Chevron

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

Site Assessment & Remediation Group
Phone (510) 842-9500

November 28, 1994

Ms. Juliet Shin
Alameda County Department of Environmental Health
1131 Harbor Bay Pkwy, 2nd Floor
Alameda, CA 94502-6577

Re: Chevron Service Station No. 9-6607
2340 Otis Drive, Alameda, California

Dear Ms. Shin :

All monitoring wells were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and xylene (BTEX). In addition to these groundwater samples, MW-1 and MW-2 were analyzed for Methyl-Ternary-Butyl-Ether (MTBE) as you requested in a phone conversation that occurred shortly after you received my letter dated September 16, 1994. All wells were below the detection limit for TPH-G with the exception of MW-1 which had 80 ppb. BTEX was not detected in any of the wells.

From our phone conversation, you agreed that the detection of Methyl-Ternary-Butyl-Ether (MTBE) is not a result of Chevron's operation.

Please refer to the enclosed report from Sierra Environmental Services dated November 10, 1994. If you have any questions or comments, please call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

LKAN/MacFile 9-6607R15

Enclosure

cc : Mr. Richard Hiett
RWQCB-San Francisco Bay Area
2101 Webster Street, Suite 500
Oakland, CA 94612

Mr. Steve Willer
Chevron U.S.A. Products Co.

SIERRA
Environmental Services

November 10, 1994

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

Re: Chevron Service Station #9-6607
2340 Otis Drive
Alameda, California
SES Project #1-292-04

Dear Mr. Kan:

This report presents the results of quarterly ground water sampling at Chevron Service Station #9-6607, located at 2340 Otis Drive in Alameda, California. Four wells, MW-1 through MW-4, were sampled (Figure 1).

On October 12, 1994, SES personnel visited the site. Water levels were measured in all wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not present in any of the site wells. Water level data are shown in Table 1 and ground water elevation contours are included on Figure 1.

The ground water samples were collected on October 12, 1994 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.

REGISTERED PROFESSIONAL ENGINEER
CHRIS J. BRAMER
C 048846
CIVIL
STATE OF CALIFORNIA

Sincerely,
Sierra Environmental Services

L. Chernyak

Luda Chernyak
Staff Technician

Chris J. Bramer
Professional Engineer #C48846

LAC/CJB/lmo
29204QM.NO4

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

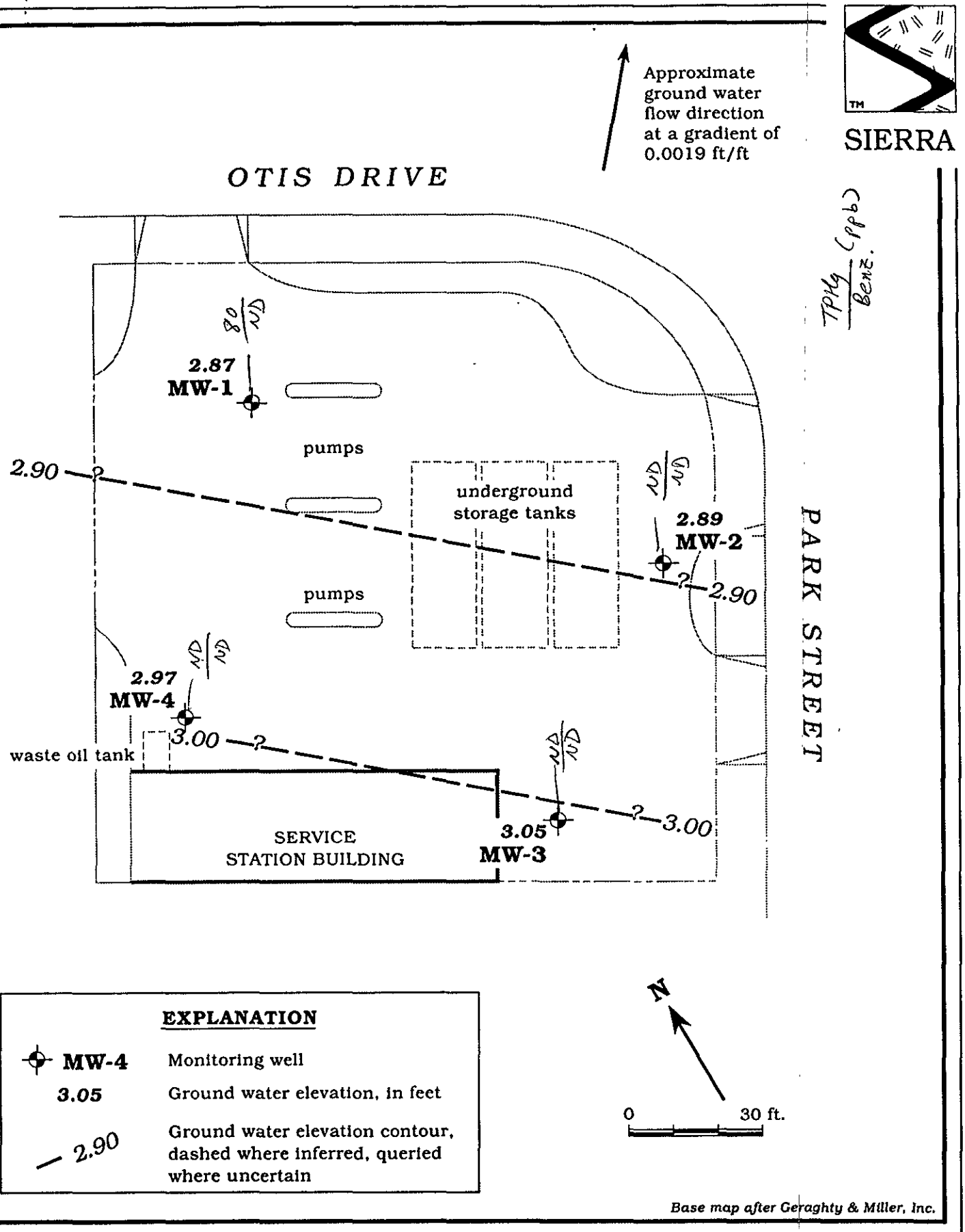

Figure 1. Monitoring Well Location and Ground Water Elevation Contour Map - October 12, 1994 - Chevron Service Station #9-6607, 2340 Otis Drive, Alameda, California

1-292-04 11/10/94

SIERRA

Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #96607, 2340 Otis Drive, Alameda, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	TPH(D)	O&G	B	T	E	X	MTBE	Other VOCs
						<-------			ppb			------->		
MW-1/														
7.12	8/21/91	6.10	1.02	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	1/9/92	3.96	3.16	0	8015/8020/503E	<50	---	<5,000	<0.5	<0.5	<0.5	<0.5	---	---
	4/20/92	3.90	3.22	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	7/25/92	4.18	2.94	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	11/24/92	4.72	2.40	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	1/21/93	3.18	3.94	0	8015/8020	<50	---	---	<0.5	0.7	<0.5	1.0	---	---
	4/13/93	3.70	3.42	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	1.0	---	---
	7/14/93	4.21	2.91	0	8015/8020	<50[2]	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	10/26/93	4.28	2.84	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	1/11/94	4.16	2.96	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	3/31/94	3.88	3.24	0	8015/8020	<50	---	---	<0.5	0.6	<0.5	0.7	---	---
	7/14/94	3.00	4.12	0	8015/8020	<50[2]	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	10/12/94	**4.25**	**2.87**	**0**	**8015/8020/8240**	**80**	**---**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**121**	**ND[3]**
MW-2/														
7.43	8/21/91	6.40	1.03	0	8015/8020	430	---	---	170.0	0.9	1.0	3.6	---	---
	1/9/92	4.23	3.20	0	8015/8020/503E	58[1]	---	<5,000	16.0	<0.5	<0.5	<0.5	---	---
	4/20/92	4.17	3.26	0	8015/8020	180	---	---	9.6	<0.5	0.8	<0.5	---	---
	7/25/92	4.47	2.96	0	8015/8020	220	---	---	8.0	0.7	4.0	8.6	---	---
	11/24/92	5.82	1.61	0	8015/8020	72	---	---	3.2	<0.5	0.5	0.6	---	---
	1/21/93	3.35	4.08	0	8015/8020	<50	---	---	0.8	<0.5	<0.5	<0.5	---	---
	4/13/93	4.02	3.41	0	8015/8020	78	---	---	<0.5	<0.5	<0.5	0.6	---	---
	7/14/93	4.49	2.94	0	8015/8020	<50[2]	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	10/26/93	4.56	2.87	0	8015/8020	<50[2]	---	---	<0.5	0.9	<0.5	0.6	---	---
	1/11/94	4.39	3.04	0	8015/8020	<50[2]	---	---	<0.5	1	<0.5	<0.5	---	---
	3/31/94	4.18	3.25	0	8015/8020	<50	---	---	0.5	<0.5	<0.5	0.8	---	---
	7/14/94	4.90	2.53	0	8015/8020	<50[2]	---	---	<0.5	<0.5	<0.5	0.6	---	---
	10/12/94	**4.54**	**2.89**	**0**	**8015/8020/8240**	**<50[2]**	**---**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2,900**	**ND[4]**
MW-3/														
8.07	8/21/91	7.10	0.97	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	1/9/92	5.03	3.04	0	8015/8020/503E	<50	---	<5,000	<0.5	<0.5	<0.5	<0.5	---	---
	4/20/92	4.91	3.16	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	7/25/92	5.34	2.73	0	8015/8020	<50	---	---	1.0	1.0	1.0	3.4	---	---
	11/24/92	5.00	3.07	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	1/21/93	4.34	3.73	0	8025/8020	<50	---	---	<0.5	0.5	<0.5	1.0	---	---
	4/13/93	4.84	3.23	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	0.6	---	---
	7/14/93	5.29	2.78	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	2	---	---
	10/26/93	5.36	2.71	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #96607, 2340 Otis Drive, Alameda, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	TPH(D)	O&G	B	T	E	X	MTBE	Other VOCs
						<--------			ppb					-------->
MW-3	1/11/94	5.22	2.85	0	8015/8020	<50	---	---	<0.5	1	<0.5	<0.5	---	---
(cont)	3/31/94	4.99	3.08	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	7/14/94	5.36	2.71	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	10/12/94	**5.02**	**3.05**	**0**	**8015/8020**	**<50**	**---**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**---**
MW-4/														
7.85	8/21/91	6.85	1.00	0	8015/8020/503E	<50	---	<5,000	0.6	<0.5	<0.5	<0.5	---	---
	1/9/92	4.70	3.15	0	8015/8020/503E	<50	---	<5,000	<0.5	<0.5	<0.5	<0.5	---	---
	4/20/92	4.64	3.21	0	8015/8020/503E	<50	---	<5,000	<0.5	<0.5	<0.5	<0.5	---	---
	7/25/92	4.95	2.90	0	8015/8020	<50	78	---	0.5	1.1	<0.5	0.8	---	---
	11/24/92	5.42	2.43	0	8015/8020/503E	<50	---	<5,000	<0.5	<0.5	<0.5	1.0	---	---
	1/21/93	4.07	3.78	0	8015/8020	<50	<10	---	<0.5	0.5	<0.5	0.7	---	---
	4/13/93	4.45	3.40	0	8015/8020	<50	<10	---	<0.5	<0.5	<0.5	1.0	---	---
	7/14/93	4.90	2.95	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	10/26/93	4.95	2.90	0	8015/8020	<50[2]	---	---	2	3	2	3	---	---
	1/11/94	4.77	3.08	0	8015/8020	<50	---	---	<0.5	0.5	<0.5	<0.5	---	---
	3/31/94	4.65	3.20	0	8015/8020	<50	---	---	<0.5	<0.5	<0.5	1.0	---	---
	7/14/94	5.05	2.80	0	8015/8020	<50	---	---	0.9	1.2	<0.5	2.0	---	---
	10/12/94	**4.88**	**2.97**	**0**	**8015/8020**	**<50**	**---**	**---**	**<0.5**	**0.9**	**<0.5**	**0.7**	**---**	**---**
Trip/Lab Blank														
TB-LB	1/21/93	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	4/13/93	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	7/14/93	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	10/26/93	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	1/11/94	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	3/31/94	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	7/14/94	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	10/12/94	**---**	**---**	**---**	**8015/8020**	**<50**	**---**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**---**
Bailer Blank														
BB	1/21/93	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	4/13/93	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	7/14/93	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	10/26/93	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	1/11/94	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---
	3/31/94	---	---	---	8015/8020	<50	---	---	<0.5	<0.5	<0.5	<0.5	---	---

