August 16, 2001 G-R #: 386521

TO:

Mr. James Brownell

Delta Environmental Consultants, Inc. 3164 Gold Camp Drive, Suite 200

Rancho Cordova, California 95670

CC: Mr. Thomas Bauhs

Chevron Products Company

P.O. Box 6004

San Ramon, California 94583

FROM:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

SEP 0 4 2001

RE: **Former Chevron Service Station**

209339

5940 College Avenue Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	August 7, 2001	Groundwater Monitoring and Sampling Report Third Quarter - Event of July 9, 2001

COMMENTS:

Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to August 30, 2001, at which time the final report will be distributed to the following:

Ms. Eva Chu, Alameda County Health Care Services, Dept. of Environmental Health, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577

Mr. Greg Gurss, Gettler-Ryan Inc., 3140 Gold Camp Drive, Suite 170, Rancho Cordova, CA 95670

Enclosures

trans/20-9339-TB



August 7, 2001 G-R Job #386521

Mr. Thomas Bauhs Chevron Products Company P.O. Box 6004 San Ramon, CA 94583

RE: Third Quarter Event of July 9, 2001

Groundwater Monitoring & Sampling Report Former Chevron Service Station #209339 5940 College Avenue

5940 College Avenue Oakland, California SEP 0 4 2001

Dear Mr. Bauhs:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached). A joint monitoring event was conducted with Sheaff's Garage located at 5930 College Avenue, Oakland, California.

Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevations, and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical report are also attached.

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,

Deanna L. Harding Project Coordinator

Hagop Kevork P.E. No. C55734

Figure 1:

Potentiometric Map

Table 1:

Groundwater Monitoring Data and Analytical Results

Table 2:

Groundwater Analytical Results - Oxygenate Compounds

Table 3:

Groundwater Analytical Results

Table 4:

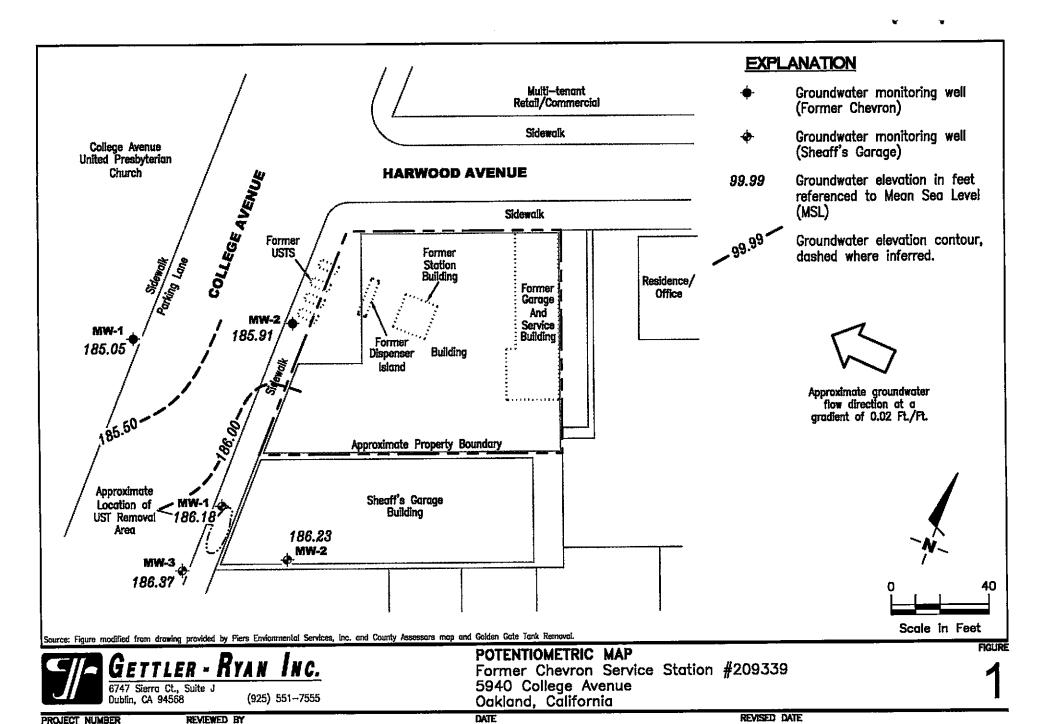
Field Measurements

Table 5: Attachments:

Joint Groundwater Monitoring Data and Analytical Results Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports



July 9, 2001

386521
FILE NAME: P:\Enviro\Chevron\209339\Q01-20-9339.DWG | Layout Tab: Pot3

Table 1
Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #209339 5940 College Avenue Oakland, California

WELL ID/	DATE	DTW	GWE	TPH-G	В	Ţ	E	X	MTBE
TOC*		(ft.)	(msl)	(ppb)	(ppb)	(pph)	(ppb)	(ppb)	(ppb)
MW-1									_
196.91	01/03/01	12.75	184.16	930 ¹	2.9	6.9	2.7	7.6	14/<2.03
	04/25/01	9.23	187.68	210^{4}	2.0	1.5	2.0	3.3	$5.3/<2.0^3$
	07/09/01	11.86	185.05	290 ⁵	1.8	2.0	2.5	0.96	<2.5
									·
MW-2				2.1002	110	11	63	25	83/2.23
197.35	01/03/01	12.48	184.87	$2,100^2$	110	11		2.5 15	150/<2.0 ³
	04/25/01	8.90	188.45	1,7004	150	12	30		
	07/09/01	11.44	185.91	2,500 ⁵	200	21	55	26	<50
TRIP BLANK									
TB-LB	01/03/01			<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
	04/25/01			<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
	07/09/01		••	<50	< 0.50	<0.50	<0.50	<0.50	<2.5

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #209339 5940 College Avenue Oakland, California

EXPLANATIONS:

TOC = Top of Casing

B = Benzene

(ppb) = Parts per billion

DTW = Depth to Water

T = Toluene

-- = Not Measured/Not Analyzed

(ft.) = Feet

E = Ethylbenzene

GWE = Groundwater Elevation

X = Xylenes

(msl) = Mean sea level

MTBE = Methyl tertiary butyl ether

TPH-G = Total Petroleum Hydrocarbons as Gasoline

- * TOC elevations were surveyed on December 27, 2000, by Virgil Chavez Land Surveying. The benchmark used for the survey was a City of Oakland benchmark being a cut square in the top of curb, at the curb return at the northeast corner of College Avenue and Miles Avenue, (Benchmark Elev. = 179.075 feet, msl).
- Laboratory report indicates unidentified hydrocarbons C6-C12.
- ² Laboratory report indicates gasoline C6-C12.
- 3 MTBE by EPA Method 8260.
- Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.</p>
- Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons C6-C12.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Former Chevron Service Station #209339 5940 College Avenue Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)
MW-1	01/03/01	<500	<50	<2.0	<2.0	<2.0	<2.0	<2.0
	04/25/01	- -	<20	<2.0	<2.0	<2.0	<2.0	
MW-2	01/03/01	<500	<50	2.2	<2.0	<2.0	<2.0	<2.0
141 44 - 2	04/25/01		<20	<2.0	<2.0	<2.0	<2.0	

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

(ppb) = Parts per billion

-- = Not Analyzed

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3

Groundwater Analytical Results

Former Chevron Service Station #209339 5940 College Avenue Oakland, California

WELL ID	DATE	FERROUS IRON (ppm)	TOTAL ALKALINITY (ppm)	SULFATE AS SO ₄ (ppm)
MW-1	04/25/01	0.15	380	11
	07/09/01	<0.050	410	6.8
MW-2	04/25/01	0.093	680	21
	07/09/01	0.44	600	9.3

EXPLANATIONS:

(ppm) = Parts per million

ANALYTICAL METHODS:

EPA Method 6010 for Ferrous Iron EPA Method 310.1 for Total Alkalinity EPA Method 300.0 for Sulfate as SO₄

Table 4

Field Measurements

Former Chevron Service Station #209339 5940 College Avenue Oakland, California

WELL ID	DATE	D.O. Before Purging (mg/L)	ORP (mV)
MW-1	07/09/01	1.25	111
MW-2	07/09/01	1.89	16

EXPLANATIONS:

D.O. = Dissolved Oxygen Concentration

mg/L = milligrams per liter

ORP = Oxygen Reduction Potential

(mV) = Millivolt

Table 5
Joint Groundwater Monitoring Data and Analytical Results

Sheaff's Garage 5930 College Avenue Oakland, California

WELL ID/	DATE	DTW	GWE	TPH-G	В	T	Е	X	MTBE
TOC*		(ft.)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(pph)
MW-1									
195.90	04/25/01 ¹	7.39	188.51			·			
	07/09/01	9.72	186.18	79,000	15,000	7,800	3,000	15,000	660
MW-2									
197.28	04/25/011	8.52	188.76						
	07/09/01	11.05	186.23	39,000	6,200	730	2,300	6,100	180
MW-3									
195.22	04/25/011	6.61	188.61						
	07/09/01	8.85	186.37	12,000	39	10	690	1,600	35

EXPLANATIONS:

Joint groundwater monitoring data and laboratory analytical results were provided by Golden Gate Tank Removal, Inc.

TOC = Top of Casing

B = Benzene

(ppb) = Parts per billion

DTW = Depth to Water

T = Toluene

-- = Not Measured/Not Analyzed

(ft.) = Feet

E = Ethylbenzene

 $GWE = Groundwater\ Elevation$

X = Xylenes

(msl) = Mean sea level

MTBE = Methyl tertiary butyl ether

TPH-G = Total Petroleum Hydrocarbons as Gasoline

* TOC elevations were surveyed on April 26, 2001, by Virgil Chavez Land Surveying. The benchmark for the survey was a City of Oakland benchmark being a cut square in the top of curb, at the curb return at the northeast corner of College Avenue and Miles Avenue, (Benchmark Elevation = 179.075 feet, msl).

Joint monitoring laboratory analytical results were not provided.

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 an 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 MONITORING/SAMPLING FIELD DATA SHEET

•		FIELD DAT	A SHEET			
Client/ CHE	vrov 29339 <u> </u>		Job#:	3865		
	40 COLLEGE	AVŽ.	Date:	7-9-	01	
	KLAND, CA		Sample	FRAN	KT.	
Well ID	MW-1	Well Condit	ion:	GOOD		
Well Diameter	<u>a''</u> in_	Hydrocarbo Thickness:		Amount Bail		
Total Depth	20.10 m	Volume Factor (VF)	2" = 0.17	3" = 0.38 6" = 1.50	4" = 12" = 5.80	0.66
Depth to Water	11.86 m	<u></u>	10 x 3 (case vo	lume) = Estimated Pur	ge Volume: <u></u>	راس) ٥٤.
Purge Equipment:	(Disposable Bailer) Bailer Stack Suction Grundfos Other:	-	Sampling Equipment:	(Disposable Bailer Bailer Pressure Bailer Grab Sample other:	ler)	
_	10:08 10:25 te: ULA or	_ Wate	nent Descripti	s:OVEA LEAR ion: Volum	Odor: L4	
	Volume pH (gal.)	Conductivi µmhos/cm	·Xloo 🔫	·F (mg/L)	ORP (mV)	Alkalinity (ppm)
10:14	3.0 6.89 4.0 6.87	353 330 314				
SAMPLE ID	(#) - CONTAINER	LABORATO	RY INFORMA	TION LABORATORY	ANAL	
MW-I	3 × VDA VIAL	Y	Heu	SEQUOIA	SULFATE	
	1500 ML. PL.	"	7002	11	IRON ALK	ALIVITY
				. '		<u> </u>
COMMENTS:						

