

GETTLER-RYAN INC.

August 1, 1996 Job #6324.80

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

Re:

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 June 27, 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 June 27, 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

DLH/PLS/dlh 6324.QML

Figure 1:

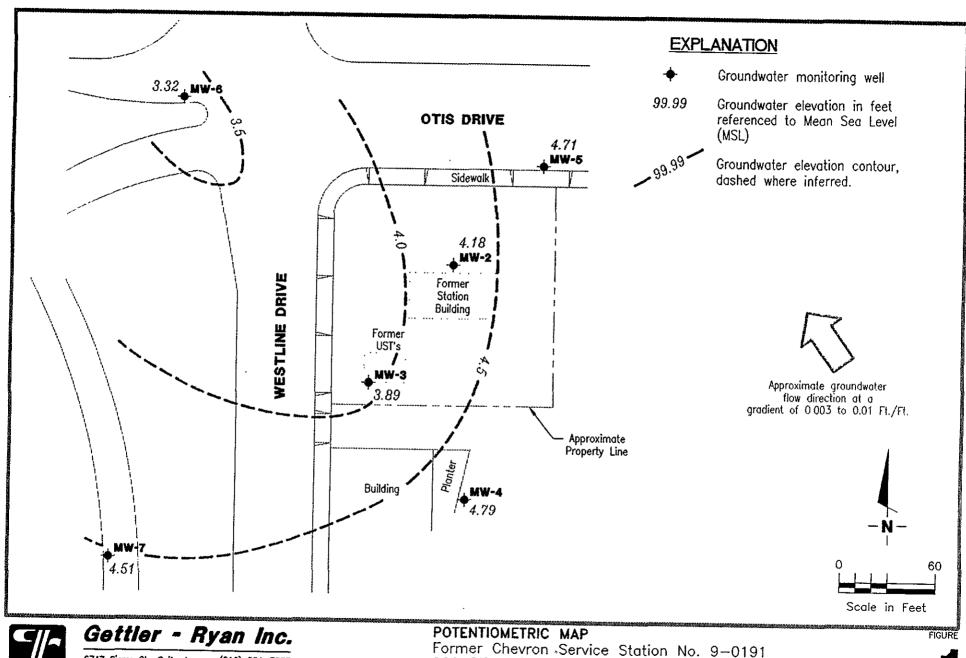
Potentiometric Map

Table 1: Attachments:

Water Level Data and Groundwater Analytical Results Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports





6747 Sierra Ct., Suite J Dublin, CA 94568

(510) 551-7555

Alameda, California

June 27, 1996

900 Otis Drive

REVISED DATE

JOB NUMBER 6324

REVIEWED BY



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)	< <u>B</u>	Т	E ppb	х	MTBE>
MW-2/										
9.17	2/8/96 6/ 27/9 6	2.75 4.99	6.42 4.18	0	94 <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	
MW-3/										
7.11	2/8/96 6/2 7/9 6	1.36 3.22	5.75 3.89	0	460 130¹	26 <0.50	ND <0.50	5.8 < 0.50	ND 0.51	- 16
MW-4/										
7.78	2/8/96 6/28/96	1.32 2.99	6.46 4.79	0	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	 <2.5
MW-5/										
7.37	2/8/96 6/27/96	0.75 2.66	6.62 4.7 1	0	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	 <2.5
MW-6/										
7.30	2/8/96 6/27/96	2.10 3.98	5.20 3.32	0	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	<2.5
MW-7/										
9.58	2/8/96 6/27/9 6	3.24 5.0 7	6.34 4.5 1	0	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	 <2.5
Trip Blank	6/27/96	***		***	<50	< 0.50	< 0.50	< 0.50	<0.50	<2.5

EXPLANATION:

DTW = Depth to water

TOC = Top of casing elevation

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

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.
- Laboratory report indicates unidentified hydrocarbons C6-C12.

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.



SAMPLER	E. Cline		DATE	6-27-96
ADDRESS CITY	900 Osis Alameda	Drive	JOB #	6324.85
Well ID Well Location Descr	MW-2	Well Condition	ss#	9-0191
Well Diameter	2" in	Hydrocarbon Thick	nes <u>s</u>	
Total Depth Depth to Liquid	10,3 ft 4,9 9 ft	Volume Factor	2" = 0.17 6" 3" = 0.38	= 1.50 12" = 5.80
# of casing 3χ Volume	10,31	× <u>O₁/7</u> x(ated <u>6,4</u> gal.
Purge Equipment	Saction	Sampling Equipmen	vol	ume
Did well dewater	<u>Mc</u>	If yes, Time	Volume	
Starting Time Sampling Time	1622	Purging Flow Rate		gpm.
Time iG24 1026 1028 1031	8157 -8171 -8165	Conductivity - 7/3 - 553 - 5 80 / - 557	Temperature 23.6 21.6 21.7 21.7	Volume
Veather Conditions Water Color: dediment Description	Clear Clear	COO!	Odor:	None
Sample ID		BORATORY INFORMATI		
MW- T	3 4116 1 1	Y HCL	SEQ	Analysis Cous BINE MIBS
Comments			,	
				



SAMPLER	6, Cline		DATE	6-21-96
ADDRESS	900 Olis	Drive	JOB#	<u>6324.85</u>
CITY	Alameda	CÅ	SS#	9-0191
Well ID	MW-3	Well Condition	Obay	1
Well Location Descrip	tion			
Well Diameter		. Hydrocarbon Thic	kness &	
Total Depth	14,7 ft	Volume	2" = 0.17	6" = 1.50 12" = 5.80
Depth to Liquid	3,22 ft	Factor	3" = 0.38	
# of casing 3χ Volume	11,48	x <u>O₁/7</u> x		timated 5.85 gal.
Purge Equipment	Saction	Sampling Equipme		Volume
Did well dewater	MO	If yes, Time	Volume	· .
Starting Time /	1635 1699	Purging Flow Rate	3	t gpm.
Time 10.37 10.39 10.41 10.44	7.09 7.26 7.31 7.29	Conductivity 5090 3490 3410 3450	Temperature 2013 2014 2013 2013	Volume Y Ce 7
Weather Conditions	Cloud	1 (00)		
Water Color:	Brown !	(ms/	Odor:	Non
Sediment Description	/	S./14		
		ABORATORY INFORMA	NOITA	
Sample ID	Container	Refrig Preservative	TypeLab	Analysis
MW-3	3x40nl UCA	Y HCI	SEQ	GasBixL MIB
Comments		<u> </u>		





SAMPLER	E. Cline		DATE	6-27-96
ADDRESS	900 Osis	Drive.	JOB#	6324.85
CITY	Alameda	CP	- _ SS#	9-0191
Weil ID	MW-Y	Well Condition	019	1
Well Location Descrip	otion	•	/	
Well Diameter	2" in	Hydrocarbon Thi	ckness	
Total Depth	ft	Volume	2" = 0.17	6" = 1.50
Depth to Liquid	2.99 ft	Factor	3" = 0.38	•,55
# of casing 3χ Volume	13.01	× <u>0)</u> //	4" = 0.66 x(VF) 2 · 2 #Es	timated <i>Ci Co</i> gal.
Purge Equipment	Suction	Sampling Equipm		Volume
Did well dewater	No	If yes, Time	Volume	
Starting Time	1616	Purging Flow Rat	e	// gpm.
1609 1653 1416	8130 8120 8123 8123	Conductivity 940 1060 1080 1075	1 2/16 2/13 · 2/16	Volume 2.2 9.9 6.16 2.0
Weather Conditions Water Color: Sediment Description	Clandy Brown Jo	COOL Smy	Odor:	Nov
Sample ID		ABORATORY INFORM		
Sample ID MW-Y.	SXYOMI LCA	Retrig Preservativa Y HCL	Type Lab SEQ	Analysis Gas BINE AMBL
Comments				





SAMPLER	E. Cline		DATE	6-27-96
ADDRESS	900 Olis	Drive	JOB#	6324.85
CITY	Alameda	CA	SS#	9-0191
Well ID	MW-5	Well Condition	Ol	ray
Well Location Descri	ption			
Well Diameter		Hydrocarbon Thickn	iess G	
Total Depth	_16' fi	t Volume	2" ≈ 0.17	6" = 1.50
Depth to Liquid	266 ft	_	3" = 0.38	6" = 1.50
# of casing 3χ	13.34	(VF)	4" = 0.66	
Volume		xx(v	(F) 2.70 #Es	timated 6.31 gal.
Purge Equipment	Suction	Sampling Equipment	Bailer	¹ purge Volume
Did well dewater		If yes, Time	Volume	
Starting Time	15:13	Purging Flow Rate	//	
Sampling Time	1522	-		, gp///.
Time 15/15 15/1 15/9 1524	8,39 -8,40, 8,40,	Conductivity 7/8 655	Temperature 25, / 24, 6, 24, 3	Volume 2 · 9 9 · 8 7 · 2
	8,42	440	24,3	810
Weather Conditions	_ Cloudy	(00)		
Water Color:	_ Oliav		Odor:	<i>K</i>)
Sediment Description		More	Odor:	Mar
	L	ABORATORY INFORMATION	אר	
Sample ID		Refrig Preservative Type		
MW- 5	3x40ml UCA	Y HCI	SEQ.	Analysis
			- a CX	Cous BINE MIRE
Comments				
				
				





SAMPLER	E. Cline		DATE	6-27-96
ADDRESS	900 Olis	Drive	J08 #	6324.85
CITY	Alameda o	CĄ	SS#	9-0191
Well ID	MW-G	Well Condition	. Oka	
Well Location Descri	ption 2" -			/
Well Diameter	in	Hydrocarbon Thickn	ness G	
Total Depth	17' ft	Volume		150
Depth to Liquid	3.98 ft	Factor	3" = 0.38	= 1.50 12" = 5.80
# of casing 3χ	13.02	×	4" = 0.66	nated <i>Gr. G</i> gal.
Volume				nated <u>(prop</u> gal.
Purge Equipment	Saction	Sampling Equipment	, -, Vo	olume
Did well dewater	<u> </u>	If yes, Time	Volume	
Starting Time/	1446 453	Purging Flow Rate		/, / gpm.
Time 1448 1450 1455 1455	7.8C 7.8C 7.83 7.83	Conductivity 7200 9600 9550	Temperature 25,0 24,7 24,6:/	Volume Z, Z 4, 94 6, 1, 5 7, C
Weather Conditions	· Cloudy	<u>cool</u>		
Water Color: Sediment Description	Grey !	C19-h1 Si/1	Odor:	Non
Sample ID	LAB Container Ref	ORATORY INFORMATION		
MW- Q	3x40ml UCA Y	1 HCI	SEQ	Analysis Gas BixE MIBLE
				(8421) 34: 14:187
Comments		1		·
				



SAMPLER	F.C.line		DATE	6-27-96
ADDRESS	900 Oris	Drive	JOB#	6324.85
CITY	Blame Na	CR	SS#	9-0191
Well ID	MW-7	Well Condition	ota	1
Well Location Descri	ption			
Well Diameter	2 in	. Hydrocarbon Thic	kness Ø	
Total Depth		Volume		= 1.50 12" = 5.80
Depth to Liquid	5,07 ft	Facte -	3" = 0.38	= 1.50 12" = 5.80
# of casing 3メ Volume	8,93	x _ <i>Q</i> ,	4" = 0,66 (VF) 1,5 #Estin	<u></u>
Purge Equipment	Suction	Sampling Equipme	- · Vo	ourge lume
Did well dewater	Mc	If yes, Time	Volume	
Starting Time Sampling Time	14:25	Purging Flow Rate	0,	75 gpm.
19:34.	7.66 8.20 8.20 8.20	Conductivity 50 38 960 965	Temperature 27.0	Volume //.5
Weather Conditions	Cloudy	coa 1		
Water Color: Sediment Description	Grey	char	Odor:	Non
Sample ID		ABORATORY INFORMA		
MW-7		Relaig Preservative Ty	······································	Analysis
	3x40n1 uca	Y 1/c1	SEQ	Gas BINE MIBE
Comments				
				· · · · · · · · · · · · · · · · · · ·

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chovron Facility Number. Facility Address. Consultant Project Number. Consultant Name. Ge Address 6747 Si	9-0191' 900 Otis 11 6-32	Prive Ala. 4.85 1, Dublin 9	meda CA 	Chevron Contact Laboratory Nan Loboratory Reid Samples Collect Collection Date	ct (Name)	F.C) ne	dy-
	Moths S = Soll A = Air W = Water C = Charcoal Type G = Grab D = Discrete	ion	MTBE O)		Analyses To	Be Performed	iac.	O NOT BILL B-LB ANALYS
	14	- He Y	× × ×					
MW-3 7 0	16	31 : 1 M V V	X					
·								
Relinquished By (Signature) Relinquished By (Signature) Relinquished By (Signature)	Organization Organization	0-2896/845 Date/Time F	Received By (Signal Received By (Signal Received For Labor		Organization Organization	Date/Time Date/Time Date/Time Date/Time	Turn Around Time (Ch 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracte	ŕ



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598_ (510) 988-9600

(415) 364-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

6747 Sierra Court Suite G

Gettler Ryan/Geostrategies Client Proj. ID: Chevron 9-0191, Alameda Sampled: 06/27/96 Chevron 9-0191, Alameda Sample Descript: TB-LB

Sampled: 06/27/96 Received: 06/28/96

Dublin, CA 94568

Matrix: LIQUID

Attention: Deanna Harding

Analysis Method: 8015Mod/8020 Lab Number: 9606G83-01

Analyzed: 07/05/96 Reported: 07/11/96

QC Batch Number: GC070596BTEX03A

Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene	Control Limits % 130	% Recovery 102

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

SEQUOIA ANALYTICAL -ELAP #1210

Mike Gregory Project Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Sampled: 06/27/96

Received: 06/28/96

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 Analyzed: 07/05/96 Lab Number: 9606G83-02 Reported: 07/11/96

QC Batch Number: GC070596BTEX03A

Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene	Control Limits % 130	% Recovery 95

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-6

Matrix: LIQUID

Analysis Method: 8015Mod/8020 Lab Number: 9606G83-03

Sampled: 06/27/96 Received: 06/28/96

Analyzed: 07/05/96 Reported: 07/11/96

QC Batch Number: GC070596BTEX03A

Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene	Control Limits % 130	% Recovery 98

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory Project Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

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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-5

Matrix: LIQUID Analysis Method: 8015Mod/8020

Lab Number: 9606G83-04

Sampled: 06/27/96 Received: 06/28/96

Analyzed: 07/05/96 Reported: 07/11/96

QC Batch Number: GC070596BTEX03A

Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trìfluorotoluene	Control Limits % 130	% Recovery 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 Client Proj. ID: Chevron 9-0191, Alameda
6747 Sierra Court Suite G Sample Descript: MW-4 Dublin, CA 94568

Matrix: LIQUID

Analysis Method: 8015Mod/8020 Lab Number: 9606G83-05

Sampled: 06/27/96 Received: 06/28/96 Analyzed: 07/05/96 Reported: 07/11/96

Attention: Deanna Harding QC Batch Number: GC070596BTEX03A

Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L	
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D. N.D.	
Surrogates Trifluorotoluene	Control Limits % 130	% Recovery 94	

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

SEQUOIA ANALYTICAL -

ELAP #1210

Mike Gregory Project Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

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FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

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

Client Proj. ID:

Sample Descript: MW-2 Matrix: LIQUID

Analysis Method: 8015Mod/8020

Attention: Deanna Harding

Lab Number: 9606G83-06

Chevron 9-0191, Alameda Sampled: 06/27/96 Received: 06/28/96 8015Mod/8020 Analyzed: 07/05/96 Reported: 07/11/96 Reported: 07/11/96

QC Batch Number: GC070596BTEX03A

Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L	
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D. N.D.	
Surrogates Trifluorotoluene	Control Limits % 130	% Recovery 93	

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

SEQUOIA ANALYTICAL -ELAP #1210

Mike Gregory Project Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

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Gettler Ryan/Geostrategies Client Proj. ID: Chevron 9-0191, Alameda Sampled: 06/27/96 6747 Serva Court Suite G Sample Descript: MW-3 Beceived: 06/28/96 Dublin, CA 94568

Lab Number: 9606G83-07

Matrix: LIQUID Analysis Method: 8015Mod/8020

Received: 06/28/96 Analyzed: 07/05/96 Reported: 07/11/96

Attention: Deanna Harding QC Batch Number: GC070596BTEX17A

Instrument ID: GCHP17

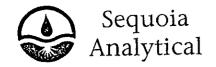
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection L ug/L	.imit	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern: Unidentified HC			10
Surrogates Trifluorotoluene	Control Limi 70	i ts % 9	6 Recovery 120

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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680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

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(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Gettler Ryan/Geostrategies 6747 Sierra Court, Ste J

Client Project ID:

Chevron 9-0191, Alameda

Matrix:

Liquid

Dublin, CA 94568 Attention: Deanna Harding

Work Order #:

9606G83 -01 - 06 Reported:

Jul 16, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	
QC Batch#:	GC070596BTEX03A	GC070596BTEX03A	GC070596BTEX03A	GC070596BTEX03A	
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo	
MS/MSD #:	G9606E71-03B	G9606E71-03B	G9606E71-03B	G9606E71-03B	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Prepared Date:	7/5/96	7/5/96	7/5/96	7/5/96	,
Analyzed Date:		7/5/96	7/5/96	7/5/96	
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L	
Result:	10	11	11	33	
MS % Recovery:	100	110	110	110	
Dup. Result:	10	11	11	33	
MSD % Recov.:	100	110	110	110	
RPD:	0.0	0.0	0.0	0.0	
RPD Limit:	0-25	0-25	0-25	0-25	

LCS #:	GBLK070596A	GBLK070596A	GBLK070596A	GBLK070596A	
Prepared Date:	7/5/96	7/5/96	7/5/96	7/5/96	
Analyzed Date:	7/5/96	7/5/96	7/5/96	7/5/96	
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L	
LCS Result:	10	11	11	34	
LCS % Recov.:	100	110	110	113	
MS/MSD	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** 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.



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Gettler Ryan/Geostrategies 6747 Sierra Court, Ste J

Client Project ID: Chevron 9-0191, Alameda

Matrix:

Liquid

Dublin, CA 94568 Attention: Deanna Harding

Work Order #:

9606G83 -07

Reported:

Jul 16, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl	Xylenes	
QC Batch#: Analy. Method: Prep. Method:		GC070596BTEX17A EPA 8020 EPA 5030	Benzene GC070596BTEX17A EPA 8020 EPA 5030	GC070596BTEX17A EPA 8020 EPA 5030	
Analyst: MS/MSD #: Sample Conc.: Prepared Date: Analyzed Date: Instrument I.D.#: Conc. Spiked:		J. Woo G9606E71-03C N.D. 7/5/96 7/5/96 GCHP17 10 ug/L	J. Woo G9606E71-03C N.D. 7/5/96 7/5/96 GCHP17 10 ug/L	J. Woo G9606E71-03C N.D. 7/5/96 7/5/96 GCHP17 30 ug/L	
Result: MS % Recovery:	10 100	10 100	9.9 99	30 100	
Dup. Result: MSD % Recov.:	9.7 97	9.5 95	9.5 95	29 97	
RPD: RPD Limit:	3.0 0-25	5.1 0-25	4.1 0-25	3.4 0-25	

LCS #:	GBLK070596A	GBLK070596A	GBLK070596A	GBLK070596A	
Prepared Date:	7/5/96	7/5/96	7/5/96	7/5/96	
Analyzed Date:	7/5/96	7/5/96	7/5/96	7/5/96	
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17	
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L	
LCS Result:	9.5	9.3	9.4	28	
LCS % Recov.:	95	93	94	93	
140/1400					
MS/MSD	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** Please Note:

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