike and Matrix Spike Duplicate Results

Analyte	Original Concentration	Spike Amount	Matrix Spike	Matrix Spike	Matrix Spike Duplicate	Matrix Spike Duplicate	Acceptability Limits		
			Concentration	Recovery, %	Concentration	Recovery, %	RPD, %	RPD, %	Recovery, %
EPA 8020	GTEL Sample ID: C5020039-09		Spike ID: Q021195-3		Dup. ID: Q021195-4				
Units: ug/L	Analysis Date: 05-FEB-95		12-FEB-95		12-FEB-95		Client ID: Batch QC		
Benzene	< 0.50	20.0	17.7	88.5	17.4	87.0	1.7	34	57.3-138%
Toluene	< 0.50	20.0	18.9	94.5	18.7	93.5	1	31	63-134%
Ethylbenzene	< 0.50	20.0	18.7	93.5	18.2	91.0	2.7	38	59.3-137%
Xylenes (Total)	< 0.50	60.0	55.5	92.5	55.0	91.7	0.8	31	59.3-144%

Notes: