Chevron

October 30, 1996

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

Marketing ~~Northwest Region~~
Phone 510 842 9500

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 #9-0191
900 Otis Drive , Alameda, California

Dear Ms. Shin:

Enclosed is the Second and Third Quarter Groundwater Monitoring reports for 1996, prepared by our consultant Gettler-Ryan Inc., for the above noted site. I apologize for the delay in submittal of the second quarter report and future reports will be submitted in a timely manner. Groundwater samples were analyzed for TPH-g, BTEX and MtBE constituents.

Benzene constituents have been below method detection limits in all of the monitoring wells in each of the quarters. TPH-g and MtBE constituents have only been observed in monitoring well MW-3 in the two quarters, with maximum concentrations of 160ppm and 16ppb respectively. Groundwater depth in the second quarter varied from 2.66 to 5.29 feet below grade with a direction of flow to the northwest. In the third quarter the depth to the groundwater varied from 3.08 to 5.21 feet below grade with a direction of flow to the northwest.

It appears that the site has not been impacted by Chevron's past operations, however we will continue to monitor the site quarterly, until we have one full year of sampling results. The results will then be reviewed, and if they are similar as now, closer will be requested.

If you have any questions, call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Ms. Bette Owen, Chevron

Harsch Investment Corp.
dba South Shore Center
235 W. MacArthur Boulevard, #63
Oakland, CA 94611

Mr. Phil Eyring
Eyring Reality Inc.
500 Ygnacio Valley Road, # 225
Walnut Creek, CA 94596

Mr Kevin Graves, RWQCB-S.F. Bay
2101 Webster Street, Suite 500
Oakland, CA 94612

GETTLER-RYAN INC.

October 7, 1996 Job #6324.80

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

Re: Third Quarter Groundwater Monitoring & Sampling Report
Former Chevron Service Station #9-0191
900 Otis Drive
Alameda, California

Dear Mr. Briggs:

This report documents the quarterly groundwater sampling event performed by Gettler-Ryan Inc. (G-R). On September 3, 1996, field personnel were on-site to monitor and sample six wells (MW-2 through MW-7) at the Former Chevron Service Station #9-0191 located at 900 Otis Drive in Alameda, California.

Static groundwater levels were measured on September 3, 1996. All wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in any of the site 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 Sequoia Analytical. Analytical results are presented in Table 1. The chain of custody document and laboratory analytical reports are attached.

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

Sincerely,

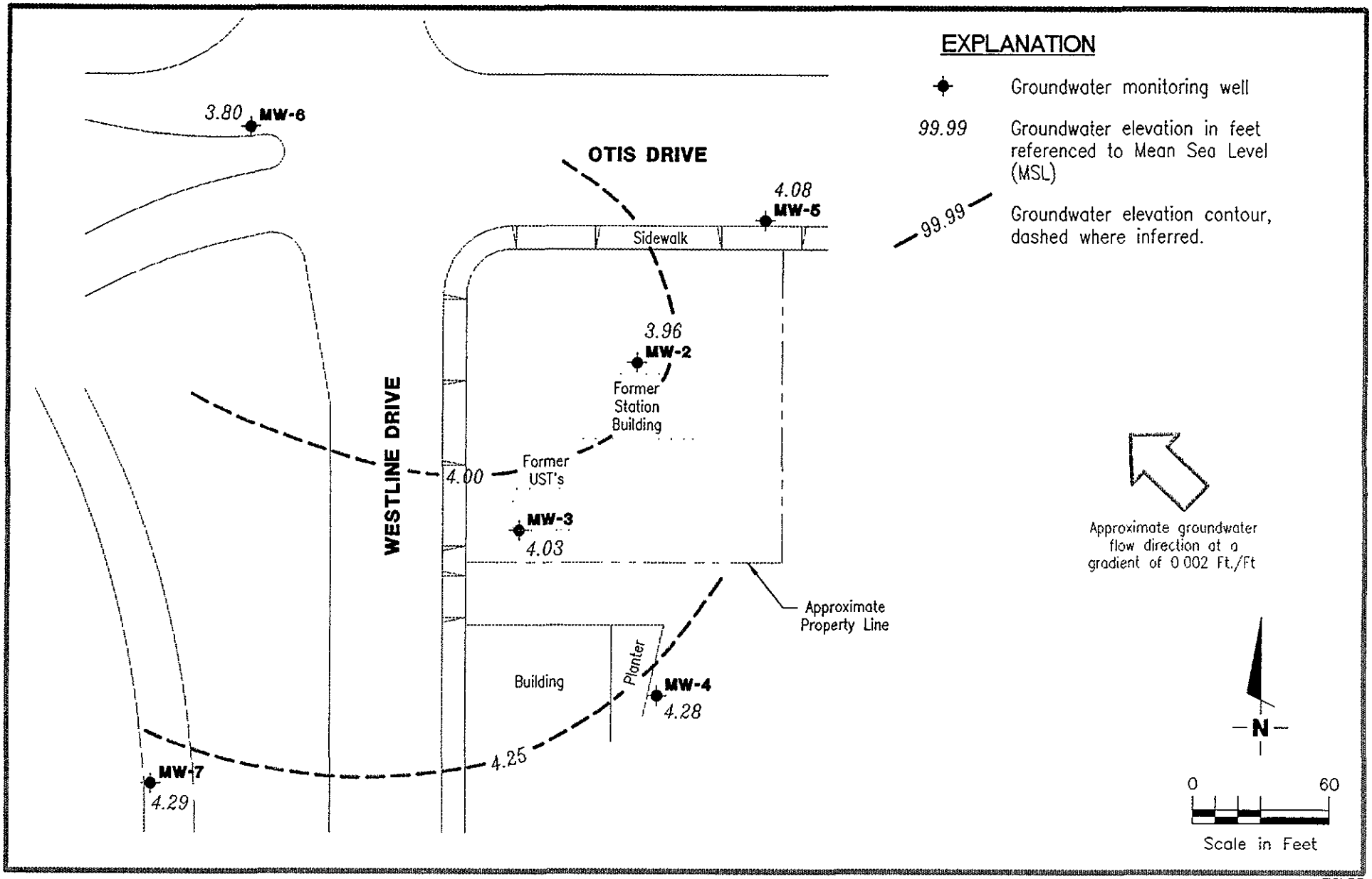
Deanna L. Harding
Project Coordinator

Penny L. Silzer
Senior Geologist, R.G. No. 5523

REGISTERED GEOLOGIST
Penny L. Silzer
No. 5523
STATE OF CALIFORNIA

DLH/PLS/dlh
6324.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. 9-0191
900 Otis Drive
Alameda, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
6324		September 3, 1996	

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-0191, 900 Otis Drive, Alameda, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	B	T	E	X	MTBE
						<———		ppb		———>
MW-2/										
9.17	2/8/96	2.75	6.42	—	94	ND	ND	ND	ND	—
	6/27/96	4.99	4.18	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	9/3/96	5.21	3.96	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
MW-3/										
7.11	2/8/96	1.36	5.75	—	460	26	ND	5.8	ND	—
	6/27/96	3.22	3.89	0	130[1]	<0.50	<0.50	<0.50	0.51	16
	9/3/96	3.08	4.03	0	160[2]	<0.50	<0.50	<0.50	<0.50	<2.5
MW-4/										
7.78	2/8/96	1.32	6.46	—	ND	ND	ND	ND	ND	—
	6/28/96	2.99	4.79	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	9/3/96	3.50	4.28	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
MW-5/										
7.37	2/8/96	0.75	6.62	—	ND	ND	ND	ND	ND	—
	6/27/96	2.66	4.71	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	9/3/96	3.29	4.08	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
MW-6/										
7.30	2/8/96	2.10	5.20	—	ND	ND	ND	ND	ND	—
	6/27/96	3.98	3.32	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	9/3/96	3.50	3.80	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
MW-7/										
9.58	2/8/96	3.24	6.34	—	ND	ND	ND	ND	ND	—
	6/27/96	5.07	4.51	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	9/3/96	5.29	4.29	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
Trip Blank	6/27/96	—	—	—	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	9/3/96	—	—	—	<50	<0.50	<0.50	<0.50	<0.50	<2.5

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-0191, 900 Otis Drive, 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
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-tertiary-butyl-ether
ppb = Parts per billion
ND = Not-Detected
--- = Not analyzed/Not applicable

ANALYTICAL METHODS:

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

NOTES:

Water level elevation data and laboratory analytical results prior to June 27, 1996, were compiled from Quarterly Monitoring Reports prepared for Chevron by Pacific Environmental Group.

* Product thickness was measured on and after June 27, 1996, with a MMC Flexi-Dip interface probe.

[1] Laboratory report indicates unidentified hydrocarbons C6-C12.
[2] Laboratory report indicates unidentified hydrocarbons <C8.

6324.TQM

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan 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 USA Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.

(5)

WELL SAMPLING FIELD DATA SHEET

SAMPLER Fiehic DATE 8-3-96

ADDRESS 900 Otis Drive JOB # 6324.85

CITY Alameda Calif SS# 9-0191

Well ID MW-2 Well Condition Okay

Well Location Description

Well Diameter 2 in Hydrocarbon Thickness 0

Total Depth 15 ft

Depth to Liquid 5.21 ft

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

# of casing Volume 3x 9.79 x 0.17 x(VF) 1.7 #Estimated purge Volume 50 gal.

Purge Equipment Suction Sampling Equipment Bailer

Did well dewater No If yes, Time ___ Volume

Starting Time 1030 Purging Flow Rate 1 gpm.

Sampling Time 1039

Time	pH	Conductivity	Temperature	Volume
1032	6.67	1900	21.6	2
1034	~~6.74~~ 6.54	1943	21.6	4
1036	6.60	1940	21.5	6
1039	6.58	1940	21.5	7

Weather Conditions Cloudy cool

Water Color: Clear Odor: None

Sediment Description Mem

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-2	3x40ml VOA	Y	HCl	STL	6015 BTXE MTBE

Comments

(5)

WELL SAMPLING FIELD DATA SHEET

SAMPLER Fiche DATE 8-3-96

ADDRESS 900 Chip's Drive JOB # 0324.85

CITY Alameda CA SS# 9-0191

Well ID MW-3 Well Condition okay

Well Location Description

Well Diameter 2" in Hydrocarbon Thickness 6

Total Depth 14 ft

Depth to Liquid 3.08 ft

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

# of casing Volume 3X 10.92 x 0.17 x(VF) 7.8 #Estimated purge Volume 5.6 gal.

Purge Equipment Suction Sampling Equipment Bailer

Did well dewater No If yes, Time ___ Volume

Starting Time 10:42 Purging Flow Rate 1 gpm.

Sampling Time

Time	pH	Conductivity	Temperature	Volume
10:44	6.08	5510	21.6	2
10:46	6.50	3870	22.2	4
10:48	6.50	3360	22.1	6
10:51	6.48	3370	22.1	7

Weather Conditions Cloudy cool

Water Color: Clear Odor: None

Sediment Description None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-3	3x40ml VOA	Y	HCl	STL	Gas BTXE MTBE

Comments

(5)

WELL SAMPLING FIELD DATA SHEET

SAMPLER Fiehic DATE 8-3-96

ADDRESS 900 Otis Drive JOB # 6324.85

CITY Alameda CA SS# 9-0191

Well ID MW-4 Well Condition dry

Well Location Description

Well Diameter 2 in Hydrocarbon Thickness 0

Total Depth 16 ft

Depth to Liquid 3.50 ft

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

# of casing Volume 3x 12.50 x 0.17 x(VF) 2.12 #Estimated purge Volume 6.4 gal.

Purge Equipment Suction Sampling Equipment Bailer

Did well dewater NC If yes, Time ___ Volume

Starting Time 10:14 Purging Flow Rate 1.1 gpm.

Sampling Time 1023

Time	pH	Conductivity	Temperature	Volume
10:16	6.56	2360	22.2	2.2
10:18	6.58	2360	22.0	4.4
10:20	6.58	2360	22.1	6.6
10:23	6.59	2350	22.0	7.0

Weather Conditions Cloudy cool

Water Color: Clear Odor: None

Sediment Description None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-4	3x40ml VOA	Y	HCl	STL	Gas BTXE MTBE

Comments

(5)

WELL SAMPLING FIELD DATA SHEET

SAMPLER: FI Clinic
DATE: 8-3-96

ADDRESS: 900 Otis Drive
JOB #: 6324.85

CITY: Alameda CA
SS#: 9-0191

Well ID: MW-5
Well Condition: Clay

Well Location Description:

Well Diameter: 2" in
Hydrocarbon Thickness: 0

Total Depth: 16 ft
Depth to Liquid: 3.29 ft

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

# of casing Volume: 3x 12.71 x 0.17 x(VF) 2:2 #Estimated purge Volume: 6.5 gal.

Purge Equipment: Suction
Sampling Equipment: Bailer

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

Starting Time: 9:59
Sampling Time: 1007

Purging Flow Rate: 1.1 gpm.

Time	pH	Conductivity	Temperature	Volume
1001	6.76	1048	23.6	2.2
1003	6.77	1000	22.8	4.4
1005	6.76	998	22.9	6.6
1007	6.76	1000	23.0	7.6

Weather Conditions: Cloudy Cool
Water Color: Clear
Odor: None
Sediment Description: None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-5	3x40ml VOA	Y	HCl	STLSQ	Gas BTXE MTBE

Comments:

(5)

WELL SAMPLING FIELD DATA SHEET

SAMPLER: FIC/mc | DATE: 8-3-96

ADDRESS: 900 Otis Drive | JOB #: 6324.85

CITY: Alameda Ca | SS#: 9-0191

Well ID: MW-6 | Well Condition: Okay

Well Location Description:

Well Diameter: 2" in | Hydrocarbon Thickness: 0

Total Depth: 17 ft

Depth to Liquid: 3.74

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

# of casing Volume: 3X . 13.26 x 0.17 x(VF) 2.3 #Estimated purge Volume: 6.8 gal.

Purge Equipment: Suction | Sampling Equipment: Bailer

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

Starting Time: 942 | Purging Flow Rate: 1.2 gpm.

Sampling Time: 950

Time	pH	Conductivity	Temperature	Volume
944	6.47	538	22.3	2.4
946	6.46	780	23.0	4.8
948	6.45	733	23.0	7.2
950	6.46	732	23.0	8.0

Weather Conditions: Cloudy cool

Water Color: Clear | Odor: N/a

Sediment Description: None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-6	3x40ml VOA	Y	HCl	STL	Gas BTEX MTBE

Comments:

(5)

WELL SAMPLING FIELD DATA SHEET

SAMPLER Fiehic DATE 8-3-96

ADDRESS 900 Otis Drive JOB # 6324.85

CITY Alameda CA SS# 9-0191

Well ID MW-7 Well Condition dry

Well Location Description

Well Diameter 2" in Hydrocarbon Thickness 0

Total Depth 14' ft

Depth to Liquid 5.29 ft

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

# of casing Volume 3x 8.71 x 0.17 x(VF) 1.5 #Estimated purge Volume 4.5 gal.

Purge Equipment Suction Sampling Equipment Bailer

Did well dewater No If yes, Time ___ Volume ___

Starting Time 9:31 Purging Flow Rate 1.5 gpm.

Sampling Time 9:37

Time	pH	Conductivity	Temperature	Volume
9:32	6.83	1250		1.5
9:33	6.63	1256	21.7	3.0
9:34	6.65	1386	21.6	4.5
9:37	6.65	1380	21.6	5.0

Weather Conditions Cloudy cool

Water Color: Clear Odor: None

Sediment Description None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-7	3x40ml VOA	Y	HCl	STL	Gas BTEX MTBE

Comments

Fax copy of Lab Report and COC to Chevron Contact. ENE — Chain of Custody

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

Chevron Facility Number: 9-0191
Facility Address: 900 Otis Drive . Alameda
Consultant Project Number: 6324.85
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): 842 9136
Laboratory Name: SEQ
Laboratory Release Number: 2097700
Samples Collected by (Name): F. Cline
Collection Date: 9-3-96
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)	Analyses To Be Performed: 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)	9609096	DO NOT BILL TB-LB ANALYSIS 42 Remarks
TB-LB	01	2	W	TB	—	HCL	Y	4									
MW-7	02	3		6	937			4									
MW-6	03				950			4									
MW-5	04				1007			4									
MW-4	05				1023			4									
MW-2	06				1039			4									
MW-3	07	↓	↓	↓	1051	↓	↓	4									

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GR	9-4-96	D. Harding	G-R	9/4/96 8:00
D. Harding	G-R	9/4/96 3:05		SEQ	9/4/96 3:05
	SEQ	9/4/96 4:04	Received For Laboratory By (Signature)		Date/Time 9/4/96 16:30

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

COC-3.DWG/03 01/HCH

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-0191, Alameda	Sampled: 09/03/96
6747 Sierra Court Suite G	Sample Descript: TB-LB	Received: 09/04/96
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 09/13/96
Attention: Deanna Harding	Lab Number: 9609096-01	Reported: 09/18/96

QC Batch Number: GC091396BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies
6747 Sierra Court Suite G
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0191, Alameda
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9609096-02

Sampled: 09/03/96
Received: 09/04/96

Analyzed: 09/13/96
Reported: 09/18/96

QC Batch Number: GC091396BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies
6747 Sierra Court Suite G
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0191, Alameda
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9609096-03

Sampled: 09/03/96
Received: 09/04/96

Analyzed: 09/13/96
Reported: 09/18/96

QC Batch Number: GC091396BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies
6747 Sierra Court Suite G
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0191, Alameda
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9609096-04

Sampled: 09/03/96
Received: 09/04/96

Analyzed: 09/13/96
Reported: 09/18/96

QC Batch Number: GC091396BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite G
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0191, Alameda
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9609096-05

Sampled: 09/03/96
Received: 09/04/96

Analyzed: 09/13/96
Reported: 09/18/96

QC Batch Number: GC091396BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite G
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0191, Alameda
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9609096-06

Sampled: 09/03/96
Received: 09/04/96

Analyzed: 09/13/96
Reported: 09/18/96

QC Batch Number: GC091396BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite G
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0191, Alameda
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9609096-07

Sampled: 09/03/96
Received: 09/04/96

Analyzed: 09/16/96
Reported: 09/18/96

QC Batch Number: GC091696BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**160**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Unidentified HC		**<C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	115

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-0191, Alameda
Matrix: Liquid
Work Order #: 9609096 -01, -02, -04-06
Reported: Sep 18, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC091396BTEX03A	GC091396BTEX03A	GC091396BTEX03A	GC091396BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9609152-03	9609152-03	9609152-03	9609152-03
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/13/96	9/13/96	9/13/96	9/13/96
Analyzed Date:	9/13/96	9/13/96	9/13/96	9/13/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
Result:	9.7	9.4	9.2	29
MS % Recovery:	97	94	92	97
Dup. Result:	9.8	9.4	9.2	29
MSD % Recov.:	98	94	92	97
RPD:	1.0	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK091396	BLK091396	BLK091396	BLK091396
Prepared Date:	9/13/96	9/13/96	9/13/96	9/13/96
Analyzed Date:	9/13/96	9/13/96	9/13/96	9/13/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Result:	9.1	8.6	8.2	26
LCS % Recov.:	91	86	82	87
MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-0191, Alameda
Matrix: Liquid
Work Order #: 9609096 -03

Reported: Sep 18, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC091396BTEX21A	GC091396BTEX21A	GC091396BTEX21A	GC091396BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	9609152-02	9609152-02	9609152-02	9609152-02
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/13/96	9/13/96	9/13/96	9/13/96
Analyzed Date:	9/13/96	9/13/96	9/13/96	9/13/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
Result:	9.5	9.2	9.0	27
MS % Recovery:	95	92	90	90
Dup. Result:	10	9.5	9.1	27
MSD % Recov.:	100	95	91	90
RPD:	5.1	3.2	1.1	0.0
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK091396	BLK091396	BLK091396	BLK091396
Prepared Date:	9/13/96	9/13/96	9/13/96	9/13/96
Analyzed Date:	9/13/96	9/13/96	9/13/96	9/13/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Result:	10	9.7	9.5	29
LCS % Recov.:	100	97	95	97
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

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6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-0191, Alameda
Matrix: Liquid
Work Order #: 9609096 -07

Reported: Sep 18, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC091696BTEX20A	GC091696BTEX20A	GC091696BTEX20A	GC091696BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	9609096-04	9609096-04	9609096-04	9609096-04
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/16/96	9/16/96	9/16/96	9/16/96
Analyzed Date:	9/16/96	9/16/96	9/16/96	9/16/96
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
Result:	10	8.4	8.1	25
MS % Recovery:	100	84	81	83
Dup. Result:	10	8.3	8.2	25
MSD % Recov.:	100	83	82	83
RPD:	0.0	1.2	1.2	0.0
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK091696	BLK091696	BLK091696	BLK091696
Prepared Date:	9/16/96	9/16/96	9/16/96	9/16/96
Analyzed Date:	9/16/96	9/16/96	9/16/96	9/16/96
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Result:	10	8.2	7.9	24
LCS % Recov.:	100	82	79	80
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

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