

GETTLER-RYAN INC.

TRANSMITTAL

JUN 1 9 2002

June 3, 2002 G-R #386521

TO:

Mr. James Brownell

Delta Environmental Consultants, Inc. 3164 Gold Camp Drive, Suite 200 Rancho Cordova, California 95670

CC: Ms. Karen Streich

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 RE: 1

Former Chevron Service Station

#209339

5940 College Avenue Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	May 21, 2002	Groundwater Monitoring and Sampling Report Second Quarter - Event of April 8, 2002

COMMENTS:

Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to *June 14, 2002*, at which time the final report will be distributed to the following:

cc: 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

Mr. Donald Sweet, San Francisco Property Management Co., 1375 Sutter St., Suite 308, San Francisco, CA 94109

Enclosures

trans/20-9339-KS

May 14, 2002

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



Subject:

Monitoring and Sampling Program At Former Chevron Service Station

Number 20-9339, 5940 College Avenue, Oakland California.

Dear Ms. Chu:

At the request of Chevron Products Company (Chevron), Delta Environmental Consultants Inc. Network Associates Gettler - Ryan Inc. (GR) would like to request modification to the current monitoring and sampling program at the subject site. Currently, wells at the site are monitored and sampled on a quarterly basis. Groundwater samples are analyzed for total petroleum hydrocarbons as gasoline (TPHg) by Environmental Protection Agency (EPA) Method 8015, benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tertiary butyl ether (MtBE) by EPA Method 8021. In addition, all samples containing MtBE detected by EPA Method 8021 are analyzed for tert-butyl alcohol (TBA), MtBE, di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE) and tert-amyl methyl ether (TAME) by EPA Method 8260. Each quarter, joint monitoring is scheduled with Sheaff's Garage located at 5930 Collage Avenue in Oakland California.

Based on information supplied by Chevron, the station was closed in the late 1960s prior to the introduction of MtBE into gasoline in California. Therefore, the site should not be suspected as a source of MtBE impact to groundwater in the vicinity. MtBE has been detected in groundwater samples collected at the site in concentrations ranging from 5.3 parts per billion (ppb) to 150 ppb by EPA Method 8021. However, when MtBE was confirmed by EPA Method 8260, the results were non-detectable. TPHg and BTEX concentrations have decreased in samples collected during consecutive monitoring and sampling events from January 2001 to January 2002. Furthermore, BTEX was not detected in groundwater samples collected from MW-1 on October 8, 2001 or January 13, 2002, and TPHg was not detected in groundwater samples collected from MW-1 on January 13, 2002 (Gettler - Ryan Inc. Groundwater Monitoring and Sampling Report, First Quarter Event of January 13, 2002).

Based on data from the quarterly monitoring and sampling events at the site, GR would like to propose that the monitoring and sampling program at the site be reduced from quarterly to semi-annually.



May 21, 2002 G-R Job #386521

Ms. Karen Streich Chevron Products Company P.O. Box 6004 San Ramon, CA 94583

RE: Second Quarter Event of April 8, 2002

Groundwater Monitoring & Sampling Report Former Chevron Service Station #209339

5940 College Avenue Oakland, California

Dear Ms. Streich:

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 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.

No. 6882

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

Sincerely.

Project Coordinator

Douglas J. Lee

Senior Geologist, R.G. No. 6882

Figure 1:

Potentiometric Map

Table 1: Groundwater Monitoring Data and Analytical Results Table 2: Groundwater Analytical Results - Oxygenate Compounds

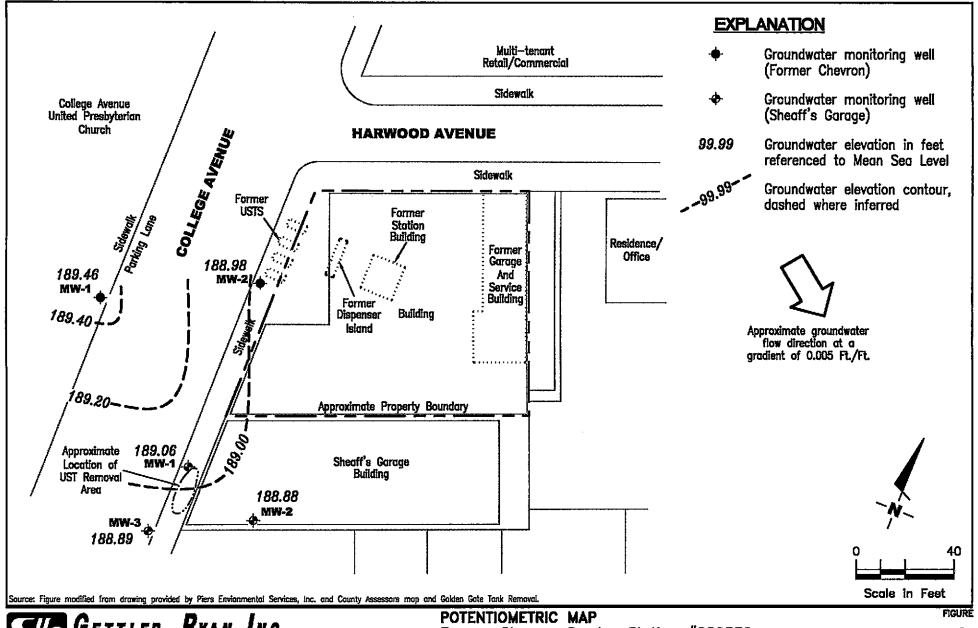
Table 3: Groundwater Analytical Results

Table 4: Field Measurements

Joint Groundwater Monitoring Data and Analytical Results Table 5: Standard Operating Procedure - Groundwater Sampling Attachments:

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports





Former Chevron Service Station #209339 5940 College Avenue

Oakland, California

DATE

April 8, 2002

REVISED DATE

PROJECT NUMBER 386521

FILE NAME: P:\Envira\Chevron\209339\Q02-20-9339.dwg | Layout Tab: Pot2

REVIEWED BY

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	T	E	X	MTBE
TOC*(ft.)		(ft.)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ррв)	(ppb)
MW-1									
196.91	01/03/01	12.75	184.16	930¹	2.9	6.9	2.7	7.6	$14/<2.0^3$
170.71	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
	10/08/01	13.49	183.42	200	<0.50	< 0.50	< 0.50	<1.5	<2.5
	01/13/02	7.33	189.58	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	04/08/02	7.33 7.45	189.46	6 70	<0.50	<2.0	<1.0	5.6	<2.5
	04/03/02	7.43	107.40	070	-0.50 -	~2.0	~1.0	5.0	~2.3
MW-2									
197.35	01/03/01	12.48	184.87	$2,100^2$	110	11	63	25	83/2.23
	04/25/01	8.90	188.45	1,700 ⁴	150	12	30	15	$150/<2.0^3$
	07/09/01	11.44	185.91	2,500 ⁵	200	21	55	26	<50
	10/08/01	13.37	183.98	4,200	87	2.8	29	9.8	<2.5
	01/13/02	6.55	190.80	410	20	2.9	<2.5	4.4	27/<2.0 ³
	04/08/02	8.37	188.98	4,000	70	1.7	17	17	<2.5
TRIP BLANK									
TB-LB	01/03/01	D-		<50	<0.50	< 0.50	< 0.50	< 0.50	<2.5
15 25	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
QA	10/08/01			<50	<0.50	<0.50	< 0.50	<1.5	<2.5
χ.·	01/13/02	••		<50	<0.50	< 0.50	< 0.50	<0.50	<2.5
	04/08/02		75	<50	<0.50	<0.50	<0.50	<1.5	<2.5

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Table 1

Groundwater Monitoring Data and Analytical Results

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

EXPLANATIONS:

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

DTW = Depth to Water

B = Benzene

(ppb) = Parts per billion

(ft.) = Feet

T = Toluene

GWE = Groundwater Elevation

(msl) = Mean sea level

TPH-G = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion

--= Not Measured/Not Analyzed

QA = Quality Assurance

(msl) = Mean sea level

X = Xylenes

- * 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.
- Laboratory report indicates gasoline C6-C12.
- MTBE by EPA Method 8260.
- Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.
- 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)
	<u> </u>	Nary.	12.27	NH CHA	Never	(Mass)	121-27	
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
	04/25/01		<20	<2.0	<2.0	<2.0	<2.0	
	01/13/02		<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
	10/08/01	1	414	5.4
	01/13/02	<0.10 ²	390	10
MW-2	04/25/01	0.093	680	21
	07/09/01	0.44	600	9.3
	10/08/01	_1	683	3.8
	01/13/02	$< 0.10^2$	630	7.0

EXPLANATIONS:

(ppm) = Parts per million

-- = Not Analyzed

ANALYTICAL METHODS:

EPA Method SM 3500 Fe for Ferrous Iron EPA Method 310.1 for Total Alkalinity EPA Method 300.0 for Sulfate as SO_4

Analysis was not performed by the Laboratory as requested on the Chain of Custody.

Due to sample transfer by the lab from laboratory to another, the sample was received beyond the EPA recommended holding time.

Table 4 Field Measurements

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

WELL ID	DATE	D.Q. Before Purging (mg/L)	ORP Before Purging (mV)
MW-1	07/09/01	1.25	111
	10/08/01	1.20	64
	01/13/02 ¹		
MW-2	07/09/01	1.89	16
	10/08/01	1.04	58
	01/13/021		

EXPLANATIONS:

D.O. = Dissolved Oxygen Concentration

(mg/L) = Milligrams per liter

ORP = Oxygen Reduction Potential

(mV) = Millivolt

-- = Not Measured

¹ D.O. and ORP meter erratic; measurments not taken.

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	E	X	MTBE
TOC*(ft.)		(ft.)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1	i								
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
	10/08/01	10.88	185.02	112,000	25,300	11,800	4,280	20,600	374
	$01/07/02^3$	4.34	191.56	96,100	21,100	13,500	4,160	21,900	596/330 ²
	04/08/02	6.84	189.06	111,000	21,200	13,400	4,230	21,000	814
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
	10/08/01	12.79	184.49	40,700	6,310	399	2,100	5,320	6,460
	01/07/02 ³	4.92	192.36	59,600	10,300	3,250	4,180	14,400	366/170 ²
	04/08/02	8.40	188.88	66,700	10,200	2,670	3,840	13,200	583
MW-3									
195.22	04/25/01 ¹	6.61	188.61		·				
	07/09/01	8.85	186.37	12,000	39	- 10	690	1,600	35
	10/08/01	9.75	185.47	4,912.5	107.7	3.9	99.0	132.5	52.2
	01/07/02 ³	4.25	190.97	7,260	723	138	492	887	81.7/16.7 ²
	04/08/02	6.33	188.89	11,700	540	108	706	1,710	<0.5

Table 5

Joint Groundwater Monitoring and Analytical Results

Sheaff's Garage 5930 College Avenue Oakland, California

EXPLANATIONS:

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

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl tertiary butyl ether

DTW = Depth to Water

B = Benzene

(ppb) = Parts per billion

(ft.) = Feet

T = Toluene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

E = Ethylbenzene

(msl) = Mean sea level

X = Xylenes

^{*} 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.

² MTBE by EPA Method 8260

³ Joint monitoring was conducted on different day than Chevron.

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.

CHEVRON .	2093	339			Job:	#:	386.	531	
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Purging Flow R Did well de-wa		=						ne:	
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COMMENTS: _			· ·						
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9/97-fieldat.fm

WELL MONITORING/SAMPLING FIELD DATA SHEET

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Well ID Well Diameter Total Depth Depth to Water	MW-2 20.10 ft. 8.37 ft.	Well Condition Hydrocarbon Thickness: Volume Factor (VF)	<u></u>	Amount Battering to the second	er): <u> </u>	(<u>Gallons)</u> 4" = 0.66
Purge Equipment:	Disposable Bailer Bailer Stack (Suction) Grundfos Other:		mpling vipment: (Dis Ba Pro Gr	Estimated Pu sposable Ba iler essure Baile ab Sample her:	iler)	5.98 (gal.)
Starting Time: Sampling Time: Purging Flow Rate Did well de-water	·	Water Co	Conditions: lor: <u>CLOUD</u> Description: ime:	Scie	Odor: U	SICTY
11:07 9	lume pH (2d.) (0.85 (0.81 (0.77	Conductivity µmhos/cm 1-100 560 588	Temperature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
SAMPLE ID	L. #) - Container Ref	ABORATORY INF	ORMATION YPE LABOR	ATORY	ANALY	
MW-7 6	2 X VOA VIAL	HCL	SEQUOIA	····	PH(G)/btex/m	·
		#				
OMMENTS:						

Chevron California Region Analysis Request/Chain of Custody



100 x00110

Acct. #: 1005 For Lancaster Laboratories use only Sample #: 3804294-6

SCR#:

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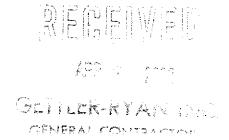
ANALYTICAL RESULTS

Prepared for:

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004 San Ramon CA 94583-0904 925-842-8582

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425



SAMPLE GROUP

The sample group for this submittal is 803755. Samples arrived at the laboratory on Friday, April 12, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client Description			Lancaster Labs Number
QA-T-020408	NA	Water	3804294
MW-1-W-020408	Grab	Water	3804295
MW-2-W-020408	Grab	Water	3804296

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO

Delta C/O Gettler-Ryan

Attn: Deanna L. Harding

Questions? Contact your Client Services Representative Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Steven A. Skiles Sr. Chemist



Lancaster Laboratories, Inc. 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681



Page 1 of 1

Lancaster Laboratories Sample No. WW 3804294

Collected: 04/08/2002 00:00

Account Number: 10905

Submitted: 04/12/2002 09:45 Reported: 04/19/2002 at 21:23 Chevron Products Company 6001 Bollinger Canyon Road

Discard: 05/20/2002

Building L PO Box 6004

OA-T-020408

NA

San Ramon CA 94583-0904

Facility# 209339

Job# 386521

GRD

5940 COLLEGE-OAKLAND

QΆ

Water

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of gasoline constituents eluting start time. A site-specific MSD sample was was performed to demonstrate p	prior to the C6	for the project.	GRO range A LCS/LCSD	ug/l	1
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether A site-specific MSD sample was was performed to demonstrate p				ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

	20002 G 002 J				
	_		Analysis		Dilution
Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	04/13/2002 15:36	John B Kiser	1
BTEX, MTBE (8021)	SW-846 8021B	1	04/13/2002 15:36	John B Kiser	1
GC VOA Water Prep	SW-846 5030B	1	04/13/2002 15:36	John B Kiser	n.a.
	TPH-GRO - Waters BTEX, MTBE (8021)	Analysis Name Method TPH-GRO - Waters N. CA LUFT Gasoline Method BTEX, MTBE (8021) SW-846 8021B	Analysis Name Method Trial# TPH-GRO - Waters N. CA LUFT Gasoline 1 Method BTEX, MTBE (8021) SW-846 8021B I	Analysis Name Method Trial# Date and Time TPH-GRO - Waters N. CA LUFT Gasoline 1 04/13/2002 15:36 Method BTEX, MTBE (8021) SW-846 8021B I 04/13/2002 15:36	Analysis Name Method Trial# Date and Time Analyst TPH-GRO - Waters N. CA LUFT Gasoline 1 04/13/2002 15:36 John B Kiser Method BTEX, MTBE (8021) SW-846 8021B I 04/13/2002 15:36 John B Kiser

717-656-2300 Fax: 717-656-2681



Page 1 of 2

Lancaster Laboratories Sample No. WW 3804295

Collected:04/08/2002 10:23 by FT

2 10:23 by FT Account Number: 10905

GRD

Submitted: 04/12/2002 09:45 Reported: 04/19/2002 at 21:23

Discard: 05/20/2002

MW-1-W-020408

310 1 10 020400 G1a

Grab Water

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 209339 Job# 386521

5940 COLLEGE-OAKLAND

AI.

NA

M1339

CAT No.	Änalysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor	
01729	TPH-GRO - Waters						
01730	TPH-GRO - Waters n.a. 670. 50. ug/l The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.						
08214	BTEX, MTBE (8021)						
00776 00777 00778 00779	Benzene Toluene Ethylbenzene Total Xylenes	71-43-2 108-88-3 100-41-4 1330-20-7	N.D. # N.D. # 5.6	0.50 2.0 1.0	ug/l ug/l ug/l ug/l	1 1 1	
00780	Methyl tert-Butyl Ether A site-specific MSD sample was	1634-04-4 not submitted f	N.D. for the project.	2.5 A LCS/LCSD	ug/l	1	

Due to the presence of interferents near their retention time, normal reporting limits were not attained for toluene and ethylbenzene. The presence or concentration of these compounds cannot be determined below the reporting limits due to the presence of these interferents.

was performed to demonstrate precision and accuracy at a batch level.

State of California Lab Certification No. 2116

Laboratory Chronicle

#=Laboratory MethodDetection limit
N.D.=Not develop F F Books Help Reporting Limit
Lancaster, PA 17605-2425
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Page 2 of 2

Lancaster Laboratories Sample No. WW 3804295

Collected: 04/08/2002 10:23

by FT

Account Number: 10905

Submitted: 04/12/2002 09:45 Reported: 04/19/2002 at 21:23

Discard: 05/20/2002

MW-1-W-020408

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road

Building L PO Box 6004 San Ramon CA 94583-0904

Facility# 209339

Job# 386521

GRD

5940 COLLEGE-OAKLAND

NΑ

NA

M1339 CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline	1	04/14/2002 06:08	John B Kiser	1
		Method				
08214	BTEX, MTBE (8021)	SW-846 8021B	1	04/14/2002 06:08	John B Kiser	1
01146	GC VOA Water Prep	SW-846 5030B	1	04/14/2002 06:08	John B Kiser	n.a.



Page 1 of 2

Lancaster Laboratories Sample No. WW 3804296

Collected: 04/08/2002 11:35 by FT

Account Number: 10905

Submitted: 04/12/2002 09:45 Reported: 04/19/2002 at 21:24 Chevron Products Company 6001 Bollinger Canyon Road

Discard: 05/20/2002

Building L PO Box 6004

MW-2-W-020408

Water

San Ramon CA 94583-0904

Facility# 209339

Job# 386521

GRD

5940 COLLEGE-OAKLAND

MΔ

Grab

NA

M2339

				As Received			
CAT			As Received	Method		Dilution	
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor	
01729	TPH-GRO - Waters						
01730	O TPH-GRO - Waters n.a. 4,000. 50. ug/l l The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.						
08214	BTEX, MTBE (8021)						
00776	Benzene	71-43-2	70.	0.50	ug/l	1	
00777	Toluene	108-88-3	1.7	0.50	ug/l	1	
00778	Ethylbenzene	100-41-4	17.	0.50	ug/l	1	
00779	Total Xylenes	1330-20-7	17.	1.5	ug/l	1	
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1	
	A site-specific MSD sample was mass performed to demonstrate pre-						

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT				Analysis				
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor		
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	04/14/2002 06:40	John B Kiser	1		
08214	BTEX, MTBE (8021)	SW-846 8021B	1	04/14/2002 06:40	John B Kiser	1		
01146	GC VOA Water Prep	SW-846 5030B	1	04/14/2002 06:40	John B Kiser	n.a.		

#=Laboratory MethodDetection Limit N.D.=Not developed at the above the Reporting Limit

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Page 2 of 2

Lancaster Laboratories Sample No. WW 3804296

Collected: 04/08/2002 11:35

by FT

Account Number: 10905

Submitted: 04/12/2002 09:45 Reported: 04/19/2002 at 21:24

Discard: 05/20/2002

MW-2-W-020408

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 209339 Job# 386521

5940 COLLEGE-OAKLAND

NΆ

GRD

M2339

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Page 1 of 2

Client Name: Chevron Products Company

Group Number: 803755

Reported: 04/19/02 at 09:24 PM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 02103A16A	Sample nu	mber(s):	3804294					
Benzene	N.D.	0.5	ug/l	112	111	80-118	1	30
Toluene	N.D.	0.5	ug/l	114	112	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	110	108	81-119	2	30
Total Xylenes	N.D.	1.5	ug/l	111	110	82-120	2	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	97	95	79-127	3	30
TPH-GRO - Waters	N.D.	50.	ug/l	104	107	76-126	3	30
Batch number: 02103A16B	Sample nu	umber(s):	3804295-38	04296				
Benzene	N.D.	0.5	ug/l	112	111	80-118	1	30
Toluene	N.D.	0.5	ug/l	114	112	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	110	108	81-119	2	30
Total Xylenes	N.D.	1.5	ug/l	111	110	B2-120	2	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	97	95	79-127	3	30
TPH-GRO - Waters	N.D.	50.	ug/l	104	107	76-126	3	30

Sample Matrix Quality Control

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup
Analysis Name	%REC	%REC	Limits	RPD	<u>MAX</u>	Conc	Conc	RPD	RPD Max
Batch number: 02103A16A	Sample	number	(s): 380429	4					
Benzene	117		77-131						
Toluene	117		80-128						
Ethylbenzene	112		76-132						
Total Xylenes	112		76-132						
Methyl tert-Butyl Ether	100		61-144						
TPH-GRO - Waters	105		74-132						
Batch number: 02103A16B	Sample	number	(s): 380429	5-38042	296				
Benzene	117		77-131						
Toluene	117		80-128						
Ethylbenzene	112		76-132						
Total Xylenes	112		76-132						
Methyl tert-Butyl Ether	100		61-144						
TPH-GRO - Waters	105		74-132						

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters

Batch number: 02103A16A

Trifluorotoluene-F

Trifluorotoluene-P

3804294	76	99
Blank	79	99

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The background result was more than four times the spike added.



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71-130

Page 2 of 2

Client Name: Chevron Products Company Group Number: 803755 Reported: 04/19/02 at 09:24 PM Surrogate Quality Control 105 98 LCS 98 LCSD 100 MS 124 97 71-130 67-135 Limits: Analysis Name: TPH-GRO - Waters Batch number: 02103A16B Trifluorotoluene-F Trifluorotoluene-P 3804295 207* 121 3804296 455* 123 77 98 Blank LCS 105 98 100 98 LCSD MS 124 97

*- Outside of specification

67-135

Limits:

(1) The result for one or both determinations was less than five times the LOQ.

(2) The background result was more than four times the spike added.

