Chevron

Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Marketing – Sales West
Phone 510 842-9500

April 20, 1997

Ms. Juliet Shin
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Chevron Service Station #9-0100
2428 Central Avenue, Alameda, California

Dear Ms. Shin:

Enclosed is a copy of the Semi-Annual Groundwater Monitoring Report 1997, that was prepared by our consultant Gettler-Ryan Inc. for the above noted site. Groundwater samples were analyzed for TPH-g, BTEX, and MtBE constituents.

The benzene constituent declined from the previous sampling event for monitoring wells MW-1 and MW-2. The sample results for monitoring wells MW-3, MW-4, MW-5, and MW-6 were below method detection levels for all constituents. Ground water depth varied from 5.33 to 5.89 feet below surface grade with the direction of flow in a northeasterly direction.

The next sampling event is scheduled for the September 1997. If you have any questions, call me at (51) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Ms. Bette Owen, Chevron

Mr. Robert Stahl
Stahl-Woolridge Investment Properties
2428 Central Avenue, Alameda, CA 94501

GETTLER-RYAN INC.

April 9, 1997 Job #5178.80

Mr. Phil Briggs
Chevron Products Company
P.O. Box 5004
San Ramon, CA 94583

Re: Semi-Annual Groundwater Monitoring & Sampling Report
Former Chevron Service Station #9-0100
2428 Central Avenue
Alameda, CA

Dear Mr. Briggs:

This report documents the semi-annual groundwater sampling event performed by Gettler-Ryan Inc. (G-R). On March 5, 1997, field personnel were on-site to monitor and sample six wells (MW-1 through MW-6) at the Former Chevron Service Station #9-0100 located at 2428 Central Avenue in Alameda, California.

Static groundwater levels were measured on March 5, 1997. All wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in any of the wells. Static water level data and groundwater elevations are presented in Table 1. A potentiometric map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets for this event are also attached. The samples were analyzed by NEI/GTEL Environmental Laboratories, Inc. Analytical results are presented in Table 1. The chain of custody document and laboratory analytical reports are attached.

Thank you for allowing Gettler-Ryan Inc. to provide environmental services to Chevron. Please call if you have any questions or comments regarding this report.

Sincerely,

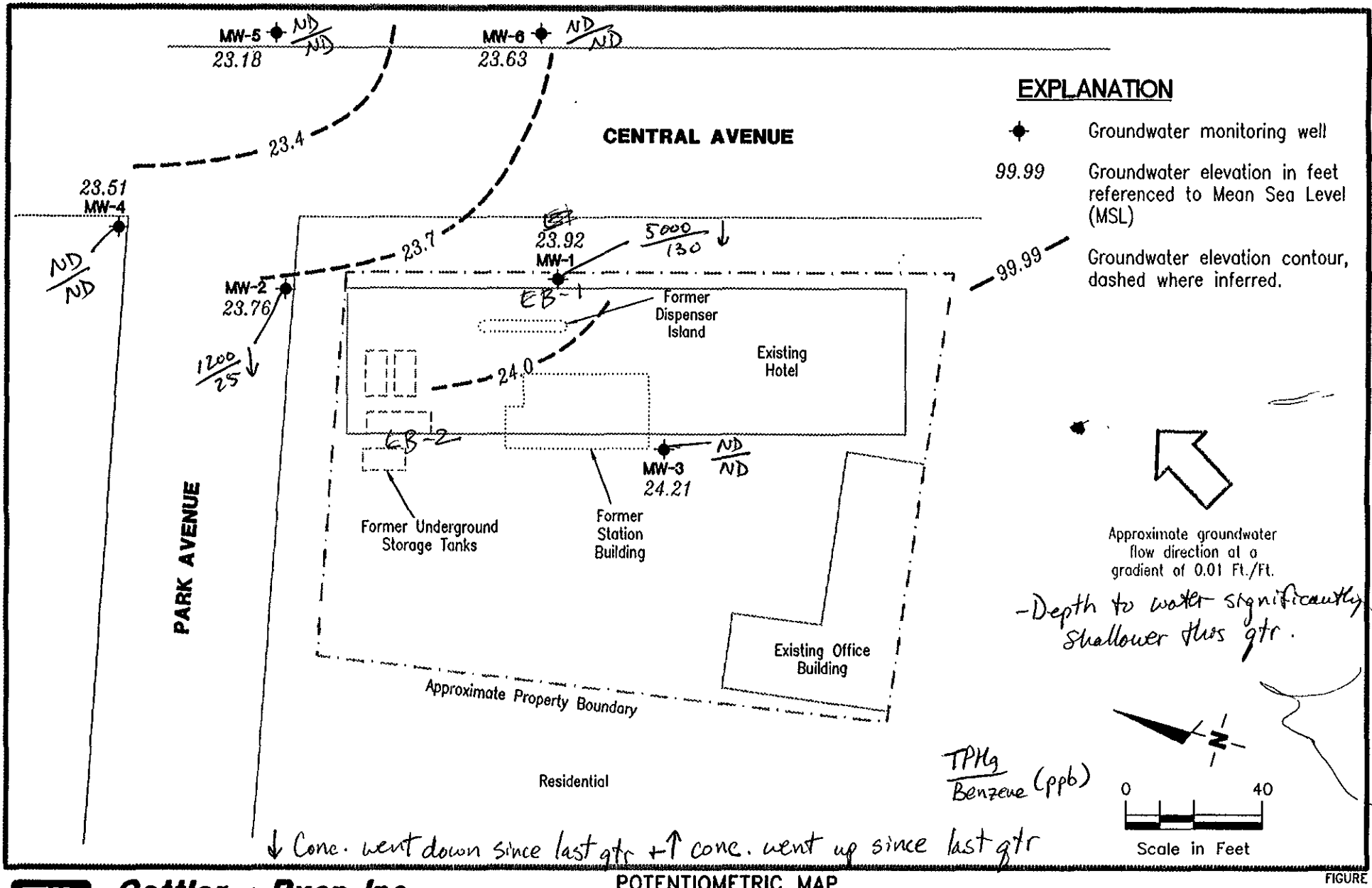
Deanna L. Harding
Project Coordinator

Stephen J. Carter
Senior Geologist, R.G. No. 5577

REGISTERED GEOLOGIST
STEPHEN J. CARTER
No. 5577
STATE OF CALIFORNIA

DLH/PLS/dlh
5178.QML

Figure 1: Potentiometric Map
Table 1: Water Level Data and Groundwater Analytical Results
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports



Gettler - Ryan Inc.

6747 Sierra Ct., Suite J (510) 551-7555
Dublin, CA 94568

POTENTIOMETRIC MAP
Former Chevron Service Station No. 9-0100
2428 Central Avenue
Alameda, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
5178		March 5, 1997	

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-0100, 2428 Central Avenue, Alameda, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	B	T	E	X	MTBE
						<------------------------------	------------------------------	ppb	------------------------------	------------------------------>
MW-1/	3/10/94[1,2]	6.79	22.44	0	7,400	120	120	33	72	---
29.23	6/21/94	7.74	21.49	0	5,300	140	60	21	43	---
	9/26/94	8.94	20.29	0	9,500	<250[5]	<250[5]	<250[5]	<250[5]	---
	12/16/94	6.57	22.66	0	4,700	<0.5	46	15	48	---
	3/22/95	5.16	24.07	0	8,800	55	14	11	<10	---
	6/13/95	5.84	23.39	0	2,100	130	29	9.5	15	---
	9/15/95	7.65	21.58	0	8,100	110	26	6.0	13	---
	3/8/96	5.36	23.87	0	5,600	250	<5.0	<5.0	<5.0	60
29.25**	9/3/96	8.03	21.22	0	7,600	270	5.6	3.4	4.9	120
	3/5/97	**5.33**	**23.92**	**0**	**5,000**	**130**	**5.2**	**3.7**	**5.7**	**31**
MW-2/	3/10/94[2,3]	6.94	22.24	0	6,400	<5	64	58	17	---
29.18	6/21/94	7.89	21.29	0	1,800	23	12	6.9	32	---
	9/26/94	8.98	20.20	0	8,400	<100[5]	<100[5]	<100[5]	<100[5]	---
	12/16/94	6.65	22.53	0	2,300	<0.5	29	8.9	33	---
	3/22/95	5.15	24.03	0	1,500	0.6	4.5	<0.5	2.5	---
	6/13/95	6.06	23.12	0	880	<0.5	<0.5	2.2	10	---
	9/15/95	7.72	21.46	0	2,700	<0.5	17	4.8	13	---
	3/8/96	5.38	23.80	0	1,300	42	2.0	0.7	2.2	10
29.19**	9/3/96	8.14	21.05	0	2,700	64	4.6	1.6	4.6	35
	3/5/97	**5.43**	**23.76**	**0**	**1,200**	**25**	**3.0**	**<0.5**	**3.6**	**<5.0**
MW-3/	3/10/94[2,4]	7.30	22.79	0	<50	<0.5	<0.5	<0.5	<0.5	---
30.09	6/21/94	8.53	21.56	0	<50	<0.5	<0.5	<0.5	<0.5	---
	9/26/94	9.80	20.29	0	<50	<0.5	<0.5	<0.5	<0.5	---
	12/16/94	7.11	22.98	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/22/95	5.54	24.55	0	<50	<0.5	<0.5	<0.5	<0.5	---
	6/13/95	6.48	23.61	0	<50	<0.5	<0.5	<0.5	<0.5	---
	9/15/95	8.40	21.69	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/8/96	5.69	24.40	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
30.10**	9/3/96	8.80	21.30	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/5/97	**5.89**	**24.21**	**0**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**
MW-4										
29.31**	9/3/96	8.32	20.99	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/5/97	**5.80**	**23.51**	**0**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**
MW-5										
28.88**	9/3/96	7.90	20.98	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/5/97	**5.70**	**23.18**	**0**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-0100, 2428 Central Avenue, Alameda, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	B	T	E	X	MTBE
						<---ppb--->				
MW-6										
29.24**	9/3/96	7.98	21.26	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/5/97	5.61	23.63	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
Trip Blank	3/10/94	---	---	---	<50	<0.5	0.7	<0.5	<0.5	---
TB-LB	6/21/94	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	9/26/94	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	12/16/94	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	3/22/95	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	6/13/95	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	9/15/95	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	3/8/96	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/3/96	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/5/97	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-0100, 2428 Central Avenue, Alameda, California (continued)

EXPLANATION:

TOC = Top of casing elevation
(ft) = feet
DTW = Depth to water
GWE = Groundwater elevation
msl = Measurements referenced relative to mean sea level
TPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
TPH(D) = Total Petroleum Hydrocarbons as Diesel
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-tertiary-butyl-ether
EDB = Ethylene Dibromide
ppb = Parts per billion
--- = Not analyzed/Not applicable

ANALYTICAL METHODS:

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

NOTES:

Water level elevation data and laboratory analytic results prior to March 22, 1995, were compiled from Quarterly Monitoring Reports prepared for Chevron by Sierra Environmental Services.

* Product thickness was measured on and after June 21,1994 with a MMC Flexi-Dip interface probe.

** Wells MW-1 through MW-6 were surveyed on September 17, 1996, by Virgil Chavez of Vallejo, California (PLS #6323).

1 TPH(D) was also analyzed and detected at 840 ppb. However, chromatogram does not match typical diesel pattern.

2 Organic lead and EDB were also analyzed but not detected at detection limits of 4 and 0.02 ppb, respectively.

3 TPH(D) was also analyzed and detected at 920 ppb. However, chromatogram does not match typical diesel pattern.

4 TPH(D) was also analyzed but not detected at detection limits of 50 ppb.

5 Detection limits raised due to the dilution required by a high amount of foaming in the sample.

5178.TQM

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using Chevron-designated disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

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

As requested by Chevron Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: C Galantine | DATE: 3/5/97

ADDRESS: 2428 Central Avenue | JOB #: 5178.85

CITY: Alameda CA | SS#: 9-0100

Well ID: MW-1 | Well Condition: OK – buried in planter – looks for drain in wall

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness:

Total Depth: 24.7 ft

Depth to Liquid: 5.33 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

# of casing Volume: 19.37 x 0.17 x(VF) 3 #Estimated purge Volume: 9.9 gal.

Purge Equipment: stack pump | Sampling Equipment: disp bailer

Did well dewater: No | If yes, Time: ___ | Volume:

Starting Time: 14:22 | Purging Flow Rate: ~2-2.5 gpm.

Sampling Time: 14:40

Time	pH ✓	Conductivity ✓	Temperature ✓	Volume
14:22	6.80	510	16.2	1.5
14:24	6.80	463	17.5	5
14:25	6.90	455	18.4	7.5
14:27	6.90	426	18.0	8.5
14:28	6.91	420	17.8	10
14:40	6.94	386	16.5	Sample

Weather Conditions: Clear

Water Color: brown/gray | Odor: slight hydrocarbon

Sediment Description: silt

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-1	Voa	X	HCL	GTEL	TPHg BTEX mTBE

Comments: Nearly dewatered – no bolts in lid.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: C Gulantine | DATE: 3/5/97

ADDRESS: 2428 Central Avenue | JOB #: 5178.85

CITY: Alameda CA | SS#: 9-0100

Well ID: MW-2 | Well Condition: OK - odd lock

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness: —

Total Depth: 23.75 ft

Depth to Liquid: 5.43 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

# of casing Volume: 18.32 x 0.17 x(VF) 3 = #Estimated purge Volume: 9.3 gal.

Purge Equipment: stack pump | Sampling Equipment: disp bailer

Did well dewater: No | If yes, Time: — | Volume:

Starting Time: 13:47 | Purging Flow Rate: ~2.5 gpm.

Sampling Time: 13:58

Time	pH ✓	Conductivity ✓	Temperature ✓	Volume
13:47	6.53	586	17.3	1
13:48	6.56	585	17.5	4
13:50	6.55	567	18.5	7
13:51	6.60	543	18.5	10
13:58	6.69	543	17.6	Sample

Weather Conditions: Clear

Water Color: brown | Odor: —

Sediment Description: silt

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-2	Voa	X	HCl	GTEL	TPHg BTEX MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: C Galantine | DATE: 3/5/97

ADDRESS: 2428 Central Avenue | JOB #: 5178.85

CITY: Alameda CA | SS#: 9-0100

Well ID: MW-3 | Well Condition: OK - odd lock

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness:

Total Depth: 24.5 ft

Depth to Liquid: 5.89 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

# of casing Volume: 18.61 x 0.17 x(VF) 3 | #Estimated purge Volume: 9.5 gal.

Purge Equipment: stack pump | Sampling Equipment: disp bailer

Did well dewater: No | If yes, Time: — | Volume:

Starting Time: 12:15 | Purging Flow Rate: gpm.

Sampling Time: 12:30

Time	pH ✓	Conductivity ✓	Temperature ✓	Volume
12:13	6.45	513	18.5	2
~~12:14~~ 12:17	6.67	467	18.0	5
12:18	6.67	465	18.0	7.5
12:19	6.66	481	17.8	10
12:30	6.70	519	17.0	Sample

Weather Conditions: clear

Water Color: lt brown | Odor: —

Sediment Description: silt

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-3	Voa	X	HCL	GTEL	TPHg, BTEX & TBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: C Galantine | DATE: 3/5/97

ADDRESS: 2428 Central Avenue | JOB #: 5178.85

CITY: Alameda CA | SS#: 9-0100

Well ID: MW-4 | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness:

Total Depth: 20.0 ft

Depth to Liquid: 5.80 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

# of casing Volume: 14.20 x 0.17 x(VF) 3 | #Estimated purge Volume: 7.2 gal.

Purge Equipment: stack pump | Sampling Equipment: disp bailer

Did well dewater: Yes | If yes, Time 13:26 Volume 3.5

Starting Time: 13:25 | Purging Flow Rate: ~ 2.5 gpm.

Sampling Time: 13:35

Time	pH	Conductivity	Temperature	Volume
13:25	6.80	224	16.2	1
13:35	6.75	222	16.1	Sample

Weather Conditions: clear

Water Color: brown | Odor: —

Sediment Description: silt

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-4	Voa	X	HCL	GTEL	TPHg BTEX MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: C Galantine | DATE: 3/5/97

ADDRESS: 2428 Central Avenue | JOB #: 5178.85

CITY: Alameda CA | SS#: 9-0100

Well ID: MW-5 | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness:

Total Depth: 21.0 ft

Depth to Liquid: 5.70 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

# of casing Volume: 15.30 x 0.17 x(VF) 3 = #Estimated purge Volume: 7.8 gal.

Purge Equipment: stack pump | Sampling Equipment: disp bailer

Did well dewater: Yes | If yes, Time: 13:04 | Volume: 8 4

Starting Time: 13:01 | Purging Flow Rate: ~2.5 gpm.

Sampling Time: 13:15

Time	pH	Conductivity	Temperature	Volume
13:01	6.85	572	17.5	1
13:08	6.97	590	17.3	4
13:15	6.91	586	16.7	Sample

Weather Conditions: clear

Water Color: brown | Odor: —

Sediment Description: silt

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-5	Voa	X	HCL	GTEL	TPHg BTEX MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: C Galantine | DATE: 3/5/97

ADDRESS: 2428 Central Avenue | JOB #: 5178.85

CITY: Alameda CA | SS#: 9-0100

Well ID: MW-6 | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness:

Total Depth: 21.0 ft

Depth to Liquid: 5.61 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

# of casing Volume: 15.39 x 0.17 x(VF) 3 #Estimated purge Volume: 7.8 gal.

Purge Equipment: stack pump | Sampling Equipment: disp bailer

Did well dewater: Yes | If yes, Time: 12:41 | Volume: 6.0

Starting Time: 12:39 | Purging Flow Rate: 2.5 gpm.

Sampling Time: 12:55

Time	pH	Conductivity	Temperature	Volume
12:39	6.58	366	16.9	1.5
12:40	6.60	382	17.1	3.5
12:55	6.73	346	17.1	

Weather Conditions: clear

Water Color: brown | Odor: —

Sediment Description: Silt

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-6	Voa	X	HCl	GTEL	TPHg BTEX MTBE

Comments:

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

Chain-of-Custody Rec

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

Chevron Facility Number: 9-0100
Facility Address: 2428 Central Avenue, Alameda
Consultant Project Number: 5178.85
Consultant Name: Gettler-Ryan
Address: 6747 Sierra Ct, Ste J, Dublin 94568
Project Contact (Name): Deanna Harding
(Phone): 510 551-7555 (Fax Number): 510 551-7888

Chevron Contact (Name): Phil Briggs
(Phone): 510-842-9136
Laboratory Name: GTEL
Laboratory Release Number: 3420820
Samples Collected by (Name): Clyde Galantine
Collection Date: 3/5/97
Signature: Clyde Galantine

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX w/MTBE (8015) (8020)	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)					DO NOT BILL TB-LB ANALY
								Analyses To Be Performed												Remarks
MW-6	970300 08	3	W	G	12:55		Y	X												
MW-5					13:15			X												
MW-4					13:35			X												
MW-3					12:30			X												
MW-2					13:58			X												
MW-1					14:40			X												
TB-LB		2			—			X												

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Clyde Galantine	GR	3/5/97 16:00	D Harding	GR	3/6/97
D. Harding	GR	3/6/97 13:20	Joe Weber	NEI/GTEL	3/6/97 1320
Joe Weber	NEI/GTEL	3/6/97 1645	Received For Laboratory By (Signature) Tammy Meeker		3/7/97 0845

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

COC-3.DWG/03 01/mch

NEI/GTEL
ENVIRONMENTAL LABORATORIES, INC.

Midwest Region
4211 May Avenue
Wichita, KS 67209
(316) 945-2624
(800) 633-7936
(316) 945-0506 (FAX)

March 17, 1997

Deanna Harding
GETTLER-RYAN
6747 Sierra Ct.
Suite J
Dublin, CA 94568

RE: NEI/GTEL Client ID: GTR01CHV08
Login Number: W7030098
Project ID (number): 5178.85
Project ID (name): CHEVRON/9-0100/2428 CENTRAL AVE/ALAMEDA/CA

Dear Deanna Harding:

Enclosed please find the analytical results for the samples received by NEI/GTEL Environmental Laboratories, Inc. on 03/07/97.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by NEI/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.

NEI/GTEL is certified by the California Department of Health Service under Certification Number 1845.

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

Sincerely,
NEI/GTEL Environmental Laboratories, Inc.

Justin Ward, Project Coordinator for
Terry R. Loucks
Laboratory Director

ANALYTICAL RESULTS
Volatile Organics

NEI/GTEL Client ID: GTR01CHV08
Login Number: W7030098
Project ID (number): 5178.85
Project ID (name): CHEVRON/9-0100/2428 CENTRAL AVE/ALAMEDA/CA

Method: EPA 8020A
Matrix: Aqueous

NEI/GTEL Sample Number	W7030098-01	W7030098-02	W7030098-03	W7030098-04
Client ID	MW-6	MW-5	MW-4	MW-3
Date Sampled	03/05/97	03/05/97	03/05/97	03/05/97
Date Analyzed	03/13/97	03/13/97	03/13/97	03/13/97
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting Limit	Units	Concentration:			
MTBE	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
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	< 0.5
BTEX (total)	--	ug/L	--	--	--	--
TPH as Gasoline	50	ug/L	< 50	< 50	< 50	< 50

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. Analyte list modified to include additional compounds. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

ANALYTICAL RESULTS
Volatile Organics

NEI/GTEL Client ID: GTR01CHV08
Login Number: W7030098
Project ID (number): 5178.85
Project ID (name): CHEVRON/9-0100/2428 CENTRAL AVE/ALAMEDA/CA

Method: EPA 8020A
Matrix: Aqueous

NEI/GTEL Sample Number	W7030098-05	W7030098-06	W7030098-07	--
Client ID	MW-2	MW-1	TBLB	--
Date Sampled	03/05/97	03/05/97		--
Date Analyzed	03/13/97	03/13/97	03/13/97	--
Dilution Factor	1.00	1.00	1.00	--

Analyte	Reporting Limit	Units	Concentration:			
MTBE	5.0	ug/L	< 5.0	31.	< 5.0	--
Benzene	0.5	ug/L	25.	130	< 0.5	--
Toluene	0.5	ug/L	3.0	5.2	< 0.5	--
Ethylbenzene	0.5	ug/L	< 0.5	3.7	< 0.5	--
Xylenes (total)	0.5	ug/L	3.6	5.7	< 0.5	--
BTEX (total)	--	ug/L	32.	140	--	--
TPH as Gasoline	50	ug/L	1200	5000	< 50	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. Analyte list modified to include additional compounds. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

NEI/GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W7030098 Volatile Organics
Project ID (number): 5178.85 Method: EPA 8020A
Project ID (name): CHEVRON/9-0100/2428 CENTRAL AVE/ALAMEDA/CA Matrix: Aqueous

Conformance/Non-Conformance Summary

(X = Requirements Met * = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	X	--	--
Surrogate Recovery	X	--	NA
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments:

NEI/GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W7030098 Volatile Organics
Project ID (number): 5178.85 Method: EPA 8020A
Project ID (name): CHEVRON/9-0100/2428 CENTRAL AVE/ALAMEDA/CA Matrix: Aqueous

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT
Method: EPA 8020A		Acceptability Limits:	43-136%
031397GC17-1	CV0313972017	Calibration Verifi	89.8
031397GC17-3	BW03139717	Method Blank Water	94.2
031397GC17-4	DP03012905	Duplicate	93.3
031397GC17-5	MS03004901	Matrix Spike	94.4
--	03009801	MW-6	95.2
--	03009802	MW-5	94.3
--	03009803	MW-4	92.5
--	03009804	MW-3	93.0
--	03009805	MW-2	90.9
--	03009806	MW-1	112.
--	03009807	TBLB	92.5

Notes:
*: Indicates values outside of acceptability limits. See Nonconformance Summary.

Project ID (Number): 5178.85
Project ID (Name): Chevron SS #9-0100
2428 Central Ave.
Alameda, CA
Work Order Number: W7-03-0098
Date Reported: 03-17-97

METHOD BLANK REPORT

Volatile Organics in Water
EA Method 8020A

Date of Analysis: 13-Mar-97 QC Batch No: 031397GC17-3

Analyte	Concentration, ug/L
MTBE	<5.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
Xylene (total)	<0.5
TPH as Gasoline	<50

NEI/GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W7030098 Volatile Organics
Project ID (number): 5178.85 Method: EPA 8020A
Project ID (name): CHEVRON/9-0100/2428 CENTRAL AVE/ALAMEDA/CA Matrix: Aqueous

Calibration Verification Sample Summary

Analyte		Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:ug/L	QC Batch:031397GC17-1			
Benzene		20.0	20.2	101.	77-123%
Toluene		20.0	20.3	102.	77.5-122.5%
Ethylbenzene		20.0	20.4	102.	63-137%
Xylenes (Total)		60.0	63.3	106.	85-115%
TPH as Gasoline		500.	539.	108.	80-120%

Notes:
QC check source: Supelco #LA12389

NEI/GTEL Client ID: GTR01CHV08
Login Number: W7030098
Project ID (number): 5178.85
Project ID (name): CHEVRON/9-0100/2428 CENTRAL AVE/ALAMEDA/CA

QUALITY CONTROL RESULTS

Volatile Organics
Method: EPA 8020A
Matrix: Aqueous

Duplicate Sample Results

Analyte	Original Concentration	Duplicate Concentration	RPD, %	Acceptability Limits, %
EPA 8020A Units: ug/L	QC Batch: 031397GC17-4	GTEL Sample ID: W7030129-05		Client ID: Batch QC
MTBE	< 500.	< 500.	NA	20
Benzene	47.1	38.4	20.4	23.9
Toluene	< 50.0	< 50.0	NA	27.2
Ethylbenzene	203.	191.	6.09	21.6
Xylenes (Total)	1120	1070	4.57	22.0
TPH as Gasoline	7450	6850	8.39	20

Notes:
NA - The concentration of the analyte is less than the reporting limit.

NEI/GTEL Client ID: GTR01CHV08
Login Number: W7030098
Project ID (number): 5178.85
Project ID (name): CHEVRON/9-0100/2428 CENTRAL AVE/ALAMEDA/CA

QUALITY CONTROL RESULTS

Volatile Organics
Method: EPA 8020A
Matrix: Aqueous

Matrix Spike(MS) Results

GTEL Sample ID:W7030049-01
Analysis Date: 14-MAR-97

MS ID:MS03004901
14-MAR-97

Units: ug/L Analyte	Sample Conc.	Spike Added	MS Conc.	MS % Rec.	Acceptability Limits %Rec.
Benzene	< 0.5 (0.290)	20.0	21.1	104.	67-110
Toluene	< 0.5 (0.250)	20.0	20.4	101.	68-115
Ethylbenzene	< 0.5 (0.000)	20.0	20.4	102.	65-120
Xylenes (Total)	< 0.5 (0.000)	60.0	61.4	102.	62-119

Notes:
Values in parentheses in the sample concentration column are used for % recovery calculations.