



Chevron U.S.A. Products Company

2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

92 MAR -3 PM: 29

Marketing Department

February 26, 1992

Ms. Pamela Evans
Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

Re: Chevron Service Station #9-6607
2340 Otis Drive, Alameda, California

Dear Ms. Evans :

Enclosed is the quarterly groundwater report dated January 28, 1992 for the above referenced site. During this sampling period, no liquid phase hydrocarbons were observed in any monitoring wells. Samples obtained from wells, MW-1, MW-3, and MW-4, were nondetect (ND) for total petroleum hydrocarbon as gasoline (TPH-G), benzene, toluene, ethylbenzene, and xylenes (BTEX). However, TPH-G at 58 ppb that had a single peak in the gasoline range and 16 ppb benzene was detected in a sample from MW-2. Depth to water ranged from 3.96 feet to 5.03 feet.

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

Sincerely,

Chevron U.S.A., Inc.

Kenneth Kan
Engineer

LKAN/MacFile 9-6607R

Enclosure

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

Mr. Steve Willer
Chevron U.S.A., Inc.

January 28, 1992
Project No. RC05003

Ms. Nancy Vukelich
Chevron U.S.A. Inc.
West Central Marketing
2410 Camino Ramon
San Ramon, California 94583-0804

SUBJECT: January 1992 ^{2nd} Quarterly Ground-Water Monitoring and Sampling Report,
Chevron Service Station #9-6607, 2340 Otis Drive, Alameda, California.

Dear Ms. Vukelich:

This letter presents the quarterly ground-water sampling results for the above-referenced Chevron U.S.A. Inc. (Chevron) service station. The scope of work for this project was presented to Chevron in a previous letter from Geraghty & Miller, Inc. (Geraghty & Miller) dated November 26, 1991.

FIELD AND LABORATORY PROCEDURES

Ground-water monitoring was performed on January 9, 1992. Prior to sampling, depth-to-water measurements were obtained and each well was checked for the presence of liquid-phase hydrocarbons. Liquid-phase hydrocarbons were not observed during this quarterly sampling event. A minimum of three casing volumes of water was purged from each well prior to sampling, using a surface diaphragm pump. Cumulative ground-water monitoring data are presented in Table 1. All equipment that entered the wells was washed in a solution of Micro™ (a nonphosphate detergent) and water, then triple rinsed in deionized water prior to sampling each well. Following purging, ground-water samples were collected using a polyethylene disposable bailer. A new bailer was used for each well. The purged water was stored in 55-gallon drums and retained on-site for subsequent disposal by Erickson, Inc. of Richmond, California, under contract to Chevron.

Ground-water samples for laboratory analysis were placed in the appropriate United States Environmental Protection Agency (USEPA) approved containers, placed on ice, and transported to Superior Precision Analytical, Inc., located in Martinez, California. The water samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline (USEPA

Method 8015, modified); benzene, toluene, ethylbenzene, and xylenes (BTEX) (USEPA Method 8020); and for oil and grease (Standards Method 503E).

RESULTS OF QUARTERLY SAMPLING

DEPTH TO WATER

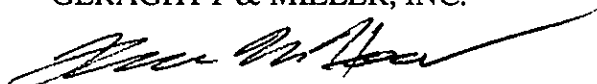
The depth-to-water measurements are presented in Table 1. A ground-water elevation map based on the data collected on January 9, 1992, is presented in Figure 1.

GROUND-WATER ANALYTICAL RESULTS

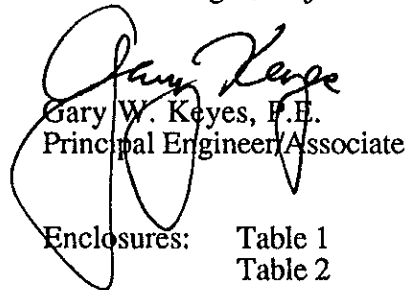
The cumulative ground-water analytical results are presented in Table 2. Copies of the certified laboratory reports and chain-of-custody documentation are included in Attachment 1.

Geraghty & Miller is pleased to be of service to Chevron. If you have any questions regarding this report, please call the undersigned at (510) 233-3200.

Sincerely,
GERAGHTY & MILLER, INC.



Thomas M. Howard
Senior Geologist/Project Manager



Gary W. Keyes, P.E.
Principal Engineer/Associate

Enclosures:	Table 1	Cumulative Ground-Water Monitoring Data
	Table 2	Cumulative Ground-Water Analytical Results
	Figure 1	Ground-Water Elevation Map
Attachments:	Attachment 1	Copies of Certified Analytical Reports and Chain-of-Custody Documentation

**Table 1: Ground-Water Monitoring Data,
Chevron Service Station #9-6607,
2340 Otis Drive, Alameda, California.**

Monitor Well	Date	TOC Elevation (feet)	DTW (feet)	DTB (feet)	Actual Purge Volume (gallons)	Water Elevation (feet)	LPH Thickness (feet)
MW-1	21-Aug-91	7.12	6.10	24.60	36.0	1.02	---
	9-Jan-92		3.96		41.5	3.16	---
MW-2	21-Aug-91	7.43	6.40	24.90	14.0	1.03	---
	9-Jan-92		4.23		40.5	3.20	---
MW-3	21-Aug-91	8.07	7.10	24.95	35.0	0.97	---
	9-Jan-92		5.03		38.9	3.04	---
MW-4	21-Aug-91	7.85	6.85	20.85	12.0	1.00	---
	9-Jan-92		4.70		39.6	3.15	---

TOC: Top of casing above mean sea level.
DTW: Depth to water below top of casing.
DTB: Depth to bottom below top of casing.
LPH: Liquid-phase hydrocarbons.
---: No liquid-phase hydrocarbons observed.

**Table 2: Ground-Water Analytical Results,
Chevron Service Station #9-6607,
2340 Otis Drive, Alameda, California.**

Monitor Well	Date	TPH as gasoline (µg/L) (a)	Benzene (µg/L) (b)	Toluene (µg/L) (b)	Ethylbenzene (µg/L) (b)	Xylenes (µg/L) (b)	Oil & Grease (µg/L) (c)
MW-1	21-Aug-91	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	9-Jan-92	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND (<5000)
MW-2	21-Aug-91	430	170.	0.9	1.	3.6	NA
	9-Jan-92	58(d)	16.	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND (<5000)
MW-3	21-Aug-91	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	9-Jan-92	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND (<5000)
MW-4	21-Aug-91	ND(<50)	0.6	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<5000)
	9-Jan-92	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<5000)

(a) Analyzed by USEPA Method 8015, modified.

(b) Analyzed by USEPA 8020.

(c) Analyzed by USEPA Method 503E.

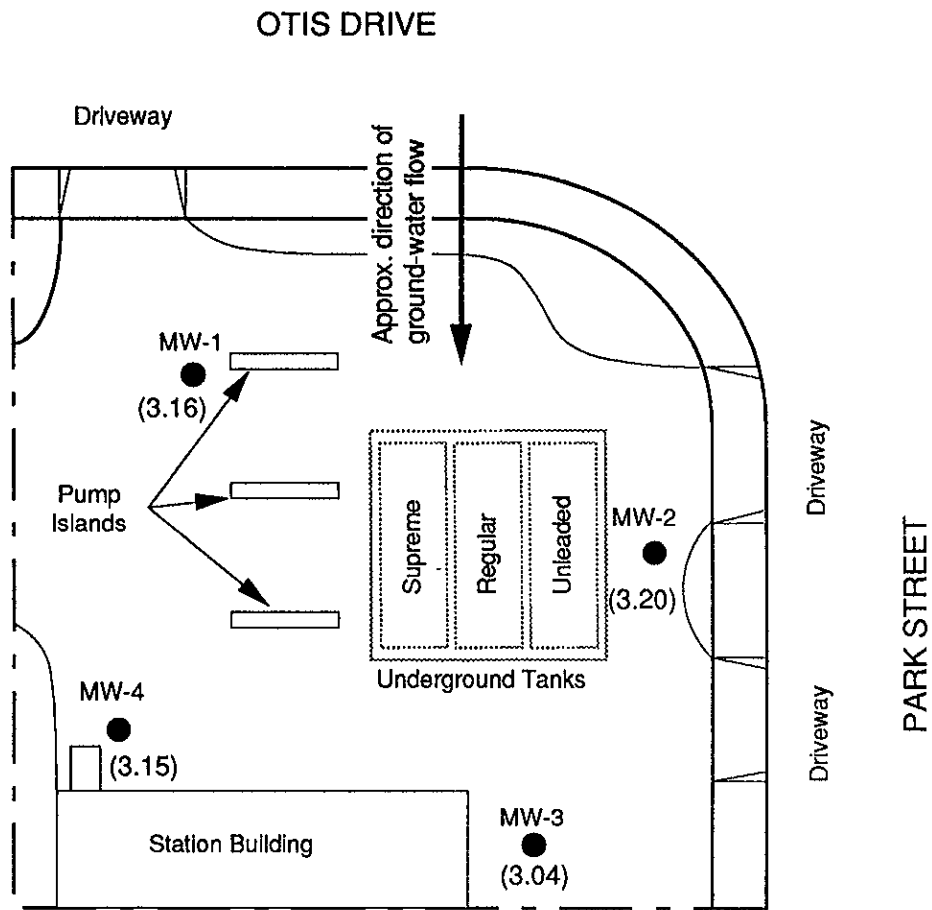
(d) Chromatogram reported as having a single peak in the gasoline range.

µg/L: Micrograms per liter.



ND: Below laboratory method detection limit.

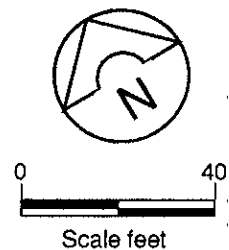
NA: Not analyzed.

Water samples analyzed by Superior Precision Analytical, Inc., Martinez, California.



EXPLANATION

- 
 MW-4 Approximate location of Monitor Well
- 
 Property line
- (3.04) Ground-water elevation in feet



Reference: Blaine Tech Services, Inc. Report No. 910409-J-1



Project No. RC05000

GROUND-WATER ELEVATION MAP

Chevron Service Station #9-6607
 2340 Otis Drive
 Alameda, California

FIGURE

1

ATTACHMENT 1

**COPIES OF CERTIFIED ANALYTICAL REPORT
AND CHAIN-OF-CUSTODY DOCUMENTATION**



Superior Precision Analytical, Inc.

1555 Burke, Unit I ▪ San Francisco, California 94124 ▪ (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 12690
CLIENT: Geraghty & Miller Inc.
CLIENT JOB NO.: RC05003

DATE RECEIVED: 01/10/92
DATE REPORTED: 01/17/92

Page 1 of 2

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
12690- 1	MW-1	01/09/92	01/14/92
12690- 2	MW-3	01/09/92	01/16/92
12690- 3	MW-4	01/09/92	01/14/92
12690- 4	MW-2	01/09/92	01/16/92
12690- 5	TRIP BLANK	01/09/92	01/16/92

Laboratory Number:	12690	12690	12690	12690	12690
	1	2	3	4	5

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	ND<5000	ND<5000	ND<5000	ND<5000	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	ND<50	*58	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5	ND<0.5	16	ND<0.5
TOLUENE:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
ETHYL BENZENE:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
XYLENES:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 12690

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/l = part per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 503E:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/l
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/l
Standard Reference: 07/23/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/l
Standard Reference: 06/13/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	04/02/91	10mg	84/86	2.4	50-125
Diesel	NA	NA	NA	NA	NA
Gasoline	07/23/91	200ng	79/82	4.0	59-121
Benzene	06/13/91	200ng	98/101	3.0	70-125
Toluene	06/13/91	200ng	94/98	4.2	74-116
Ethyl Benzene	06/13/91	200ng	92/95	2.7	75-120
Total Xylene	06/13/91	600ng	98/102	3.7	75-119

* The chromatogram showed a single peak in the gasoline range.

Richard Srna, Ph.D.

Greg A. Novak
Laboratory Director

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 Drive Alameda
Consultant Project Number RCO5003
Consultant Name Geraghty & Miller, Inc.
Address 1050 Marina Way South, Richmond, CA 94804
Project Contact (Name) Kate McCutchen
(Phone) 510/233-3200 (Fax Number) 510/233-3204

Chevron Contact (Name) Nancy Vukelich
(Phone) _____
Laboratory Name Superior - Martinez
Laboratory Release Number 542 4780
Samples Collected by (Name) ALEX RIOS
Collection Date 01-09-92
Signature [Signature]

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)	Analyses To Be Performed											Remarks
								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)				
MW-1		3	W	G	11:35	HCL	✓	✓											
MW-1		1	W	G	11:35	---	✓		✓										
MW-3		3	W	G	12:27	HCL	✓	✓											
MW-3		1	W	G	12:27	---	✓		✓										
MW-4		3	W	G	15:12	HCL	✓	✓											
MW-4		1	W	G	15:12	---	✓		✓										
MW-2		3	W	G	14:25	HCL	✓	✓											
MW-2		1	W	G	14:25	---	✓		✓										
TRIP BLANK		2	W	G	---	---	✓	✓											

Please initial: [Signature]
 Samples stored in ice. ---
 Appropriate containers. ---
 Samples preserved. ---
 VOA's without headspace. ---
 Comments: _____

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>G&M Inc</u>	Date/Time <u>1-10-92-0800</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>G&M Inc</u>	Date/Time <u>1-10-92-0800</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>G&M Inc</u>	Date/Time <u>1-10-92-0930</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>1-10-92-0930</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>1-10-92</u>	Received For Laboratory By (Signature) <u>[Signature]</u>	Date/Time <u>1/10/92</u>	

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

COC-3.DWG/03 81/HCH