WELL MONITORING/SAMPLING FIELD DATA SHEET

	AAFTE	FIELD D	ATA SHEE	T		•	
		AVE.	_ Job#	:	386521 7-9-0 FRANK)	
Well ID Well Diameter Total Depth Depth to Water	MW-2 2 in 20.04 in 11.44 in 8.60 x vi	Well Co	arbon ess:	in. 0.17 6" =		12" = 5.80	(gel.) = 0.66
Purge Equipment:	(Disposable Bailer) Bailer Stack Suction Grundfos Other:	_	Sampling Equipme	nt: ([Disposable Bail Bailer Pressure Bailer Grab Sample		
- -	10:49 11:07 e:	_	Veather Condit Vater Color: _ iediment Desc Fyes; Time:	CLEA ription:		Odor: 4	<u> </u>
10:52 10:55	Volume pH (gal.) 1.5 7.15 3.0 6.84 4.0 6.77	Condu	8	65.1 64.8 64.6	D.O. (mg/L) PAL-1. 89	ORP (mV)	Alkalinity (ppm)
SAMPLE ID	18) - CONTAINER 3 × VDA VIAL 14 SOD ML. PLASTIC	LABOR REFRIG.	ATORY INFORPRESERV. TYP	E. L	ABORATORY EQUOIA	TPHE STE	YSES L/MTOE E/FEREMS LKALINITY
COMMENTS: .							

Fax cop	v o	of Lo	ab F	Report a	nd (COC	to	Che	vron	Со	ntac	:t: [)				<u> hai</u> ı	<u>n-c</u>	of –(Cust	ody	-Record
Chevron Produ			Chevron	Facility Number	#209 5940	339 COL	LEGE						— J ʻ	Chevron			071	. THOM 5-842- QUOLA	·xxux	•			7-
P.O. BOX 6 San Ramon, C FAX (925)84	5004 A 945	83	Consulta Addi	int Project Num int Name <u>GE</u> ess 6747 S	<u>etler-</u> I erra	CT.	SUIT	<u>E J.</u>	DUBL	IN, C	CA		1 1	Laborato Laborato	iry Servi iry Servi Collecte	ce Code	er						Novi
(020)01.			Project Contact (Nome) <u>DEANNA L. HARDING</u> (Phone) 925-551-7555 (Fax Number) 925-551-788 State Method: CA CA					7888 1 OR	<u>l</u>	Signatur	- NW	<u> </u>	<u> </u>	Te □ C	<u></u>	<u> </u>			Remarks PLEASE				
Sample Number	Number of Containers	Matrix 5 = Soil A = Air W = Water C = Charcool	}	Date/Time	BTEX/MTBE+TPH CAS (8020 + 8015)	1 GAS 315)		Oxygenotes (8250)	alocarbons	Purgeable Organics (8260)	Extractable Organics (8270)	Oil and Grease (5520)	(4		(TBE/Naph.	TPH - HCID	TPH-0 Extended	SULFATE, AND FEED, ALKALINGY					FILTER- FERROUS IRON ASAP! Lob Sample No.
TB-LB	1	W	HCL	7-9-01	7			011	1									X					Run 5 Oxy's by 82
MW-1 MW-2			HCT	10:25	X			02 03		D								X					on all 8020 MTBE hits.
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Relinquished , By	/810=	alura)		Organization	Date/	(ime	R	aceived	By (Sig	nalure)		Or	gantzali	on (ate/Tim		Iced	Y/N		Turn	Around 1	lime (C	ircle Chaice)
Relinquished By	Te	2		G-R INC. Organization	l `	0-01		ecelved	By (Sig	noture)		Or	ganizati	on ()ate/Tim	•	Iced	Y/N			4	24 Hrs. 18 Hrs. 5 Doys	
Relinquished By	y (Sign	alure)		Organization	Date/	Time	R	ecleved RM	For Lat	poralory	By (Sig	naturo)	e gr		7/10	101		Y/N				O Days Contract	



JUI 25 7001

404 N. Wiget Lane Walnut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673 www.sequoialabs.com

GETTLEK-KYAN INC.

25 July, 2001

Deanna L. Harding Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin, CA 94568

RE: Chevron

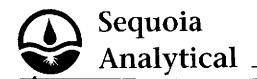
Sequoia Report: W107124

Enclosed are the results of analyses for samples received by the laboratory on 10-Jul-01 08:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater Project Manager

CA ELAP Certificate #1271



Gettler Ryan, Inc. - Dublin

Project: Chevron

6747 Sierra Court Suite J Dublin CA, 94568 Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported: 25-Jul-01 07:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W107124-01	Water	09-Jul-01 00:00	10-Jul-01 08:35
MW-1	W107124-02	Water	09-Jul-01 10:25	10-Jul-01 08:35
MW-2	W107124-03	Water	09-Jul-01 11:07	10-Jul-01 08:35

Sequoia Analytical - Walnut Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Charlie Westwater Project Manager



Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Chevron

Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported:

25-Jul-01 07:54

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Walnut Creek

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (W107124-01) Water	Sampled: 09-Jul-01 00:00	Received	: 10-Jul	-01 08:35					
Purgeable Hydrocarbons	ND	50	ug/l	1	1G10003	18-Jul-01	18-Jul-01	EPA 8015M/8020	
Benzene	ND	0.50	10	n	H	19	*	н	
Toluene	ND	0.50	•	11	**	*	*	H.	
Ethylbenzene	ND	0.50	n	н	n	•	III	*	
Xylenes (total)	ND	0.50	31	н	Ħ	11	Ħ	н	
Methyl tert-butyl ether	ND	2.5	н	H	n	11	11	•	CC-3
Surrogate: a,a,a-Trifluorotolue	ene	103 %	70	-130	"	n	"	"	
MW-1 (W107124-02) Water	Sampled: 09-Jul-01 10:25	Received	։ 10-Jul-	01 08:35					
Purgeable Hydrocarbons	290	50	ug/l	1	1G10003	18-Jul-01	18-Jul-01	EPA 8015M/8020	P-04
Benzene	1.8	0.50	u	и	11	**	"	Ħ	
Toluene	2.0	0.50	Ħ	Ħ	и	п	**	11	
Ethylbenzene	2.5	0.50	н	Ħ	n	•	u	11	
Xylenes (total)	0.96	0.50	Ħ	•	II.	u	# .	n	
Methyl tert-butyl ether	ND	2.5		*		"	-	н	CC-3
Surrogate: a,a,a-Trifluorotolue	ene	100 %	70	-130	"	п	"	11	
MW-2 (W107124-03) Water	Sampled: 09-Jul-01 11:07	Received	: 10-Jul	-01 08:35					
Purgeable Hydrocarbons	2500	1000	ug/l	20	1G10003	23-Jul-01	23-Jul-01	EPA 8015M/8020	P-04
Benzene	200	10	н	н	'n	H	•	В	
Toluene	21	10	*	*1	H	.,	11		
Ethylbenzene	55	10	₩'	Ħ	н	•	II	*	
Xylenes (total)	26	10	Ħ	H	tt	*	H	*	
Methyl tert-butyl ether	ND	50	n	,		n	и	•	CC-3
Surrogate: a,a,a-Trifluorotolu	ene	101 %	70	-130	"	"	"	"	

Gettler Ryan, Inc. - Dublin

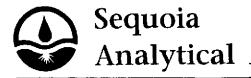
6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported: 25-Jul-01 07:54

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (W107124-02) Water	Sampled: 09-Jul-01 10:25	Received:	: 10-Jul-	01 08:35					
Ferrous Iron	ND	0.050	mg/l	1	1G09012	09-Jul-01	18-Jul-01	EPA 6010A	
MW-2 (W107124-03) Water	Sampled: 09-Jul-01 11:07	Received:	: 10-Jul-	01 08:35					
Ferrous Iron	0.44	0.050	mg/l	1	1G09012	09-Jul-01	18-Jul-01	EPA 6010A	



Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Chevron

Project Number: Chevron # 209339

Project Manager: Deanna L. Harding

Reported:

25-Jul-01 07:54

Conventional Chemistry Parameters by APHA/EPA Methods Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (W107124-02) Water	Sampled: 09-Jul-01 10:25	Received:	10-Jul-	01 08:35					
Total Alkalinity	410	11	mg/l	10	1G17014	17-Jul-01	17-Jul-01	EPA 310.1	
MW-2 (W107124-03) Water	Sampled: 09-Jul-01 11:07	Received:	10-Jul-	01 08:35					
Total Alkalinity	600	11	mg/l	10	1G17014	17-Jul-01	17-Jul-01	EPA 310.1	



Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported: 25-Jul-01 07:54

Anions by EPA Method 300.0 Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (W107124-02) Water	Sampled: 09-Jul-01 10:25	Received	: 10-Jul-	01 08:35					
Sulfate as SO4	6.8	1.0	mg/l	10	1G16012	13-Jul-01	14-Jul-01	EPA 300.0	
MW-2 (W107124-03) Water	Sampled: 09-Jul-01 11:07	Received	: 10-Jul-	01 08:35					
Sulfate as SO4	9.3	1.0	mg/l	10	1G16012	13-Jul-01	14-Jul-01	EPA 300.0	



Gettler Ryan, Inc. - Dublin

Project: Chevron

6747 Sierra Court Suite J Dublin CA, 94568 Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported: 25-Jul-01 07:54

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G10003 - EPA 5030B P/T	100011						<u> </u>			
Blank (1G10003-BLK1)	_			Prepared	& Analyz	ed: 11 - Jul	-01			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50								
Ethylbenzene	ND	0.50								
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	н							
Surrogate: a,a,a-Trifluorotoluene	47.1			30.0		157	70-130			S-03
Blank (1G10003-BLK2)				Prepared	& Analyz	ed: 12-Jul	-01			
Purgeable Hydrocarbons	ND	50	ug/l							·
Benzene	ND	0.50	u			:				
Toluene	ND	0.50	11							
Ethylbenzene	ND	0.50	Ħ							
Xylenes (total)	ND	0.50	n							
Methyl tert-butyl ether	ND	2.5	n							
Surrogate: a,a,a-Trifluorotoluene	28.0		**	30.0		93.3	70-130			
Blank (1G10003-BLK3)				Prepared	& Analyz	zed: 13-Jul	-01			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	H							
Ethylbenzene	ND	0.50								
Xylenes (total)	ND	0.50	Ħ							
Methyl tert-butyl ether	ND	2.5	н							
Surrogate: a,a,a-Trifluorotoluene	29.5		,,	30.0		98.3	70-130			
Blank (1G10003-BLK4)				Prepared	& Analy:	zed: 16-Ju	I-01			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50								
Toluene	ND	0.50	ur .							
Ethylbenzene	ND	0.50	•							
Xylenes (total)	ND	0.50	Ħ							
Methyl tert-butyl ether	ND	2.5	π							
Surrogate: a,a,a-Trifluorotoluene	33.4		"	30.0		111	70-130			

Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported: 25-Jul-01 07:54

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G10003 - EPA 5030B P/T	<u>-</u>			- "						
Blank (1G10003-BLK5)				Prepared	& Analyz	ed: 17-Jul-	-01			
Purgeable Hydrocarbons	ND	50	ug/l					•		
Benzene	ND	0.50	n	•						
Toluene	ND	0.50	n							
Ethylbenzene	ND	0.50	n							
Xylenes (total)	ND	0.50	11							
Methyl tert-butyl ether	ND	2.5	н							
Surrogate: a,a,a-Trifluorotoluene	30.2	<u> </u>	"	30.0		101	70-130			
Blank (1G10003-BLK6)				Prepared	& Analyz	ed: 18-Jul	-01			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	н							
Toluene	ND	0.50	#							
Ethylbenzene	ND	0.50	н							
Xylenes (total)	ND	0.50								
Methyl tert-butyl ether	ND	2.5	Ħ							
Surrogate: a,a,a-Trifluorotoluene	25.2		н	30.0		84.0	70-130	•		•
Blank (1G10003-BLK7)				Prepared	& Analyz	ed: 23-Jul	-01			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50								
Toluene	ND	0.50	н							
Ethylbenzene	ND	0.50								
Xylenes (total)	ND	0.50	14							
Methyl tert-butyl ether	ND	2.5	H							
Surrogate: a,a,a-Trifluorotoluene	28.6		17	30.0		95.3	70-130			
LCS (1G10003-BS1)				-	l & Analyz					
Benzene	23.3	0.50	ug/l	20.0		116	70-130			•
Toluene	22.1	0.50	u	20.0		110	70-130			
Ethylbenzene	23.2	0.50	n	20.0		116	70-130			
Xylenes (total)	64.5	0.50	н	60.0		108	70-130			
Surrogate: a,a,a-Trifluorotoluene	32,1		"	30.0		107	70-130			-

Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported: 25-Jul-01 07:54

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G10003 - EPA 5030B P/T										
LCS (1G10003-BS2)	_			Prepared	& Analyze	d: 12-Jul-	01			
Benzene	20.0	0.50	u g /l	20.0		100	70-130			
Toluene	19.8	0.50	0	20.0		99.0	70-130			
Ethylbenzene	20.0	0.50	"	20.0		100	70-130			
Xylenes (total)	57.5	0.50	11	60.0		95.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	27.6		"	30.0		92.0	70-130			
LCS (1G10003-BS3)				Prepared	& Analyz	ed: 13-Jul-	01			
Benzene	21.5	0.50	ug/l	20.0	-	108	70-130			-
Toluene	20.7	0.50	n	20.0		104	70-130			
Ethylbenzene	21.2	0.50	*	20.0		106	70-130			
Xylenes (total)	59.6	0.50	*	60.0		99.3	70-130			
Surrogate: a;a,a-Trifluorotoluene	29.2		"	30.0		97.3	70-130			
LCS (1G10003-BS4)				Prepared	& Analyz	ed: 16-Jul-	-01			
Benzene	22.7	0.50	ug/l	20.0	•	114	70-130			
Toluene	21.5	0.50	н	20.0		108	70-130			
Ethylbenzene	22.5	0.50	H	20.0		112	70-130			
Xylenes (total)	63.6	0.50	H	60.0		106	70-130			
Surrogate: a,a,a-Trifluorotoluene	30.5		11	30.0		102	70-130		·	
LCS (1G10003-BS5)		•		Prepared	& Analyz	ed: 17-Jul-	-01			
Веплене	21.5	0.50	ug/l	20.0		108	70-130			
Toluene	20.8	0.50	Ħ	20.0		104	70-130			
Ethylbenzene	21.2	0.50	tr	20.0		106	70-130			
Xylenes (total)	59.5	0.50	#1	60.0		99.2	70-130			
Surrogate: a,a,a-Trifluorotoluene	27.2		"	30.0		90.7	70-130			
LCS (1G10003-BS6)				Prepared	& Analyz	ed: 18-Jul-	-01			
Benzene	19.5	0.50	ug/l	20.0	-	97.5	70-130	*	,	
Toluene	19.0	0.50	11	20.0		95.0	70-130			
Ethylbenzene	19.3	0.50	н	20.0		96.5	70-130			
Xylenes (total)	54.5	0.50	н	60.0		90.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	28.2		п	30.0		94.0	70-130			

Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

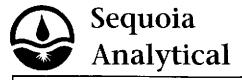
Dublin CA, 94568

Project: Chevron

Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported: 25-Jul-01 07:54

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G10003 - EPA 5030B P/T										
LCS (1G10003-BS7)				Prepared	& Analyz	ed: 23-Jul				
Benzene	21.5	0.50	ug/l	20.0		108	70-130			
Toluene	20.1	0.50	u	20.0		100	70-130			
Ethylbenzene	21.2	0.50	н	20.0		106	70-130			
Xylenes (total)	59.1	0.50	n	60.0		98.5	70-130			_
Surrogate: a,a,a-Trifluorotoluene	30.1		H	30.0		100	70-130			-
Matrix Spike (1G10003-MS1)	So	ource: W1071	21-02	Prepared	: 11-Jul-01	Analyzed	d: 20-Jul-0	1		
Benzene	20.4	0.50	ug/l	20.0	ND	102	70-130			
Toluene	19.4	0.50	u	20.0	ND	97.0	70-130			
Ethylbenzene	20.5	0.50	•	20.0	ND	102	70-130			
Xylenes (total)	56.6	0.50	11	60.0	ND	94.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	27.5		11	30.0		91.7	70-130			
Matrix Spike Dup (1G10003-MSD1)	S	ource: W1071	121-02	Prepared	: 11-Jul-0	I Analyze	d: 20- Jul-0	1		
Benzene	19.6	0.50	ug/l	20.0	ND	98.0	70-130	4.00	20	
Toluene	18.5	0.50	н	20.0	ND	92.5	70-130	4.75	20	
Ethylbenzene	19.6	0.50		20.0	ND	98.0	70-130	4.49	20	
Xylenes (total)	54.3	0.50	#	60.0	ND	90.5	70-130	4.15	20	
Surrogate: a,a,a-Trifluorotoluene	25.9		"	30.0		86.3	70-130			



Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 209339

Project Manager: Deanna L. Harding

Reported:

25-Jul-01 07:54

Total Metals by EPA 6000/7000 Series Methods - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G09012 - 200.7										
Blank (1G09012-BLK1)				Prepared:	09-Jul-01	Analyzed	l: 18-Jul-01			
Ferrous Iron	ND	0.050	mg/l				-			
LCS (1G09012-BS1)				Prepared:	: 09-Jul-01	Analyzed	l: 18-Jul-01	İ		
Ferrous Iron	1.20	0.050	mg/l	1.00		120	80-120			
LCS Dup (1G09012-BSD1)				Prepared	: 09-Jul-01	Analyzed	l: 18-Jul- 01	l		
Ferrous Iron	1.20	0.050	mg/l	1.00		120	80-120	0.00	20	
Matrix Spike (1G09012-MS1)	Sc	ource: W1070	70-04	Prepared	: 09-Jul-01	Analyzed	l: 18-Jul-01	l		
Ferrous Iron	1.07	0.050	mg/l	1.00	0.19	88.0	80-120	, ,		
Matrix Spike Dup (1G09012-MSD1)	Sc	ource: W1070	70-04	Prepared	: 09-Jul-01	Analyzed	l: 18-Jul-0	i		
Ferrous Iron	1.16	0.050	mg/l	1.00	0.19	97.0	80-120	8.07	20	

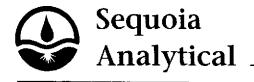


Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported: 25-Jul-01 07:54

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G17014 - General Preparation									<u> </u>	
Blank (1G17014-BLK1)	•			Prepared	& Analyz	ed: 17-Jul-	-01			
Total Alkalinity	ND	1.1	mg/l							
LCS (1G17014-BS1)				Prepared	& Analyz	ed: 17-Jul	-01			
Total Alkalinity	98.0	1.1	mg/l	100		98.0	80-120			
Matrix Spike (1G17014-MS1)	Se	ource: W1071	41-01	Prepared	& Analyz	ed: 17-Jul	-01			
Total Alkalinity	1440	11	mg/l	1000	. 470	97.0	75-125	·		
Matrix Spike Dup (1G17014-MSD1)	Se	ource: W1071	141-01	Prepared	& Analyz	ed: 17-Jul				
Total Alkalinity	1450	11	mg/l	1000	470	98.0	75-125	0.692	20	



Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Chevron

Project Number: Chevron # 209339

Project Manager: Deanna L. Harding

Reported: 25-Jul-01 07:54

Anions by EPA Method 300.0 - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G16012 - General Preparation	· ·									
Blank (1G16012-BLK2)				Prepared:	13-Jul-01	Analyzed	l: 14-Jul-0	l		
Sulfate as SO4	ND	0.10	mg/l							
LCS (1G16012-BS2)				Prepared:	13-Jul-01	Analyzed	l: 14-Jul-01	l		
Sulfate as SO4	8.55	0.10	mg/l	10.0		85.5	80-120			
Matrix Spike (1G16012-MS2)	So	urce: W1072	07-01	Prepared:	13-Jul-01	Analyzed	l: 14-Jul-01	1		
Sulfate as SO4	528	10	mg/l	500	110	83.6	75-125			
Matrix Spike Dup (1G16012-MSD2)	So	urce: W1072	07-01	Prepared:	13-Jul-01	Analyzed	l: 14-Jul-0	l		
Sulfate as SO4	530	10	mg/l	500	110	84.0	75-125	0.378	20	



Gettler Ryan, Inc. - Dublin 6047 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 209339 Project Manager: Deanna L. Harding Reported:

25-Jul-01 07:54

Notes and Definitions

CC-3 Continuing Calibration indicates that the quantitative result for this analyte includes a greater than 15% degree of uncertainty. The value as reported is within method acceptance.

P-04 Chromatogram Pattern: Gasoline C6-C12 + Unidentified Hydrocarbons C6-C12

S-03 The surrogate recovery for this sample is outside of established control limits. Review of associated QC indicates the recovery for

this surrogate does not represent an out-of-control condition.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference