ENVIRONMENTAL
PROTECTION

97 FEB 28 PM 3:15

Chevron

February 27, 1997

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

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 Fourth Quarter Groundwater Monitoring report for 1996, prepared by our consultant Gettler-Ryan Inc., for the above noted site. Groundwater samples were analyzed for TPH-g, BTEX and MtBE constituents.

Only monitoring wells MW-2 and MW-3 were sampled and analyzed for the constituents, the other wells were measured for groundwater depth to determine the direction of flow. Well MW-2 was below method detection limits for all constituents, while MW-3 detected 4.3 ppb and 0.62 ppb of benzene and ethyl benzene constituents respectively. Toluene and Xylene constituents were below method detection limits in MW-3.

Groundwater depth varied from 2.66 to 4.95 feet below grade with a direction of flow to the northwest.

This appears to be a low risk site and Chevron believes that this site can be closed based on existing criteria, however, since a minimal impact of benzene was detected in MW-3 we will monitor for another quarter to see if this was an anomaly. After these results are received, they will be reviewed to determine if ~~closer~~ closure 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-San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

GETTLER-RYAN INC.

ENVIRONMENTAL PROTECTION
97 FEB 28 PM 3:16

January 7, 1997 Job #6324.80

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

Re: Fourth 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 December 3, 1996, field personnel were on-site to monitor six wells (MW-2 through MW-7) and sample two wells (MW-2 and MW-3) at the Former Chevron Service Station #9-0191 located at 900 Otis Drive in Alameda, California.

Static groundwater levels were measured on December 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 Inc. to provide environmental services to Chevron. Please call if you have any questions or comments regarding this report.

Sincerely,

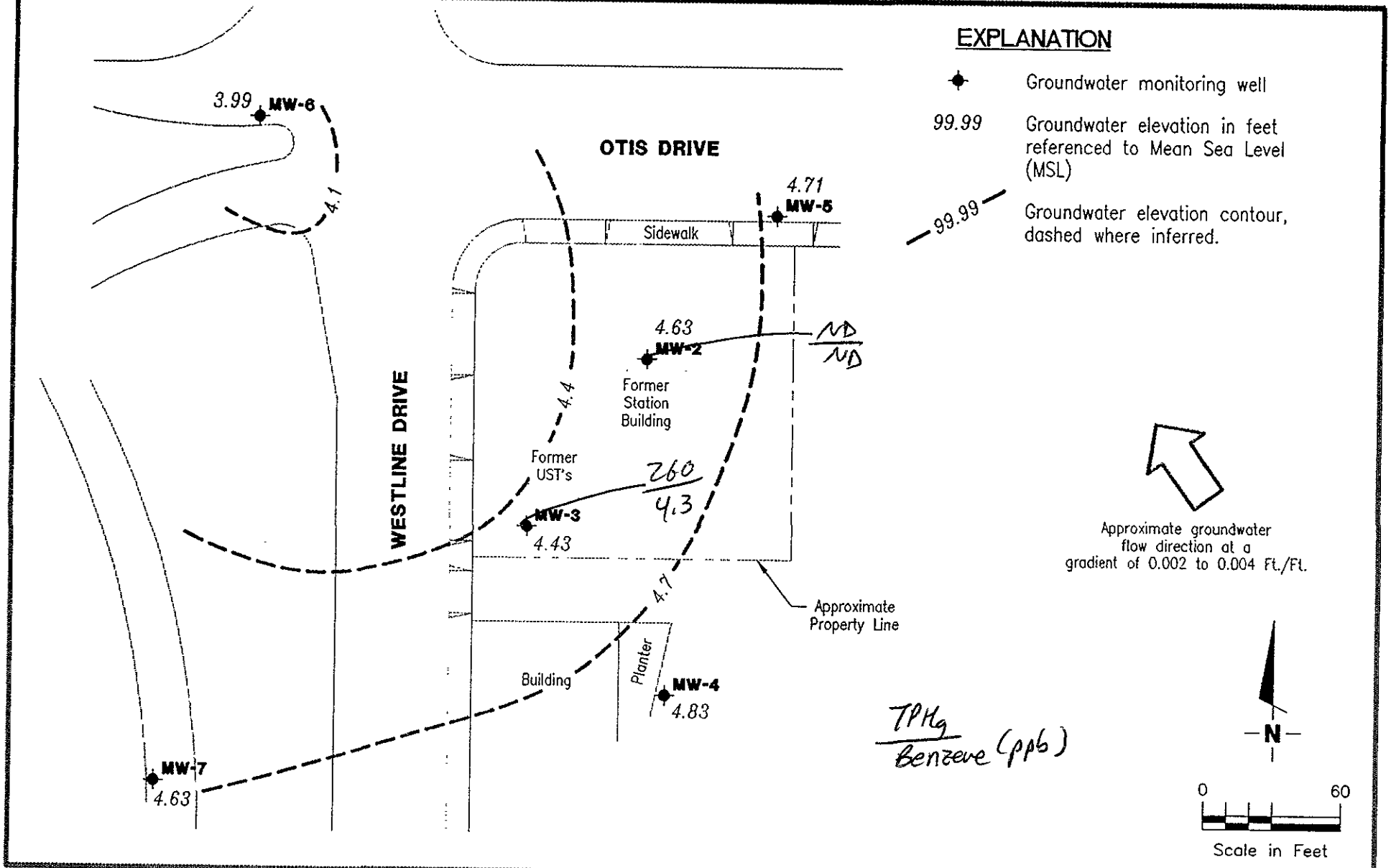
Deanna L. Harding
Project Coordinator

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	PLS	December 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
	12/3/96	**4.54**	**4.63**	**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
	12/3/96	**2.68**	**4.43**	**0**	**260[2]**	**4.3**	**<0.50**	**0.62**	**<0.50**	**50**
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
	12/3/96	**2.95**	**4.83**	**0**	—	—	—	—	—	—
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
	12/3/96	**2.66**	**4.71**	**0**	—	—	—	—	—	—
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
	12/3/96	**3.31**	**3.99**	**0**	—	—	—	—	—	—
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
	12/3/96	**4.95**	**4.63**	**0**	—	—	—	—	—	—
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
	12/3/96	**—**	**—**	**—**	**<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 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: F. Cline | DATE: 12-3-96

ADDRESS: 900 Otis Drive | JOB #: 6324.85

CITY: Alameda CA | SS#: 9-0191

Well ID: MW-2 | Well Condition: Okay

Well Location Description: 2"

Well Diameter: in | Hydrocarbon Thickness: 6

Total Depth: 15' ft

Depth to Liquid: 4.54 ft

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

# of casing Volume: 3X | 10.46 x 0.17 x(VF) 1.8 | #Estimated purge Volume: 6.4 gal.

Purge Equipment: Stack | Sampling Equipment: Bailer

Did well dewater: NC | If yes, Time: ___ | Volume:

Starting Time: 11:07 | Purging Flow Rate: 1 gpm.

Sampling Time: 14:15

Time	pH	Conductivity	Temperature	Volume
1409	7.56	608	18.5	2
1411	7.43	699	19.0	4
1413	7.45	695 ✓	19.7 ✓	6 ✓
14.15	7.43 ✓	699	19.4	7

Weather Conditions: Cloudy Cool

Water Color: Clear | Odor: None

Sediment Description: None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-2	3x40-mlVOA	Y	HCl	STL	GRO BTXE MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: F. Cline | DATE: 12-3-96

ADDRESS: 900 Otis Drive | JOB #: 6324

CITY: Alameda CA | SS#: 9-0191

Well ID: MW-3 | Well Condition: okay

Well Location Description:

Well Diameter: 2" in | Hydrocarbon Thickness: 0

Total Depth: 14' ft

Depth to Liquid: 2.68 ft

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

# of casing Volume: 3x 11.32 x 0.17 x(VF) 1.9 #Estimated purge Volume: 5.18 gal.

Purge Equipment: Stack | Sampling Equipment: Bailer

Did well dewater: | If yes, Time: | Volume:

Starting Time: 14:25 | Purging Flow Rate: 1 gpm.

Sampling Time: 1433

Time	pH	Conductivity	Temperature	Volume
1427	6.98	767	16.3	2
1429	6.81	675	15.8	4
1431	7.00	680	15.8	6
1433	6.98 ✓	685 ✓	15.8 ✓	7

Weather Conditions: Cloudy cool

Water Color: Clear | Odor: None

Sediment Description: N/A?

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-3	3x40ml VOA	Y	HCl	SEQ	6015/8021 MTBE

Comments:

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: Service order # ~~21-97706~~ 9033187
Samples Collected by (Name): F. Cline
Collection Date: 12-3-96
Signature:

96122173

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 (8016) (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)					Remarks
TB-LB	1 A,B	2	W	TB	—	HCl	Y	X												
MW-3	2 A-C	3		G	1433			X												
MW-2	3	3		G	1415 MW-2			X												

DO NOT BILL TB-LB ANALYSIS

Analyses To Be Performed

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GK	12-4-96	D. Harding	G-R	12/4/96
D. Harding	G-R	12/4/96	Stacie Tan	SEQ	12-4-96 1:55 pm
Stacie Tan	SEQ	12/4/96	Received For Laboratory By (Signature)		Date/Time
			S Kuan		12-4-96

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

DEC - 3 12

COC-3.CHG\03 91/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

DEC 24 [illegible]

GETTLER-RYAN INC

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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0191, Alameda
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612173-01

Sampled: 12/03/96
Received: 12/04/96

Analyzed: 12/06/96
Reported: 12/13/96

QC Batch Number: GC120696BTEX18A
Instrument ID: GCHP18

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	101

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-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612173-02

Sampled: 12/03/96
Received: 12/04/96

Analyzed: 12/06/96
Reported: 12/13/96

QC Batch Number: GC120696BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**260**
Methyl t-Butyl Ether	**2.5**	**50**
Benzene	**0.50**	**4.3**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**0.62**
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Gas & Unidentified HC		**<C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	179 Q

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	Client Proj. ID: Chevron 9-0191, Alameda	Sampled: 12/03/96
6747 Sierra Court Suite G	Sample Descript: MW-2	Received: 12/04/96
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/09/96
Attention: Deanna Harding	Lab Number: 9612173-03	Reported: 12/13/96

QC Batch Number: GC120996BTEX07A
Instrument ID: GCHP07

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	105

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
Lab Proj. ID: 9612173

Received: 12/04/96
Reported: 12/13/96

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 7 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

#Q - Surrogate coelution was confirmed.

SEQUOIA ANALYTICAL

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, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-0191, Alameda
Matrix: Liquid
Work Order #: 9612173 -01, 02
Reported: Dec 17, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC120696BTEX18A	GC120696BTEX18A	GC120696BTEX18A	GC120696BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9611F1403	9611F1403	9611F1403	9611F1403
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/6/96	12/6/96	12/6/96	12/6/96
Analyzed Date:	12/6/96	12/6/96	12/6/96	12/6/96
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	9.8	9.7	28
MS % Recovery:	96	98	97	93
Dup. Result:	9.9	10	10	29
MSD % Recov.:	99	100	100	97
RPD:	3.1	2.0	3.0	3.5
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK120696	BLK120696	BLK120696	BLK120696
Prepared Date:	12/6/96	12/6/96	12/6/96	12/6/96
Analyzed Date:	12/6/96	12/6/96	12/6/96	12/6/96
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.8	10	9.9	28
LCS % Recov.:	98	100	99	93

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

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, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-0191, Alameda
Matrix: Liquid
Work Order #: 9612173-03
Reported: Dec 17, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC120996BTEX07A	GC120996BTEX07A	GC120996BTEX07A	GC120996BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	961218002	961218002	961218002	961218002
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/9/96	12/9/96	12/9/96	12/9/96
Analyzed Date:	12/9/96	12/9/96	12/9/96	12/9/96
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	9.7	9.7	29
MS % Recovery:	100	97	97	97
Dup. Result:	12	11	11	33
MSD % Recov.:	120	110	110	110
RPD:	18	13	13	13
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK120996	BLK120996	BLK120996	BLK120996
Prepared Date:	12/9/96	12/9/96	12/9/96	12/9/96
Analyzed Date:	12/9/96	12/9/96	12/9/96	12/9/96
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	31
LCS % Recov.:	100	100	100	103
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