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #96607, 2340 Otis Drive, Alameda, California (continued)

EXPLANATION:

DTW = Depth to water
GWE = Ground water elevation
msl = Measurements referenced relative to mean sea level
TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
TPH(D) = Total Petroleum Hydrocarbons as Diesel
O&G = Oil and Grease
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methytertiary butylether
VOCs = Volatile Organic Compounds
ppb = Parts per billion
--- = Not analyzed/Not applicable

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)
8015 = Modified EPA Method 8015/3510 for TPH(D)
8020 = EPA Method 8020 for BTEX
503E = Standard Methods Method 503E for O&G
8240 = EPA Method 8240 for VOCs

NOTES:

Top of casing elevations were compiled from the Quarterly Ground Water Monitoring Report prepared for Chevron by Geraghty & Miller, Inc., December 29, 1992.

Analytic data prior to January 2, 1993 compiled from the Quarterly Ground Water Monitoring Report prepared for Chevron by Geraghty & Miller, Inc., December 29, 1992.

* Product thickness was measured with an MMC flexi-dip interface probe on and after January 21, 1993.

1 Chromatogram reported as having a single peak in the gasoline range.

2 Uncategorized compound is not included in gasoline hydrocarbon total.

3 VOCs not detected at detection limits ranging from 5 to 50 ppb.

4 VOCs not detected at detection limits ranging from 50 to 500 ppb.

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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 ±0.5°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.

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WATER SAMPLING DATA

Job Name 2340 Otis Dr.
Job Number 1-292-04
Sampler DB
Well Number MW-1
Date 10-12-94
Well Diameter 4"
Sample Point Location/Description North on Property
Well Depth (spec.)
Depth to Water (static) 4.25
Well Depth (sounded) 25.0
Initial height of water in casing 20.75
Volume 13.5 gallons
Volume to be purged 40. gallons
Purged With Pump
Sampled With Disp. Bailer
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_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time Start	Purge Time Stop	Purge Volume (gal.)	Cumulative (gal.)	pH	Temp F°	Specific Conductance Measurement	x umhos/cm
10:39							
	10:44	13	13	7.40	70.2	1.68	X 1,000
	10:49	13	26	7.41	71.1	1.68	
	10:54	14	40	7.37	71.8	1.46	↓

SAMPLES COLLECTED Time 11:08
Total volume purged (gal.) 40
Water color Clear
Odor None
Description of sediments or material in sample:
Additional Comments:

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

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 ___

WATSMPLFM

SIERRA

WATER SAMPLING DATA

Job Name 2340 Otis Dr. Job Number 1-292-04 Sampler D.B.

Well Number MW-2 Date 10-12-94 Well Diameter 4"

Sample Point Location/Description East Side of Property Well Depth (spec.) _____

Depth to Water (static) 4.54 Well Depth (sounded) 250

Initial height of water in casing 20.46 Volume 13.36 gallons

Volume to be purged 40 gallons

Purged With Pump Sampled With Disp. Bailer

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_6" casing = 1.47 gal/ft
V_8" 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
11:58							
	12:03	13	13	7.88	72.4	0.61	x 1,000
	12:08	13	26	7.84	73.1	0.63	↓
	12:13	14	40	7.89	72.3	0.66	↓

SAMPLES COLLECTED Time 12:20 Total volume purged (gal.) 40

Water color CLEAR Odor NONE

Description of sediments or material in sample: _____

Additional Comments: _____

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

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 _____

SIERRA

WATER SAMPLING DATA

Job Name 2340 Otis Dr. Job Number 1-292-04 Sampler DB

Well Number MW-3 Date 10-12-94 Well Diameter 4"

Sample Point Location/Description South on Property Well Depth (spec.) ____

Depth to Water (static) 5.02 Well Depth (sounded) 25.0

Initial height of water in casing 19.98 Volume 13.04 gallons

Volume to be purged 39 gallons

Purged With Pump Sampled With Disp. Bailer

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_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time Start	Purge Time Stop	Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance Measurement	Specific Conductance x umhos/cm
11:17							
	11:22	13	13	7.66	69.4	1.93	x 1,000
	11:27	13	26	7.62	70.5	1.83	↓
	11:32	13	39	7.60	71.1	1.78	

SAMPLES COLLECTED Time 11:40 Total volume purged (gal.) 40

Water color Clear Odor None

Description of sediments or material in sample: ____

Additional Comments: ____

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

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 ____

WATSMAX.FRM

SIERRA

WATER SAMPLING DATA

Job Name 2340 Otis Dr. | Job Number 1-292-04 | Sampler D.B.

Well Number MW-4 | Date 10-17-94 | Well Diameter 4"

Sample Point Location/Description West on Property | Well Depth (spec.) ____

Depth to Water (static) 4.88 | Well Depth (sounded) 21.0

Initial height of water in casing 16.12 | Volume 10.5 gallons

Volume to be purged 32 gallons

Purged With Pump | Sampled With Disp. Bailer

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_6" casing = 1.47 gal/ft
V_8" 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
9:58	10:02	11	11	7.47	70.5	* —	
	10:06	11	22	7.48	72.2	~~3.30~~ 3.30	x 1,000
	10:10	10	32	7.49	73.1	3.33	↓

SAMPLES COLLECTED Time 10:20 | Total volume purged (gal.) 32

Water color CLEAR | Odor NO

Description of sediments or material in sample: ____

Additional Comments: * NOT REGISTERING

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-4	3	1	—	HCL	YES	GTEL	GAS/BTEX

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 ____

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-6607
Facility Address 2340 Otis Dr. Alameda
Consultant Project Number 1-292-04
Consultant Name Sierra Environmental Service
Address PO Box 2546 Martinez, CA 94553
Project Contact (Name) Ed Morales
(Phone) 370-1280 (Fax Number) 370 7959

Chevron Contact (Name) Kenneth Kan
(Phone) 842-8752
Laboratory Name GTEL
Laboratory Release Number 8617811
Samples Collected by (Name) D.B.
Collection Date 10.12.94
Signature [signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					Remarks
MW-1	01	3	W	G	11:08	HCl	Yes	✓					✓							Analyze
MW-2	02	3	↓	↓	12:20	↓	↓	✓					✓							↓
MW-3	03	3	↓	↓	11:40	↓	↓	✓												↓
MW-4	04	3	↓	↓	10:20	↓	↓	✓												↓
TB	05	2	↓	↓	—	↓	↓	✓												↓

Note: Do Not Bill TB-LB Samp
4.0C

C4100247

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
[signature]	SES	10-12-94 1700	[signature]	GTEL	10/12/94 1700	24 Hrs.
[signature]	GTEL	10-12-94 1700				48 Hrs. / 5 Days
			Received For Laboratory By (Signature): [signature]		10/12/94 17:00	10 Days / **As Contracted** (circled)

10/12/94

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)

Client Number: SIE01CHV08
Consultant Project Number: 1-292-04
Facility Number: 9-6607
Project ID: 2340 Otis Dr. Alameda
Work Order Number: C4-10-0247

October 25, 1994

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

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 10/12/94.

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. This report is to be reproduced only in full.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning 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

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8240[a]

GTEL Sample Number		01	02[b]	101794 MSA	
Client Identification		MW-1	MW-2	METHOD BLANK	
Date Sampled		10/12/94	10/12/94	--	
Date Analyzed		10/17/94	10/17/94	10/17/94	
Analyte	Quantitation Limit, ug/L	Concentration, ug/L			
Chloromethane	10	<10	<100	<10	
Bromomethane	10	<10	<100	<10	
Vinyl chloride	10	<10	<100	<10	
Chloroethane	10	<10	<100	<10	
Methylene chloride	5	<5	<50	<5	
Acetone	20	<20	<200	<20	
Carbon disulfide	5	<5	<50	<5	
1,1-Dichloroethene	5	<5	<50	<5	
1,1-Dichloroethane	5	<5	<50	<5	
1,2-Dichloroethene, total	5	<5	<50	<5	
Chloroform	5	<5	<50	<5	
1,2-Dichloroethane	5	<5	<50	<5	
2-Butanone	20	<20	<200	<20	
1,1,1-Trichloroethane	5	<5	<50	<5	
Carbon tetrachloride	5	<5	<50	<5	
Vinyl acetate	50	<50	<500	<50	
Bromodichloromethane	5	<5	<50	<5	
1,2-Dichloropropane	5	<5	<50	<5	
cis-1,3-Dichloropropene	5	<5	<50	<5	
Trichloroethene	5	<5	<50	<5	
Dibromochloromethane	5	<5	<50	<5	
1,1,2-Trichloroethane	5	<5	<50	<5	
MTBE	5	121	2900	<5	

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986 (method modified for additional compounds). Sample introduction by EPA Method 5030.
b. Sample diluted and MDL raised due to high level of (MTBE) non-target compound.

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8240[a]

GTEL Sample Number		01	02[b]	101794 MSA	
Client Identification		MW-1	MW-2	METHOD BLANK	
Date Sampled		10/12/94	10/12/94	--	
Date Analyzed		10/17/94	10/17/94	10/17/94	
Analyte	Quantitation Limit, ug/L	Concentration, ug/L			
Benzene	5	<5	<50	<5	
trans-1,3-Dichloropropene	5	<5	<50	<5	
2-Chloroethylvinyl ether	10	<10	<100	<10	
Bromoform	5	<5	<50	<5	
4-Methyl-2-pentanone	20	<20	<200	<20	
2-Hexanone	20	<20	<200	<20	
Tetrachloroethene	5	<5	<50	<5	
1,1,2,2-Tetrachloroethane	5	<5	<50	<5	
Toluene	5	<5	<50	<5	
Chlorobenzene	5	<5	<50	<5	
Ethylbenzene	5	<5	<50	<5	
Styrene	5	<5	<50	<5	
1,2-Dichlorobenzene	5	<5	<50	<5	
1,3-Dichlorobenzene	5	<5	<50	<5	
1,4-Dichlorobenzene	5	<5	<50	<5	
Xylene, total	5	<5	<50	<5	
Trichlorofluoromethane	5	<5	<50	<5	
Quantitation Limit Multiplier		1	10	1	
DCE surrogate, % recovery		99.7	97.7	105	
TOL surrogate, % recovery		97.2	99.7	98.6	
BFB surrogate, % recovery		106	104	96.2	

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986 (method modified for additional compounds). Sample introduction by EPA Method 5030.
b. Sample diluted and MDL raised due to high level of (MTBE) non-target compound.

QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
EPA 8240:							
1,1-Dichloroethene	C4100154-04	50	ug/L	86.4	91.6	5.8	61 - 145
Trichloroethene	C4100154-04	50	ug/L	46[a]	103	76.5[a]	71 - 120
Benezene	C4100154-04	50	ug/L	108	115	6.3	76 - 127
Toluene	C4100154-04	50	ug/L	95.0	95.8	0.8	76 - 125
Chlorobenzene	C4100154-04	50	ug/L	97.6	101	3.4	75 - 130

a. Outside of QC limits due to matrix interference.

GTEL Client ID: SIE01CHV08 ANALYTICAL RESULTS
Login Number: C4100247
Project ID (number): 1-292-04
Project ID (name): Chevron/#9-6607/2340 Otis Dr., Alameda

Volatile Organics
Method: EPA 8020
Matrix: Aqueous

GTEL Sample Number:	C4100247-01	C4100247-02	C4100247-03	C4100247-04
Client ID	MW-1	MW-2	MW-3	MW-4
Date Sampled	10/12/94	10/12/94	10/12/94	10/12/94
Date Analyzed	10/19/94	10/19/94	10/19/94	10/20/94
Dilution Factor:	1.00	1.00	1.00	1.00

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	0.9
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes (total)	0.5	ug/L	< 0.5	< 0.5	< 0.5	0.7
TPH as GAS	50.	ug/L	80.	< 50.	< 50.	< 50.
BFB (Surrogate)	--	%	133.	131.	130.	123.

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.

C4100247-02:

Uncategorized compound is not included in gasoline concentration.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: SIE01CHV08 ANALYTICAL RESULTS
Login Number: C4100247
Project ID (number): 1-292-04
Project ID (name): Chevron/#9-6607/2340 Otis Dr., Alameda

Volatile Organics
Method: EPA 8020
Matrix: Aqueous

GTEL Sample Number	C4100247-05	--	--	--
Client ID	TB	--	--	--
Date Sampled	10/12/94	--	--	--
Date Analyzed	10/19/94	--	--	--
Dilution Factor	1.00	--	--	--

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.5	ug/L	< 0.5	--	--	--
Toluene	0.5	ug/L	< 0.5	--	--	--
Ethylbenzene	0.5	ug/L	< 0.5	--	--	--
Xylenes (total)	0.5	ug/L	< 0.5	--	--	--
TPH as GAS	50.	ug/L	< 50.	--	--	--
BFB (Surrogate)	--	%	131.	--	--	--

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.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: SIE01CHV08 QUALITY CONTROL RESULTS
Login Number: C4100247 Volatile Organics
Project ID (number): 1-292-04 Method: EPA 8020
Project ID (name): Chevron/#9-6607/2340 Otis Dr., Alameda Matrix: Aqueous

Method Blank Results

QC Batch No: G101994-5
Date Analyzed: 19-OCT-94

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 ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: SIE01CHV08 QUALITY CONTROL RESULTS

Login Number: C4100247 Volatile Organics

Project ID (number): 1-292-04 Method: EPA 8020

Project ID (name): Chevron/#9-6607/2340 Otis Dr., Alameda Matrix: Aqueous

Matrix Spike and Matrix Spike Duplicate Results

Analyte	Original Concentration	Spike Amount	Matrix Spike Concentration	Matrix Spike Recovery, %	Matrix Spike Duplicate Concentration	Matrix Spike Duplicate Recovery, %	RPD, %	Acceptability Limits RPD, %	Acceptability Limits Recovery, %
EPA 8020	GTEL Sample ID:C4100224-04		Spike ID:G101994-1		Dup. ID:G101994-2				
Units: ug/L	Analysis Date:19-OCT-94			20-OCT-94		20-OCT-94	Client ID:Batch QC		
Benzene	< 0.50 **	20.0	22.1	111.	21.3	107.	3.6	34	57.3-138%
Toluene	< 0.50 **	20.0	21.2	106.	20.6	103.	2.8	31	63-134%
Ethylbenzene	< 0.50 **	20.0	20.3	102.	19.8	99.0	2.9	38	59.3-137%
Xylenes (Total)	< 0.50 **	60.0	64.5	108.	63.4	106.	1.8	31	59.3-144%

Notes:

**: C4100224-04: Benzene: For data validation purposes an estimated concentration of 0.139, which is below the reporting limit, was used to calculate the spike recovery results.

C4100224-04: Toluene: For data validation purposes an estimated concentration of 0.198, which is below the reporting limit, was used to calculate the spike recovery results.

C4100224-04: Ethylbenzene: For data validation purposes an estimated concentration of 0.0582, which is below the reporting limit, was used to calculate the spike recovery results.

C4100224-04: Xylenes (Total): For data validation purposes an estimated concentration of 0.306, which is below the reporting limit, was used to calculate the spike recovery results.

GTEL ENVIRONMENTAL LABORATORIES, INC.