Chevron

Chevron Products Company
6001 Bollinger Canyon Rd, Bldg L
PO Box 5004
San Ramon, CA 94583-0804

Site Assessment & Remediation
Phone (510) 842-9500
Fax (510) 842-8370

February 7, 1997

Ms. Madhulla Logan
Alameda County Dept. of Envrio. Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Chevron Service Station #9-8341
3530 Macarthur Blvd, Oakland, CA

Dear Ms. Logan,

Please find attached the quarterly groundwater monitoring report prepared by Gettler-Ryan dated December 5th, 1996. This report describes the results of the sampling event performed on November 1st, 1996.

The groundwater samples collected by Gettler-Ryan were analyzed for the presence of TPHG and BTEX constituents. The results obtained during this sampling event were consistent with historical data seen from previous sampling at this site.

Chevron will continue with the current monitoring schedule (quarterly) in place for this site. As of January 1st, 1997 I now oversee the monitoring and sampling activities associated with this site. If you have any questions or comments regarding this site please call. I can be reached by phone at (510) 842-9449 or by fax at (510) 842-8370.

Sincerely,

Tammy L Hodge
Groundwater Coordinator
Site Assessment and Remediation

cc:
* Mr. Richard Hiett, RWQCB-Bay Region
2101 Webster St. Suite 500, Oakland CA 94612

* Ms. Violet Cargill, Chevron Property Development
* Chevron File # 98341

GETTLER-RYAN INC.

December 5, 1996 Job #6346.80

Ms. Tammy Hodge
Chevron Products Company
P.O. Box 5004
San Ramon, CA 94583

Re: Fourth Quarter Groundwater Monitoring & Sampling Report
Chevron Service Station #9-8341
3530 MacArthur Boulevard
Oakland, California

Dear Ms. Hodge:

This report documents the quarterly groundwater sampling event performed by Gettler-Ryan Inc. (G-R). On November 1, 1996, field personnel were on-site to monitor and sample three wells (MW-1, MW-2, and MW-3) at Chevron Service Station #9-8341 located at 3530 MacArthur Boulevard in Oakland, California.

Static groundwater levels were measured on November 1, 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,

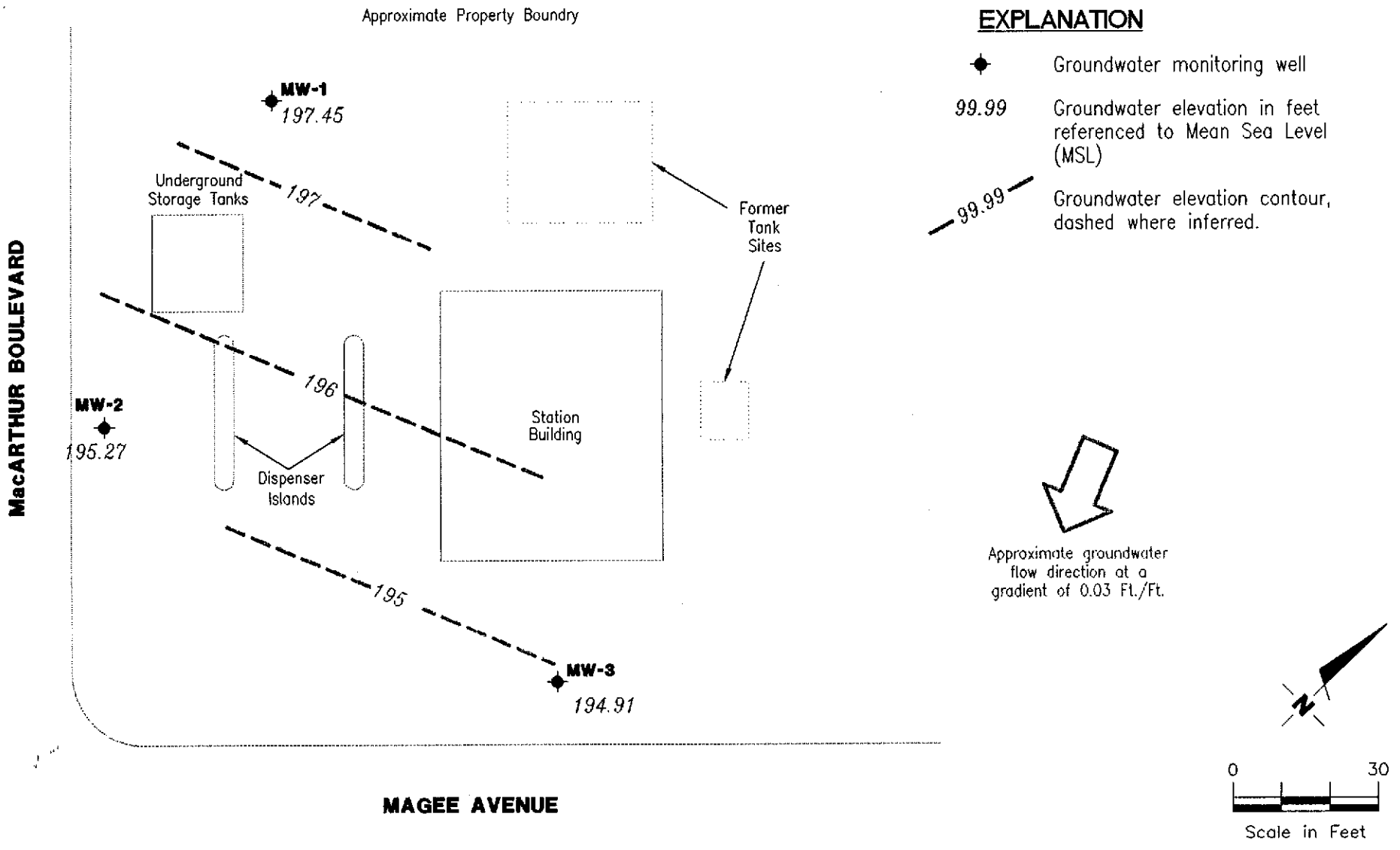
Deanna L. Harding
Project Coordinator

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

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

DLH/PLS/dlh
6346.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
Chevron Service Station No. 9-8341
3530 MacArthur Boulevard
Oakland, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
6346		November 1, 1996	

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-8341, 3530 MacArthur Blvd., Oakland, California

Well ID TOC	Date Sampled	Depth to Water (ft)	GWE (msl)	Product Thickness (ft)	TPH(G)	B	T	E	X	MTBE
					<----------ppb---------->					
MW-1										
202.47	04/04/96	3.82	198.65	---	<50	<0.50	<0.50	<0.50	<0.50	ND
	11/01/96	**5.02**	**197.45**	**0**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
MW-2										
198.88	04/04/96	2.81	196.07	---	<50	<0.50	<0.50	<0.50	<0.50	6100
	11/01/96	**3.61**	**195.27**	**0**	**<500**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**2600**
MW-3										
199.10	04/04/96	3.88	195.22	---	<50	<0.50	<0.50	<0.50	<0.50	ND
	11/01/96	**4.19**	**194.91**	**0**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
Trip Blank	**11/01/96**	**---**	**---**	**---**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**

Explanation:

TOC = Top of casing elevation
(ft) = feet
GWE = Groundwater elevation
(msl) = Measurement referenced relative to mean sea level
TPH(G) = Total petroleum hydrocarbons as gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-tertiary-butyl ether
--- = Not analyzed, not measured
ND = Not-detected at or above laboratory detection limit

Notes:

Water level elevation data and laboratory analytical results prior to November 1, 1996, were provided by Chevron Products Company.

6346.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: Guadalupe Sanchez | DATE: 11-1-96

ADDRESS: 3530 MacArthur Blvd | JOB #: 6346.81

CITY: Oakland | SS#: 9-8341

Well ID: MW-1 | Well Condition: ok

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness: ⌀

Total Depth: 27.14 ft

Depth to Liquid: 5.02 ft

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

3 # of casing Volume: 22.12 x 1.17 x(VF) 3.8 #Estimated purge Volume: 11.4 gal.

Purge Equipment: Stack Pump | Sampling Equipment: D. Bailey

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

Starting Time: 1554 | Purging Flow Rate: 2 gpm.

