STID 1042

ENVIRONMENTAL PROTECTION
97 SEP -4 PM 4:01

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

September 2, 1997

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

10m! Is this your site? MJ.

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

Dear Ms. Logan,

Please find attached the "Third Quarter Groundwater Monitoring & Sampling Report" dated August 20th, 1997. This report was prepared by Gettler-Ryan to provide the results obtained from the sampling event which took place on July 17th, 1997.

The results obtained during this sampling event were consistent with historical data seen for this site. TPHG and Benzene were non-detect on all wells with MTBE detect only on MW-2.

Chevron will continue with the current sampling schedule (quarterly) in place for this site. If you have any questions, concerns or require any additional information 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. Bette Owen, Chevron Property Development
* Chevron File 9-8341

GETTLER-RYAN INC.

August 20, 1997 Job #6346.80

Ms. Tammy Hodge
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583

Re: Third 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 July 17, 1997, 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 July 17, 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 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,

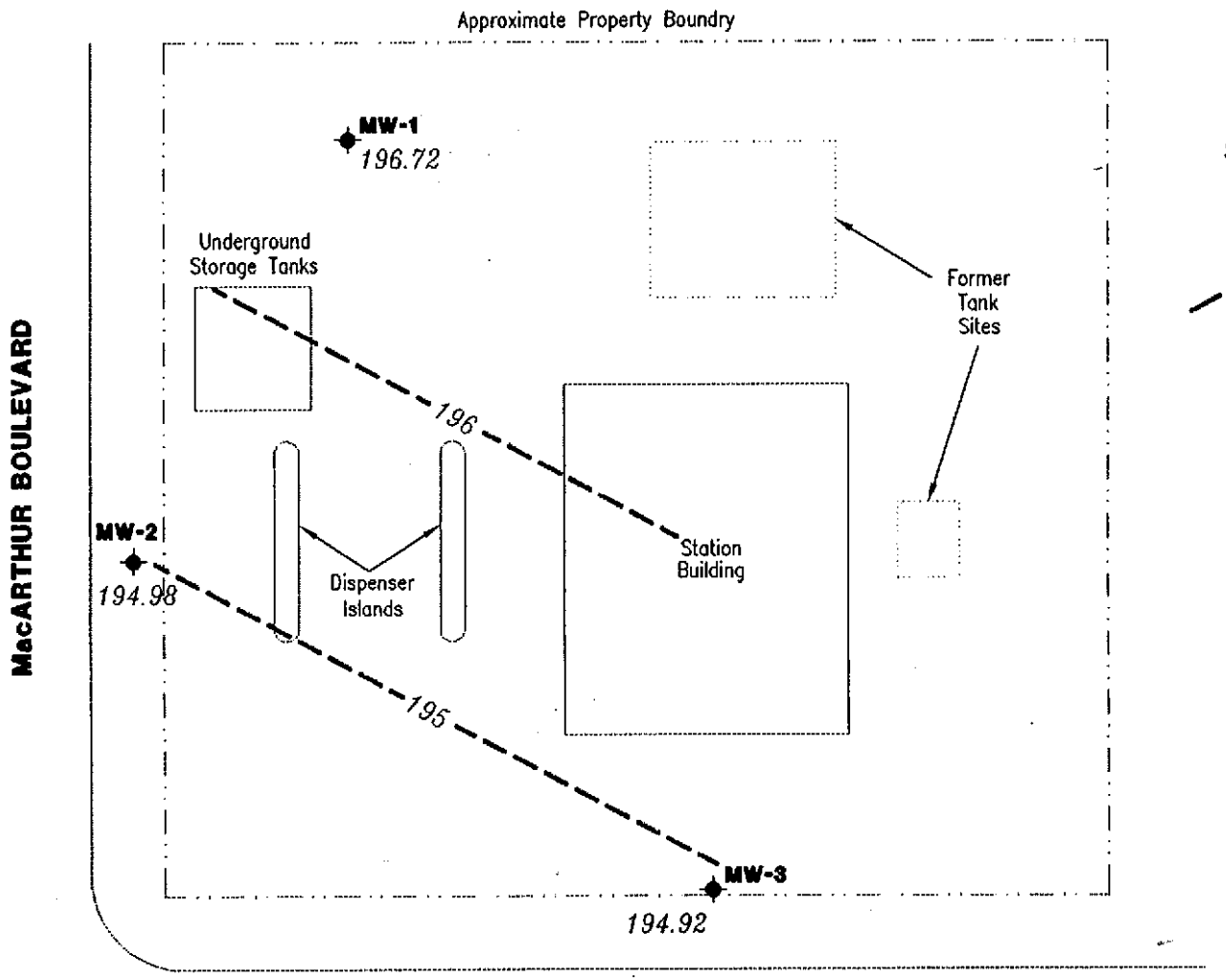
Deanna L. Harding
Project Coordinator

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

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

DLH/SJC/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



EXPLANATION

- Groundwater monitoring well
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 — Groundwater elevation contour, dashed where inferred.

Approximate groundwater flow direction at a gradient of 0.02 Ft./Ft.

N

0 30

Scale in Feet

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		July 17, 1997	

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	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/06/97	2.75	199.72	0.00	<50	<0.50	<0.50	<0.50	<0.50	14
	04/14/97	4.76	197.71	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/17/97	**5.75**	**196.72**	**0.00**	**<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	6,100
	11/01/96	3.61	195.27	0.00	<500	<5.0	<5.0	<5.0	<5.0	2,600
	01/06/97	2.91	195.97	0.00	<2,000	31	<20	<20	<20	4,000
	04/14/97	3.45	195.43	0.00	<2,000	<20	<20	<20	<20	5,100/5,800[1]
	07/17/97	**3.90**	**194.98**	**0.00**	**<500**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**2,300/2,900[1]**
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	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/06/97	3.81	195.29	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	04/14/97	4.17	194.93	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/17/97	**4.18**	**194.92**	**0.00**	**<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
	01/06/97	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	04/14/97	—	—	—	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/17/97	**---**	**---**	**---**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**

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

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
ppb = Parts per billion
— = 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.

[1] MTBE by EPA Method 8260.

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: F. Cline — DATE: 7-17-97

ADDRESS: 3330 MacArthur — JOB #: 6346.85

CITY: Oakland CA — SS#: 9-8341

Well ID: MW-1 — Well Condition: okay

Well Location Description:

Well Diameter: 2" in — Hydrocarbon Thickness: 0

Total Depth: 27.14 ft

Depth to Liquid: 5.75 ft

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

# of casing Volume: 3x 21.39 x 0.17 x (VF) 3.6 — #Estimated purge Volume: 10.9 gal.

Purge Equipment: Stack — Sampling Equipment: DiBailer

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

Starting Time: 1803

Sampling Time: 1811

Purging Flow Rate: 1.8 gpm

Time	pH	Conductivity	Temperature	Volume
1805	7.40	159	21.1	3.6
1807	7.39	157	20.9	7.2
1809	7.41	154	20.2	10.8
1811	7.40	155	20.3	11.0

Weather Conditions: Clear warm

Water Color: clear

Odor: None

Sediment Description: No

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-1	3x40ml VOA	Y	HCl	SEQ	602 BTXE MTBE

Comments:

(2)

WELL SAMPLING FIELD DATA SHEET

SAMPLER: F. Cline | DATE: 7-17-97

ADDRESS: 3330 MacArthur | JOB #: 6346.85

CITY: Oakland CA | SS#: 9-8341

Well ID: MW-2 | Well Condition: okay

Well Location Description:

Well Diameter: 2" in | Hydrocarbon Thickness: 0

Total Depth: 33.20 ft

Depth to Liquid: 3.90 ft

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

# of casing Volume: 3x 29.30 x 0.17 x(VF) 4.9 = #Estimated purge Volume 14.9 gal.

Purge Equipment: Stack | Sampling Equipment: Disposable Bailer

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

Starting Time: 18:15 | Purging Flow Rate: 1.7 gpm.

Sampling Time: 18:28

Time	pH	Conductivity	Temperature	Volume
18:18	7.24	178	22.7	5.1
18:22	7.27	180	21.9	10.2
18:24	7.29	184	21.8	15.3
18:26	7.28	182	21.6	16.6

Weather Conditions: Clear warm

Water Color: Clear | Odor: Mild

Sediment Description: None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-2	3x40ml VOA	Y	HCl	SBC	602 BTXE MTBE

Comments:

(2)

WELL SAMPLING FIELD DATA SHEET

SAMPLER F.C Line DATE 7-17-97

ADDRESS 3330 MacArthur JOB # 6346.85

CITY Oakland CA SS# 9-8341

Well ID MW-3 Well Condition okay

Well Location Description

Well Diameter 2" in Hydrocarbon Thickness 0

Total Depth 32.84 ft

Depth to Liquid 4.18 ft

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

# of casing Volume 3x 28.66 x 0.17 x(VF) 4.8 #Estimated purge Volume 20 gal.

Purge Equipment Stack Sampling Equipment DiBailer

Did well dewater ____ If yes, Time ____ Volume ____

Starting Time 17:46 Purging Flow Rate 1.6 gpm.

Sampling Time ____

Time	pH	Conductivity	Temperature	Volume
17:49	7.37	162	23.0	4.8
17:52	7.32	156	21.6	9.6
17:55	7.40	154	21.3	14.4
17:58	7.38	155	21.4	19.0

Weather Conditions Clear Warm Breeze

Water Color: Clear Odor: Non

Sediment Description N/a

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-3	3x40ml VOA	Y	HCl	SEQ	602 BTXE MTBE

Comments

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

Chain-of-Custody-Recor

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, Oakland, CA
Consultant Project Number 6346
Consultant Name Gettler-Ryan
Address 6747 Sierra Ct, Ste J, Dublin 94568
Project Contact (Name) Deanna Harding
(Phone) 551-7555 (Fax Number) 551-7888

Chevron Contact (Name) Ms. Tammy Hodge
(Phone) (510) 842-9449
Laboratory Name SEQUOIA Service Code: ZZ02790
Laboratory Service Order # 9022851
Samples Collected by (Name) F. Clint
Collection Date 7-17-97
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)	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)	Confirm MTBE by 8260 (all wells)				Remarks
TB-LB	1	2	W	TB	—	ice	Y	X								X				DO NOT BILL TB-LB ANALYSIS 9707A12
MW-3	2	3		G	1238			X								X				
MW-1	3	3			1811			X								X				
MW-2	4	3			1826			X								X				

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	G-R Inc.	7/18/97/11:50		G-R Inc.	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 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
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9707A12-01

Sampled: 07/17/97
Received: 07/19/97

Analyzed: 07/22/97
Reported: 08/04/97

QC Batch Number: GC072297BTEX02A
Instrument ID: GCHP02

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, (650) 364-9600, FAX (650) 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: 07/17/97
6747 Sierra Court Suite G	Sample Descript: MW-1	Received: 07/19/97
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 07/22/97
Attention: Deanna Harding	Lab Number: 9707A12-03	Reported: 08/04/97

QC Batch Number: GC072297BTEX02A
Instrument ID: GCHP02

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

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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: 07/17/97
6747 Sierra Court Suite G	Sample Descript: MW-2	Received: 07/19/97
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 07/23/97
Attention: Deanna Harding	Lab Number: 9707A12-04	Reported: 08/04/97

QC Batch Number: GC072397BTEX21A
Instrument ID: GCHP21

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**	**2300**
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	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

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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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
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9707A12-04

Sampled: 07/17/97
Received: 07/19/97

Analyzed: 08/04/97
Reported: 08/04/97

QC Batch Number: MS080497MTBEH6A
Instrument ID: H6

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	33	2900

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	98

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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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: 07/17/97
6747 Sierra Court Suite G	Sample Descript: MW-3	Received: 07/19/97
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 07/22/97
Attention: Deanna Harding	Lab Number: 9707A12-02	Reported: 08/04/97

QC Batch Number: GC072297BTEX02A
Instrument ID: GCHP02

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

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

Client Project ID: Chevron 9-8341, Oakland
Matrix: Liquid
Work Order #: 9707A12 -04
Reported: Aug 7, 1997

QUALITY CONTROL DATA REPORT

Analyte:	MTBE
QC Batch#:	MS080497MTBEH6A
Analy. Method:	EPA 8260
Prep. Method:	N.A.
Analyst:	L. Duong
MS/MSD #:	9707B9708
Sample Conc.:	7.2
Prepared Date:	-
Analyzed Date:	8/4/97
Instrument I.D.#:	H6
Conc. Spiked:	50 µg/L
Result:	62
MS % Recovery:	110
Dup. Result:	50
MSD % Recov.:	86
RPD:	21
RPD Limit:	0-25

LCS #:	VMB080497
Prepared Date:	8/4/97
Analyzed Date:	8/4/97
Instrument I.D.#:	H6
Conc. Spiked:	50 µg/L
LCS Result:	55
LCS % Recov.:	110

MS/MSD	60-140
LCS	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
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-8341, Oakland
Matrix: Liquid
Work Order #: 9707A12-01-03

Reported: Aug 7, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC072297BTEX02A	GC072297BTEX02A	GC072297BTEX02A	GC072297BTEX02A	GC072297BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	970795301	970795301	970795301	970795301	970795301
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/22/97	7/22/97	7/22/97	7/22/97	7/22/97
Analyzed Date:	7/22/97	7/22/97	7/22/97	7/22/97	7/22/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.2	8.9	9.0	27	61
MS % Recovery:	92	89	90	90	102
Dup. Result:	9.4	9.1	9.2	27	62
MSD % Recov.:	94	91	92	90	103
RPD:	2.2	2.2	2.2	0.0	1.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK072297	BLK072297	BLK072297	BLK072297	BLK072297
Prepared Date:	7/22/97	7/22/97	7/22/97	7/22/97	7/22/97
Analyzed Date:	7/22/97	7/22/97	7/22/97	7/22/97	7/22/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.0	8.5	8.7	26	56
LCS % Recov.:	90	85	87	87	93
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

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, (650) 364-9600, FAX (650) 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 9-8341, Oakland
Matrix: Liquid
Work Order #: 9707A12-04

Reported: Aug 7, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC072397BTEX21A	GC072397BTEX21A	GC072397BTEX21A	GC072397BTEX21A	GC072397BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9707A1203	9707A1203	9707A1203	9707A1203	9707A1203
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/23/97	7/23/97	7/23/97	7/23/97	7/23/97
Analyzed Date:	7/23/97	7/23/97	7/23/97	7/23/97	7/23/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.9	9.9	9.9	29	53
MS % Recovery:	99	99	99	97	88
Dup. Result:	10	10	10	30	53
MSD % Recov.:	100	100	100	100	88
RPD:	1.0	1.0	1.0	3.4	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK072397	BLK072397	BLK072397	BLK072397	BLK072397
Prepared Date:	7/23/97	7/23/97	7/23/97	7/23/97	7/23/97
Analyzed Date:	7/23/97	7/23/97	7/23/97	7/23/97	7/23/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	9.8	29	64
LCS % Recov.:	100	100	98	97	107
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

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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 9-8341, Oakland

Lab Proj. ID: 9707A12

Received: 07/19/97

Reported: 08/04/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 10 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPGBMW: Sample 9707A12-04 was diluted 10-fold.

MTBE(8260): Sample 9707A12-04 was diluted 16.7-fold.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager