R2438

GETTLER-RYAN INC.

TRANSMITTAL

July 22, 2002
G-R #386911

AUG 07 2002

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: Chevron Service Station
#9-2029
890 West MacArthur Blvd.
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	July 19, 2002	Groundwater Monitoring and Sampling Report Second Quarter - Event of June 7, 2002

COMMENTS:

This report is being sent for your review. Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to ***August 2, 2002***, at which time the final report will be distributed to the following:

cc: Mr. Don Hwang, Alameda County Health Care Services, Dept. of Environmental Health, 1153 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/9-2029-ks

GETTLER-RYAN INC.

July 19, 2002
G-R Job #386911

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

RE: Second Quarter Event of June 7, 2002
Groundwater Monitoring & Sampling Report
Chevron Service Station #9-2029
890 West MacArthur Boulevard
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).

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.

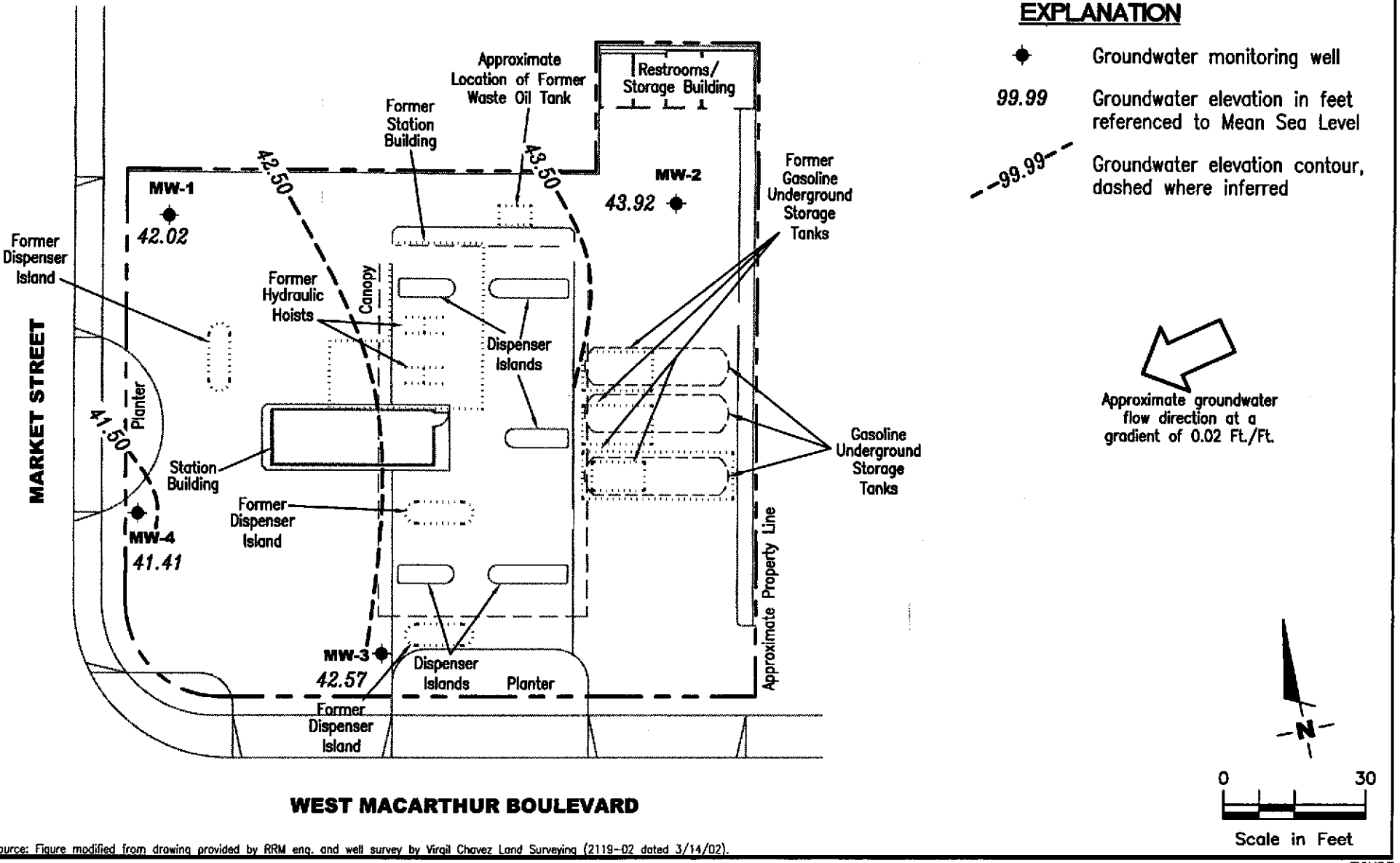
Sincerely,

Deanna L. Harding
Project Coordinator

Hagop Kevork
P.E. No. C55734

REGISTERED PROFESSIONAL ENGINEER
HAGOP KEVORK
No. C 55734
Exp. 12/31/04
CIVIL
STATE OF CALIFORNIA

Figure 1: Potentiometric Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results – Oxygenate Compounds
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports



Source: Figure modified from drawing provided by RRM eng. and well survey by Virgil Chavez Land Surveying (2119-02 dated 3/14/02).

GETTLER - RYAN INC.
6747 Sierra Ct., Suite J
Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP
Chevron Service Station #9-2029
890 West MacArthur Boulevard
Oakland, California

FIGURE
1

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
386911		June 7, 2002	

FILE NAME: P:\Enviro\Chevron\9-2029\Q02-9-2029.dwg | Layout Tab: Pot2

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-2029
890 West MacArthur Blvd.
Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1									
50.71	03/12/02[1]	6.50	44.21	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[2]
	06/07/02	**8.69**	**42.02**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.5**	**<2.5/<2[2]**
MW-2									
52.57	03/12/02[1]	6.09	46.48	<50	<0.50	<0.50	<0.50	<1.5	<2.5/3[2]
	06/07/02	**8.65**	**43.92**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.5**	**<2.5/<2[2]**
MW-3									
50.31	03/12/02[1]	6.50	43.81	12,000	600	8.5	1,100	370	700/650[2]
	06/07/02	**7.74**	**42.57**	**14,000**	**630**	**8.8**	**1,200**	**160**	**520/490[2]**
MW-4									
49.93	03/12/02[1]	5.34	44.59	9,700	360	5.3	1,100	150	170/170[2]
	06/07/02	**8.52**	**41.41**	**7,300**	**170**	**2.7**	**280**	**21**	**200/120[2]**
TRIP BLANK									
QA	03/12/02	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	06/07/02	**--**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.5**	**<2.5**

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-2029
890 West MacArthur Blvd.
Oakland, California

EXPLANATIONS:

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
(msl) = 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 Measured/Not Analyzed
QA = Quality Assurance

* TOC elevations were surveyed on March 14, 2002, by Virgil Chavez Land Surveying. The benchmark for this survey was a USGS bronze disk located near the north end of the curb return at the Northwest corner of 38th Street and Broadway, (Benchmark Elevation = 85.41 feet, NGVD29).

1 Well development performed.

2 MTBE by EPA method 8260.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Chevron Service Station #9-2029
890 West MacArthur Blvd.
Oakland, California

WELL ID	DATE	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-1	03/12/02	<100	<2	<2	<2	<2	<2	<2
	06/07/02	**<100**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**
MW-2	03/12/02	<100	3	<2	<2	<2	<2	<2
	06/07/02	**<100**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**
MW-3	03/12/02	<100	650	<2	<2	18	<2	<2
	06/07/02	**230**	**490**	**<5.0**	**<5.0**	**11**	**<5.0**	**<5.0**
MW-4	03/12/02	<100	170	<2	<2	13	<2	<2
	06/07/02	**<100**	**120**	**<2**	**<2**	**14**	**<2**	**<2**

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
EDB = 1,2-Dibromoethane
(ppb) = Parts per billion

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

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 Facility# 9-2029 Job#: 3816911

Address: 890 W. MacArthur Date: 6.7.02

City: Oakland Sampler: FT

Well ID MW-1 Well Condition: GOOD

Well Diameter 2 in. Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 24.80 ft.

Depth to Water 8.69 ft.

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

16.11 X VF .17 = 2.73 X 3 (case volume) = Estimated Purge Volume: 8.21 (gal.)

Purge Equipment: Disposable Bailer / Bailer / (Stack) / Suction / Grundfos / Other:

Sampling Equipment: (Disposable Bailer) / Bailer / Pressure Bailer / Grab Sample / Other:

Starting Time: 10:34 Weather Conditions: SUNNY

Sampling Time: 10:49 Water Color: CLEAR Odor: NO

Purging Flow Rate: 1.5 gpm. Sediment Description:

Did well de-water? NO If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm +100	Temperature °F °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
10:36	2.5	7.26	146	18.6			
10:38	5.0	7.22	171	18.4			
10:40	8.0	7.27	174	18.7			

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	6 X VOA VIAL	Y	HCL	LANCASTER	TPH(G)/btex/mtbe
					7 day's

COMMENTS: "NEW LOCK"

9/97-fieldat.frm

WELL MONITORING/SAMPLING FIELD DATA SHEET.

CHEVRON Facility# 9-2029 Job#: 3816911

Address: 890 W. MacArthur Date: 6.7.02

City: Oakland Sampler: FT

Well ID MW-2 Well Condition: GOOD

Well Diameter 2 in. Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 24.70 ft.

Depth to Water 8.65 ft.

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

16.05 X VF .17 = 2.72 X 3 (case volume) = Estimated Purge Volume: 8.18 (gal.)

Purge Equipment: Disposable Bailer; Bailer; (Stack); Suction; Grundfos; Other:

Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other:

Starting Time: 11:03 Weather Conditions: SUNNY

Sampling Time: 11:20 Water Color: CLOUDY LT TAN Odor: NO

Purging Flow Rate: 1.5 gpm. Sediment Description: LITE SILT

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:05	2.5	7.24	324	19.6			
11:07	5.0	7.27	316	19.0			
11:09	8.0	7.28	319	18.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 X VOA VIAL	Y	HCL	LANCASTER	TPH(G)/btex/mtbe
					7 04 j

COMMENTS: "NEW LOCK"

9/97-fieldat.frm

WELL MONITORING/SAMPLING FIELD DATA SHEET.

CHEVRON Facility# 9-2029 Job#: 3816911

Address: 890 W. MacArthur Date: 6.7.02

City: Oakland Sampler: FT

Well ID MW-3 Well Condition: GOOD

Well Diameter 2 in. Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 24.53 ft.

Depth to Water 7.74 ft.

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

16.79 X VF .17 = 2.85 X 3 (case volume) = Estimated Purge Volume: 8.56 (gal.)

Purge Equipment: Disposable Bailer; Bailer; (Stack); Suction; Grundfos; Other: _____

Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other: _____

Starting Time: 12:04 Weather Conditions: SUNNY

Sampling Time: 12:26 Water Color: CLOUDY / LT. GRAY Odor: YES / STRONG

Purging Flow Rate: 1.5 gpm. Sediment Description: LITE SILT

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:06	3.0	7.18	358	20.8			
12:08	6.0	7.22	362	20.1			
12:10	8.5	7.24	359	21.2			

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 X VOA VIAL	Y	HCL	LANCASTER	TPH(G)/btex/mtbe
					7 044J

COMMENTS: "NEW LOCK"

WELL MONITORING/SAMPLING FIELD DATA SHEET.

CHEVRON Facility# 9-2029 Job#: 3810911

Address: 890 W. MacArthur Date: 6.7.02

City: Oakland Sampler: FT

Well ID MW-4 Well Condition: GOOD

Well Diameter 2 in. Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 24.64 ft.

Depth to Water 8.52 ft.

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

16.12 X VF .17 = 2.74 X 3 (case volume) = Estimated Purge Volume: 8.22 (gal.)

Purge Equipment: Disposable Bailer, Bailer, (Stack), Suction, Grundfos, Other:

Sampling Equipment: (Disposable Bailer), Bailer, Pressure Bailer, Grab Sample, Other:

Starting Time: 11:36 Weather Conditions: SUNNY

Sampling Time: 11:53 Water Color: CLOUDY/LT GREY Odor: YES

Purging Flow Rate: 1.5 gpm. Sediment Description: LITE SILT

Did well de-water? NO If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:38	2.5	7.21	380 +100	21.4			
11:40	5.0	7.25	361	20.2			
11:42	8.0	7.23	359	20.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	(6) X VOA VIAL	Y	HCL	LANCASTER	TPH(G)/btex/mtbe
					7 DAYS

COMMENTS: "NEW LOCK"

9/97-fieldat.frm

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

Acct. #: 10905 | For Lancaster Laboratories use only Sample #: 393384-B | SCR#:

061002-004

Facility #: 9-2029 Job #386911 Global ID NONE
Site Address: 890 WEST MACARTHUR BLVD., OAKLAND, CA
Chevron PM: Karen Streich Lead Consultant: Delta/G-R
Consultant/Office: G-R Inc., 6747 Sierra Ct, Dublin, CA 94568
Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)
Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
Sampler: FRANK TENNINONI
Service Order #: ☐ Non SAR:

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy s on highest hit
☐ Run ____ oxy s on all hits

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Water	Oil ☐ Air ☐	Total Number of Containers	Analyses Requested / Preservation Codes: BTEX + MTBE 8260 ☐ 8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates (8260)	Lead 7420 ☐ 7421 ☐
QA	6.7.02					W		2	X	X				
MW-1		1049	X					6	X	X			X	
MW-2		1120	X					6	X	X			X	
MW-3		1226	X					6	X	X			X	
MW-4		1153	X					6	X	X			X	

Comments / Remarks

Turnaround Time Requested (TAT) (please circle)
STD. TAT | 72 hour | 48 hour | 24 hour | 4 day | 5 day

Data Package Options (please circle if required)
QC Summary | Type I — Full | Type VI (Raw Data) | ☐ Coelt Deliverable not needed | WIP (RWQCB) | Disk

	Date	Time		Date	Time
Relinquished by:	6.8.02		Received by:	6/8/02	1510
Relinquished by:	6/8/02	1310	Received by:	6-10-02	1310
Relinquished by:	6/10/02	1530	Received by: Airborne	6/10/02	
Relinquished by Commercial Carrier: UPS FedEx Other			Received by:	6/11/02	0830
Temperature Upon Receipt 2.5-3.5°C			Custody Seals Intact? Yes No		

3460 Rev. 7/30/01

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

925-842-8582

Prepared by:

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

SAMPLE GROUP

The sample group for this submittal is 810647. Samples arrived at the laboratory on Tuesday, June 11, 2002. The PO# for this group is 99011184 and the release number is STREICH.

Client Description			Lancaster Labs Number
QA-T-020607	NA	Water	3833084
MW-1-W-020607	Grab	Water	3833085
MW-2-W-020607	Grab	Water	3833086
MW-3-W-020607	Grab	Water	3833087
MW-4-W-020607	Grab	Water	3833088

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

Lancaster Laboratories
Where quality is a science.

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

Respectfully Submitted,

Steven A. Skiles
Sr. Chemist

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

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833084

Collected:06/07/2002 00:00

Account Number: 10905

Submitted: 06/11/2002 08:30
Reported: 06/17/2002 at 17:07
Discard: 07/18/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

QA-T-020607 NA Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA QA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	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.					
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	1634-04-4	N.D.	2.5	ug/l	1
	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.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	06/12/2002 15:47	Melissa-Ann S McAlpine	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	06/12/2002 15:47	Melissa-Ann S McAlpine	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2002 15:47	Melissa-Ann S McAlpine	n.a.

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

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

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833085

Collected:06/07/2002 10:49 by FT

Account Number: 10905

Submitted: 06/11/2002 08:30
Reported: 06/17/2002 at 17:07
Discard: 07/18/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-1-W-020607 Grab Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA MW-1

029M1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	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.					
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	1634-04-4	N.D.	2.5	ug/l	1
	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.					
01595	Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	2.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	2.	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	2.	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

#=Laboratory Method Detection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

ACIL
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833085

Collected:06/07/2002 10:49 by FT

Account Number: 10905

Submitted: 06/11/2002 08:30
Reported: 06/17/2002 at 17:07
Discard: 07/18/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-1-W-020607 Grab Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA MW-1

029M1

01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	06/12/2002 16:22	Melissa-Ann S McAlpine	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	06/12/2002 16:22	Melissa-Ann S McAlpine	1
01595	Oxygenates by 8260B	SW-846 8260B	1	06/12/2002 19:18	Nicole S Lamoreaux	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2002 16:22	Melissa-Ann S McAlpine	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/12/2002 19:18	Nicole S Lamoreaux	n.a.

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833086

Collected:06/07/2002 11:20 by FT

Account Number: 10905

Submitted: 06/11/2002 08:30
Reported: 06/17/2002 at 17:07
Discard: 07/18/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-2-W-020607 Grab Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA MW-2

029M2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	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.					
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	1634-04-4	N.D.	2.5	ug/l	1
	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.					
01595	Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	2.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	2.	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	2.	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

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

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833086

Collected:06/07/2002 11:20 by FT Account Number: 10905

Submitted: 06/11/2002 08:30
Reported: 06/17/2002 at 17:07
Discard: 07/18/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-2-W-020607 Grab Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA MW-2

029M2

01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	06/12/2002 16:57	Melissa-Ann S McAlpine	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	06/12/2002 16:57	Melissa-Ann S McAlpine	1
01595	Oxygenates by 8260B	SW-846 8260B	1	06/12/2002 04:17	Marla S Lord	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2002 16:57	Melissa-Ann S McAlpine	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/12/2002 04:17	Marla S Lord	n.a.

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

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

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833087

Collected:06/07/2002 12:26 by FT

Account Number: 10905

Submitted: 06/11/2002 08:30
Reported: 06/17/2002 at 17:07
Discard: 07/18/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-3-W-020607 Grab Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA MW-3

029M3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	14,000.	250.	ug/l	5
	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.					
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	630.	1.0	ug/l	5
00777	Toluene	108-88-3	8.8	1.0	ug/l	5
00778	Ethylbenzene	100-41-4	1,200.	1.0	ug/l	5
00779	Total Xylenes	1330-20-7	160.	3.0	ug/l	5
00780	Methyl tert-Butyl Ether	1634-04-4	520.	2.5	ug/l	5
	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.					
01595	Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	490.	5.0	ug/l	10
02011	di-Isopropyl ether	108-20-3	N.D. #	5.0	ug/l	10
02013	Ethyl t-butyl ether	637-92-3	N.D. #	5.0	ug/l	10
02014	t-Amyl methyl ether	994-05-8	11.	5.0	ug/l	10
02015	t-Butyl alcohol	75-65-0	230.	100.	ug/l	10
05402	1,2-Dichloroethane	107-06-2	N.D. #	5.0	ug/l	10
05412	1,2-Dibromoethane	106-93-4	N.D. #	5.0	ug/l	10
	The reporting limits for the GC/MS volatile compounds were raised due to the level of non-target compounds.					

State of California Lab Certification No. 2116

Laboratory Chronicle

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833087

Collected:06/07/2002 12:26 by FT Account Number: 10905

Submitted: 06/11/2002 08:30 ChevronTexaco
Reported: 06/17/2002 at 17:07 6001 Bollinger Canyon Rd L4310
Discard: 07/18/2002 San Ramon CA 94583
MW-3-W-020607 Grab Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA MW-3

029M3

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	06/13/2002 05:13	Anastasia Papadoplos	5
08214	BTEX, MTBE (8021)	SW-846 8021B	1	06/13/2002 05:13	Anastasia Papadoplos	5
01595	Oxygenates by 8260B	SW-846 8260B	1	06/12/2002 23:15	Nicole S Lamoreaux	10
01146	GC VOA Water Prep	SW-846 5030B	1	06/13/2002 05:13	Anastasia Papadoplos	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/12/2002 23:15	Nicole S Lamoreaux	n.a.

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833088

Collected:06/07/2002 11:53 by FT

Account Number: 10905

Submitted: 06/11/2002 08:30
Reported: 06/17/2002 at 17:07
Discard: 07/18/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-4-W-020607 Grab Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA MW-4

029M4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	7,300.	250.	ug/l	5
	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.					
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	170.	1.0	ug/l	5
00777	Toluene	108-88-3	2.7	1.0	ug/l	5
00778	Ethylbenzene	100-41-4	280.	1.0	ug/l	5
00779	Total Xylenes	1330-20-7	21.	3.0	ug/l	5
00780	Methyl tert-Butyl Ether	1634-04-4	200.	2.5	ug/l	5
	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.					
01595	Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	120.	2.	ug/l	2
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	2
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	2
02014	t-Amyl methyl ether	994-05-8	14.	2.	ug/l	2
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	2
05402	1,2-Dichloroethane	107-06-2	N.D.	2.	ug/l	2
05412	1,2-Dibromoethane	106-93-4	N.D.	2.	ug/l	2
	The reporting limits for the GC/MS volatile compounds were raised due to the level of non-target compounds.					

State of California Lab Certification No. 2116

Laboratory Chronicle

#=Laboratory Method Detection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

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

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3833088

Collected:06/07/2002 11:53 by FT

Account Number: 10905

Submitted: 06/11/2002 08:30
Reported: 06/17/2002 at 17:07
Discard: 07/18/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-4-W-020607 Grab Water
Facility# 92029 Job# 386911 GRD
890 W MACARTHUR BLVD NA MW-4

029M4

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	06/13/2002 08:08	Anastasia Papadoplos	5
08214	BTEX, MTBE (8021)	SW-846 8021B	1	06/13/2002 08:08	Anastasia Papadoplos	5
01595	Oxygenates by 8260B	SW-846 8260B	1	06/13/2002 01:45	Marla S Lord	2
01146	GC VOA Water Prep	SW-846 5030B	1	06/13/2002 08:08	Anastasia Papadoplos	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2002 01:45	Marla S Lord	n.a.

#=Laboratory MethodDetection Limit Exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

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

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: ChevronTexaco
Group Number: 810647
Reported: 06/17/02 at 05:07 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: 02163A55A	Sample number(s): 3833084-3833087							
Benzene	N.D.	0.5	ug/l	98	95	80-118	2	30
Toluene	N.D.	0.5	ug/l	98	96	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	98	96	81-119	2	30
Total Xylenes	N.D.	1.5	ug/l	98	96	82-120	2	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	91	91	79-127	0	30
TPH-GRO - Waters	N.D.	50.	ug/l	89	88	76-126	1	30
Batch number: 02163A55B	Sample number(s): 3833088							
Benzene	N.D.	0.5	ug/l	98	95	80-118	2	30
Toluene	N.D.	0.5	ug/l	98	96	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	98	96	81-119	2	30
Total Xylenes	N.D.	1.5	ug/l	98	96	82-120	2	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	91	91	79-127	0	30
TPH-GRO - Waters	N.D.	50.	ug/l	89	88	76-126	1	30
Batch number: U021621AB	Sample number(s): 3833086							
Methyl t-butyl ether	N.D.	2.	ug/l	96		77-127		
di-Isopropyl ether	N.D.	2.	ug/l	107		74-125		
Ethyl t-butyl ether	N.D.	2.	ug/l	97		74-120		
t-Amyl methyl ether	N.D.	2.	ug/l	91		71-114		
t-Butyl alcohol	N.D.	100.	ug/l	96		59-139		
1,2-Dichloroethane	N.D.	2.	ug/l	113		77-132		
1,2-Dibromoethane	N.D.	2.	ug/l	101		84-119		
Batch number: U021621AC	Sample number(s): 3833085,3833087-3833088							
Methyl t-butyl ether	N.D.	2.	ug/l	96		77-127		
di-Isopropyl ether	N.D.	2.	ug/l	107		74-125		
Ethyl t-butyl ether	N.D.	2.	ug/l	97		74-120		
t-Amyl methyl ether	N.D.	2.	ug/l	91		71-114		
t-Butyl alcohol	N.D.	100.	ug/l	96		59-139		
1,2-Dichloroethane	N.D.	2.	ug/l	113		77-132		
1,2-Dibromoethane	N.D.	2.	ug/l	101		84-119		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 02163A55A	Sample number(s): 3833084-3833087								
Benzene	100		77-131						
Toluene	102		80-128						
Ethylbenzene	101		76-132						
Total Xylenes	101		76-132						
Methyl tert-Butyl Ether	94		61-144						
TPH-GRO - Waters	91		74-132						
Batch number: 02163A55B	Sample number(s): 3833088								
Benzene	100		77-131						
Toluene	102		80-128						
Ethylbenzene	101		76-132						
Total Xylenes	101		76-132						
Methyl tert-Butyl Ether	94		61-144						
TPH-GRO - Waters	91		74-132						
Batch number: U021621AB	Sample number(s): 3833086								

*- 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.

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

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/17/02 at 05:07 PM

Group Number: 810647

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Methyl t-butyl ether	(2)	(2)	69-134	3	30				
di-Isopropyl ether	106	110	68-133	4	30				
Ethyl t-butyl ether	94	97	73-123	4	30				
t-Amyl methyl ether	86	91	69-118	3	30				
t-Butyl alcohol	92	99	51-148	6	30				
1,2-Dichloroethane	115	115	75-141	0	30				
1,2-Dibromoethane	100	101	78-120	1	30				
Batch number: U021621AC	Sample number(s): 3833085,3833087-3833088								
Methyl t-butyl ether	(2)	(2)	69-134	3	30				
di-Isopropyl ether	106	110	68-133	4	30				
Ethyl t-butyl ether	94	97	73-123	4	30				
t-Amyl methyl ether	86	91	69-118	3	30				
t-Butyl alcohol	92	99	51-148	6	30				
1,2-Dichloroethane	115	115	75-141	0	30				
1,2-Dibromoethane	100	101	78-120	1	30				

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters
Batch number: 02163A55A

	Trifluorotoluene-F	Trifluorotoluene-P
3833084	91	99
3833085	90	99
3833086	91	99
3833087	106	114
Blank	90	99
LCS	100	98
LCSD	101	98
MS	104	99
Limits:	67-135	71-130

Analysis Name: TPH-GRO - Waters
Batch number: 02163A55B

	Trifluorotoluene-F	Trifluorotoluene-P
3833088	113	120
Blank	88	100
LCS	100	98
LCSD	101	98
MS	104	99
Limits:	67-135	71-130

Analysis Name: Oxygenates by 8260B
Batch number: U021621AB

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3833086	97	101	98	93
Blank	94	94	99	94
LCS	99	94	102	99
MS	94	93	100	99
MSD	91	92	101	100

*- 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.

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

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/17/02 at 05:07 PM

Group Number: 810647

Surrogate Quality Control

Limits:	86-118	80-120	88-110	86-115

Analysis Name: Oxygenates by 8260B
Batch number: U021621AC

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3833085	97	91	99	97
3833087	98	95	99	99
3833088	91	89	103	100
Blank	95	92	99	96
LCS	99	94	102	99
MS	94	93	100	99
MSD	91	92	101	100
Limits:	86-118	80-120	88-110	86-115

*- 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.

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