Sampling Time: 1604

Time	pH	Conductivity	Temperature	Volume
1556	7.40	618	20.2	4 gal
1558	7.31	623	20.5	8
1600	7.29	625	20.6	12
1604	7.29	625	20.6	13 ↓

Weather Conditions: sunny

Water Color: clear | Odor: none

Sediment Description: mod

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-1	3x40ml	Y	HCl	SEQ	Gas BTEX & MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER	Guadalupe Sanchez	DATE	11-1-96
ADDRESS	3530 MacArthur Blvd	JOB #	6546.81
CITY	Oakland	SS#	9-8341

Well ID	MW-2	Well Condition	OK
Well Location Description			
Well Diameter	2 in	Hydrocarbon Thickness	⌀
Total Depth	33.20 ft		
Depth to Liquid	3.61 ft		

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

3 # of casing Volume: 29.59 x 1.17 x(VF) 5.0 #Estimated [1] purge Volume: 150 gal.

Purge Equipment	Stack Pump	Sampling Equipment	D. Bailey
Did well dewater	NO	If yes, Time ___	Volume

Starting Time	1620	Purging Flow Rate	2.5 gpm.
Sampling Time	1630		

Time	pH	Conductivity	Temperature	Volume
1622	7.17	780	21.3	5 gal
1624	7.24	791	21.2	10
1626	7.23	794	20.8	15
1630	7.23	794	20.7	16

Weather Conditions	Sunny		
Water Color:	clear	Odor:	none
Sediment Description	none		

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-2	3x40ml	Y	HCl	SEQ	Gas BTEX w/MTBE

Comments: Well box ring is not attached to the skirt box - top of box is completely loose - not attached to concrete.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: Guadalupe Sanchez | DATE: 11-1-96

ADDRESS: 3530 MacArthur Blvd | JOB #: 6346.81

CITY: Oakland | SS#: 9-8341

Well ID: MW-3 | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness:

Total Depth: 32.84 ft

Depth to Liquid: 4.19 ft

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

3 # of casing Volume: 28.65 x 1.17 x(VF) 4.9 #Estimated purge Volume: 17.7 gal.

Purge Equipment: Stack Pump | Sampling Equipment: D. Bailey

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

Starting Time: 1527 | Purging Flow Rate: 2.5 gpm.

Sampling Time: 1538

Time	pH	Conductivity	Temperature	Volume
1529	7.48	656	21.5	5 gal
1531	7.39	631	21.8	10
1533	7.37	611	21.7	15
1538	7.37	610	21.7	16

Weather Conditions: sunny

Water Color: light brown | Odor: none

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-3	3x40ml	Y	HCl	SEQ	GAS BTEX & MTBE

Comments:

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

Chain-of-Custody

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

Chevron Facility Number: 9-8341
Facility Address: 3530 MacArthur Blvd Oakland
Consultant Project Number: 6346-85
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): Tamay Hodge
(Phone): (510) 842-9449
Laboratory Name: Sequoia
Laboratory Release Number: 90228511
Samples Collected by (Name): Guadalupe Sandoval
Collection Date: 11-1-96
Signature: Guadalupe Sandoval

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)	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)	9611081	Remarks
TB-LB	1	2	W	G	—	HCl	Yes	X									DO NOT BILL TB-LB ANALYSIS
MW-3	2	3	↓	↓	1533	↓	↓	↓									
MW-1	3	↓	↓	↓	1604	↓	↓	↓									
MW-2	4	↓	↓	↓	1630	↓	↓	↓									

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Guadalupe Sandoval	G/R	11-1-96 1700	R. Harden	G-R	11/4/96 8:30
R. Harden	G-R	11/4/96 8:00 9:30		SEQ	11/4 9:30
	SEQ	11/4 1100	Received For Laboratory By (Signature)		11/04 11:00

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

COC-3.DWG/03 81/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 9-8341, Oakland	Sampled: 11/01/96
6747 Sierra Court Suite G	Sample Descript: TB-LB	Received: 11/04/96
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 11/05/96
Attention: Deanna Harding	Lab Number: 9611081-01	Reported: 11/08/96

QC Batch Number: GC110596BTEX03A
Instrument ID: GCHP3

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	81

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
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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-8341, Oakland	Sampled: 11/01/96
6747 Sierra Court Suite G	Sample Descript: MW-1	Received: 11/04/96
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 11/05/96
Attention: Deanna Harding	Lab Number: 9611081-03	Reported: 11/08/96

QC Batch Number: GC110596BTEX03A
Instrument ID: GCHP3

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	84

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	Client Proj. ID: Chevron 9-8341, Oakland	Sampled: 11/01/96
6747 Sierra Court Suite G	Sample Descript: MW-3	Received: 11/04/96
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 11/05/96
Attention: Deanna Harding	Lab Number: 9611081-02	Reported: 11/08/96

QC Batch Number: GC110596BTEX03A
Instrument ID: GCHP3

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	85

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
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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-8341, Oakland	Sampled: 11/01/96
6747 Sierra Court Suite G	Sample Descript: MW-2	Received: 11/04/96
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 11/06/96
Attention: Deanna Harding	Lab Number: 9611081-04	Reported: 11/08/96

QC Batch Number: GC110696BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	N.D.
Methyl t-Butyl Ether	**25**	**2600**
Benzene	5.0	N.D.
Toluene	5.0	N.D.
Ethyl Benzene	5.0	N.D.
Xylenes (Total)	5.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	112

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 Project ID:	Chevron 9-8341, Oakland	
6747 Sierra Court, Ste J	Matrix:	Liquid	
Dublin, CA 94568			
Attention: Deanna Harding	Work Order #:	9611081 -01-03	Reported: Nov 18, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC110596BTEX03A	GC110596BTEX03A	GC110596BTEX03A	GC110596BTEX03A
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 #:	961105201	961105201	961105201	961105201
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/5/96	11/5/96	11/5/96	11/5/96
Analyzed Date:	11/5/96	11/5/96	11/5/96	11/5/96
Instrument I.D.#:	GCHP03	GCHP03	GCHP03	GCHP03
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	9.3	9.1	25
MS % Recovery:	110	93	91	83
Dup. Result:	11	9.5	9.2	27
MSD % Recov.:	110	95	92	90
RPD:	0.0	2.1	1.1	7.7
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK110596	BLK110596	BLK110596	BLK110596
Prepared Date:	11/5/96	11/5/96	11/5/96	11/5/96
Analyzed Date:	11/5/96	11/5/96	11/5/96	11/5/96
Instrument I.D.#:	GCHP03	GCHP03	GCHP03	GCHP03
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	8.6	8.2	26
LCS % Recov.:	100	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

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Project ID:	Chevron 9-8341, Oakland	
6747 Sierra Court, Ste J	Matrix:	Liquid	
Dublin, CA 94568			
Attention: Deanna Harding	Work Order #:	9611081-04	Reported: Nov 18, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC110696BTEX17A	GC110696BTEX17A	GC110696BTEX17A	GC110696BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	Y. Arteaga	Y. Arteaga	Y. Arteaga	Y. Arteaga
MS/MSD #:	961105902	961105902	961105902	961105902
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/6/96	11/6/96	11/6/96	11/6/96
Analyzed Date:	11/6/96	11/6/96	11/6/96	11/6/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	9.7	29
MS % Recovery:	100	100	97	97
Dup. Result:	4.5	4.5	4.4	13
MSD % Recov.:	45	45	44	43
RPD:	76	76	75	76
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK110696	BLK110696	BLK110696	BLK110696
Prepared Date:	11/6/96	11/6/96	11/6/96	11/6/96
Analyzed Date:	11/6/96	11/6/96	11/6/96	11/6/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	9.8	9.8	29
LCS % Recov.:	100	98	98	97

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 Suite G
Dublin, CA 94568
Attention: Deanna Harding

Client Proj. ID: Chevron 9-8341, Oakland

Lab Proj. ID: 9611081

Received: 11/04/96

Reported: 11/08/96

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 8 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPGBMW: Sample 9611081-04 was diluted 10-fold.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager