R0221 Barney DH

GETTLER-RYAN INC.

TRANSMITTAL

March 14, 2003
G-R #386456

TO: Mr. Robert Foss
Cambria Environmental Technology, Inc.
2680 Bishop Drive, Suite 290
San Ramon, CA 94583

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
#9-0338
5500 Telegraph Avenue
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	March 10, 2003	Groundwater Monitoring and Sampling Report First Quarter - Event of February 4, 2003

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 ***March 28, 2003***, at which time the final report will be distributed to the following:

cc: Mr. Larry Seto, Alameda County Health Care Services, Dept. of Environmental Health, 1153 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577

Enclosures

trans/9-0338-ks

GETTLER-RYAN INC.

March 10, 2003
G-R Job #386456

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

RE: First Quarter Event of February 4, 2003
Groundwater Monitoring & Sampling Report
Chevron Service Station #9-0338
5500 Telegraph 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).

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.

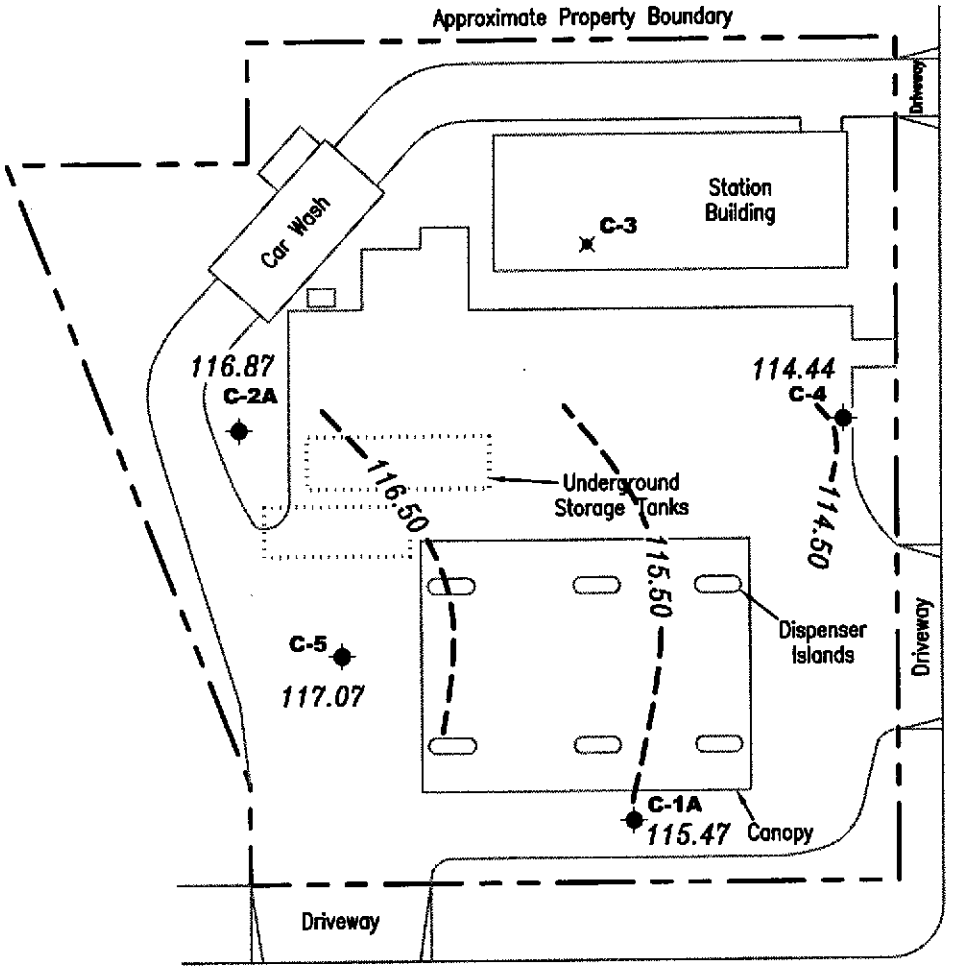
Sincerely,

Shamarie Noreau
-For-
Deanna L. Harding
Project Coordinator

Robert C. Mallory
Registered Geologist, No. 7285

REGISTERED GEOLOGIST
ROBERT C. MALLORY
No. 7285
Exp. 01/04
STATE OF CALIFORNIA

Figure 1: Potentiometric Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results – Oxygenate Compounds
Table 3: Groundwater Analytical Results
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports



EXPLANATION

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

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

N

0 40

Scale in Feet

Source: Figure modified from drawing provided by RRM engineering contracting firm.

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

POTENTIOMETRIC MAP
Chevron Service Station #9-0338
5500 Telegraph Avenue
Oakland, California

FIGURE 1

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
386456		February 4, 2003	

FILE NAME: P:\ENVIRO\CHEVRON\9-0338\Q03-9-0338.DWG | Layout Tab: Pot1

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-0338

5500 Telegraph Avenue

Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-1A									
05/27/99	123.27	115.93	7.34	9,100	40	25	560	1,900	35
09/02/99	123.27	115.72	7.55	9,700	24	18.4	626	754	66
10/27/99	123.27	115.84	7.43	4,740	<10	<10	276	270	<100/66.6[2]
02/11/00	123.27	115.27	8.00	5,100	17.5	<10	182	333	<50
05/10/00	123.27	116.65	6.62	11,000[1]	110	170	480	980	<500
07/27/00	123.27	115.14	8.13	6,200[1]	<50	<50	540	150	<250
11/21/00	123.27	115.60	7.67	6,500[1]	19	<10	450	360	<50
02/05/01	123.27	115.91	7.36	5,270	1.43	1.04	326	269	15.0
05/07/01	123.27	115.90	7.37	3,000[1]	37	27	520	490	63
08/06/01	123.27	115.15	8.12	3,300[1]	3.1	3.8	160	100	47
11/12/01	123.27	116.42	6.85	5,100	1.9	<2.0	230	230	3.1
02/11/02	123.27	114.99	8.28	820	1.3	<0.50	21	7.7	5.7/4[3]
05/13/02	123.27	114.30	8.97	1,800	<1.0	<0.50	26	8.6	7.5
08/09/02	123.27	114.33	8.94	2,100	1.7	<5.0	29	<20	<2.5
11/07/02	123.27	114.37	8.90	2,600	<2.0	1.0	13	54	7.9
02/04/03	**123.27**	**115.47**	**7.80**	**640**	**<2.0**	**<2.0**	**4.4**	**6.3**	**7.8**
C-2A									
05/27/99	125.89	119.53	6.36	<50	<0.5	<0.5	<0.5	<0.5	44
09/02/99	125.89	117.04	8.85	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/27/99	125.89	116.65	9.24	<50	<0.5	<0.5	<0.5	<0.5	8.75/7.77[2]
02/11/00	125.89	117.64	8.25	<50	<0.5	<0.5	<0.5	<0.5	17.8
05/10/00	125.89	117.46	8.43	<50	<0.50	<0.50	<0.50	<0.50	3.2
07/27/00	125.89	116.34	9.55	<50	<0.50	<0.50	<0.50	<0.50	20
11/21/00	125.89	116.39	9.50	<50	<0.50	<0.50	<0.50	<0.50	<50
02/05/01	125.89	116.50	9.39	<50.0	<0.500	<0.500	<0.500	<0.500	3.36
05/07/01	125.89	116.29	9.60	<50	<0.50	<0.50	<0.50	<0.50	<2.5
08/06/01	125.89	115.72	10.17	<50	<0.50	0.59	<0.50	1.4	12
11/12/01	125.89	115.28	10.61	<50	<0.50	<0.50	<0.50	<1.5	3.4
02/11/02	125.89	117.31	8.58	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[3]
05/13/02	125.89	115.76	10.13	1,100	17	83	21	99	29

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-0338
5500 Telegraph Avenue
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-2A (cont)									
08/09/02	125.89	116.76	9.13	<50	<0.50	<0.50	<0.50	<1.5	<2.5
11/07/02	125.89	114.37	11.52	<50	<0.50	<0.50	<0.50	<1.5	7.5
02/04/03	**125.89**	**116.87**	**9.02**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.5**	**<2.5**
C-4									
05/27/99	125.40	115.34	10.06	<50	<0.5	<0.5	<0.5	<0.5	44
09/02/99	125.40	114.89	10.51	<50	<0.5	<0.5	<0.5	<0.5	3.1
10/27/99	125.40	115.03	10.37	<50	<0.5	<0.5	<0.5	<0.5	<5.0/<2.0[2]
02/11/00	125.40	114.48	10.92	<50	<0.5	<0.5	<0.5	<0.5	2.79
05/10/00	125.40	116.28	9.12	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/27/00	125.40	113.50	11.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5
11/21/00	125.40	113.76	11.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5
02/05/01	125.40	115.21	10.19	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
05/07/01	125.40	114.45	10.95	<50	<0.50	<0.50	<0.50	<0.50	<2.5
08/06/01	125.40	113.75	11.65	<50	<0.50	0.52	<0.50	1.1	3.2
11/12/01	125.40	113.69	11.71	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/02[4]	125.40	114.45	10.95	<50	<0.50	<0.50	<0.50	<1.5	72/62[3]
05/13/02	125.40	113.64	11.76	<50	<0.50	<0.50	<0.50	<1.5	21
08/09/02	125.40	114.50	10.90	<50	<0.50	<0.50	<0.50	<1.5	4.9
11/07/02	125.40	113.72	11.68	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/04/03	**125.40**	**114.44**	**10.96**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.5**	**81**
C-5									
05/27/99	124.15	117.54	6.61	2,800	350	73	32	280	2,200/2,500[2]
09/02/99	124.15	116.27	7.88	570	9.0	<2.5	<2.5	<2.5	890
10/27/99	124.15	116.90	7.25	543	4.22	<0.5	3.28	<0.5	845/1,080[2]
02/11/00	124.15	117.41	6.74	488	0.56	<0.5	1.45	<0.5	565
05/10/00	124.15	118.36	5.79	140[1]	3.6	1.2	0.53	2.0	380
07/27/00	124.15	116.92	7.23	260[1]	1.4	1.2	0.93	2.8	460
11/21/00	124.15	117.47	6.68	130[1]	0.74	0.73	<0.50	<0.50	350
02/05/01	124.15	117.74	6.41	111	<1.00	<1.00	<1.00	<1.00	197

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-0338
5500 Telegraph Avenue
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-5 (cont)									
05/07/01	124.15	117.91	6.24	100[1]	2.1	1.0	<0.50	0.80	210
08/06/01	124.15	116.74	7.41	94[1]	0.84	1.2	0.54	1.5	360
11/12/01	124.15	116.82	7.33	58	<0.50	<0.50	<0.50	<1.5	280
02/11/02	124.15	117.90	6.25	<50	<0.50	<0.50	<0.50	<1.5	150/140[3]
05/13/02	124.15	116.13	8.02	79	7.7	1.2	2.6	5.5	180
08/09/02	124.15	113.13	11.02	<50	<0.50	<0.50	<0.50	<1.5	220
11/07/02	124.15	114.51	9.64	<50	<0.50	<0.50	<0.50	<1.5	300
02/04/03	**124.15**	**117.07**	**7.08**	**2,300**	**210**	**4.4**	**250**	**53**	**490**
TRIP BLANK									
05/27/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/02/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/27/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
02/11/00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/10/00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/27/00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
11/21/00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
02/05/01	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
05/07/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
08/06/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA									
11/12/01	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
05/13/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
11/07/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/04/03	**--**	**--**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.5**	**<2.5**

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-0338

5500 Telegraph Avenue

Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to May 10, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing
(ft.) = Feet
GWE = Groundwater Elevation
(msl) = Mean sea level
DTW = Depth to Water

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/Trip Blank

1 Laboratory report indicates gasoline C6-C12.

2 Confirmation run.

3 MTBE by EPA Method 8260.

4 Total Petroleum Hydrocarbons as Diesel (TPH-D) was less than the reporting limit.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Chevron Service Station #9-0338
5500 Telegraph Avenue
Oakland, California

WELL ID	DATE	TBA *(ppb)*	MTBE *(ppb)*	DIPE *(ppb)*	ETBE *(ppb)*	TAME *(ppb)*
C-1A	02/11/02	<100	4	<2	<2	<2
C-2A	02/11/02	<100	<2	<2	<2	<2
C-4	02/11/02	<100	62	<2	<2	<2
C-5	02/11/02	<100	140	<2	<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
(ppb) = Parts per billion

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3

Groundwater Analytical Results

Chevron Service Station #9-0338
5500 Telegraph Avenue
Oakland, California

WELL ID	DATE	Cadmium *(ppb)*	Chromium *(ppb)*	Lead *(ppb)*	Nickel *(ppb)*	Zinc *(ppb)*	TOG *(ppb)*	HVOCs *(ppb)*
C-4	02/11/02	<10.0	80.5	16.7	126	143	<320	<0.20-<0.50

EXPLANATIONS:

TOG = Total Oil and Grease
HVOCs = Halogenated Volatile Oraganic Compounds
(ppb) = Parts per billion

Note: All HVOCs were not detected (ND) unless otherwise noted.

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, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable 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 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.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-0338 Job Number: 386456
Site Address: 5500 Telegraph Avenue Event Date: 2.4.03 (inclusive)
City: Oakland, CA Sampler: FT

Well ID C-1A Date Monitored: 2-4-03 Well Condition: OK
Well Diameter 2 in.
Total Depth 19.45 ft.
Depth to Water 7.80 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

11.65 xVF .17 = 1.98 x3 (case volume) = Estimated Purge Volume: 5.94 gal.

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Other:

Time Started: (2400 hrs)
Time Bailed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 2:48 Weather Conditions: SUNNY
Sample Time/Date: 3:06 / 2.4.03 Water Color: CLEAR Odor: YES
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? NO If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (u mhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
2:52	2.0	7.86	497	16.8		
2:56	4.0	7.82	492	17.2		
3:00	6.0	7.69	502	17.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
C-1A	3 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8021)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Size:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-0338 Job Number: 386456
Site Address: 5500 Telegraph Avenue Event Date: 2.4.03 (inclusive)
City: Oakland, CA Sampler: FT

Well ID C-2A Date Monitored: 2.4.03 Well Condition: OK
Well Diameter 2 in.
Total Depth 20.25 ft.
Depth to Water 9.02 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

11.23 xVF .17 = 1.90 x3 (case volume) = Estimated Purge Volume: 5.72 gal.

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Other:

Time Started: (2400 hrs)
Time Bailed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 1:11 Weather Conditions: SUNNY
Sample Time/Date: 1:26 / 2.4.03 Water Color: CLEAR Odor: NO
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? NO If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
1:14	2.0	7.80	570	16.2		
1:18	4.0	7.73	584	16.5		
1:21	6.0	7.62	593	16.7		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
C-2A	3 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8021)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Size:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-0338 Job Number: 386456
Site Address: 5500 Telegraph Avenue Event Date: 2.4.03 (inclusive)
City: Oakland, CA Sampler: FT

Well ID C-4 Date Monitored: 2.4.03 Well Condition: OK!
Well Diameter 2 in.
Total Depth 19.49 ft.
Depth to Water 10.96 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

8.53 xVF .17 = 1.45 x3 (case volume) = Estimated Purge Volume: 4.35 gal.

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Other:

Time Started: (2400 hrs)
Time Bailed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 1:42 Weather Conditions: SUNNY
Sample Time/Date: 1:56 / 2.4.03 Water Color: CLEAR Odor: NO
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? NO If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
1:45	1.5	7.55	534	17.3		
1:48	3.0	7.52	536	17.6		
1:51	4.0	7.49	554	17.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
C-4	3 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8021)

COMMENTS:

Add/Replaced Lock: ✓ Add/Replaced Plug: Size:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-0338 Job Number: 386456
Site Address: 5500 Telegraph Avenue Event Date: 2.4.03 (inclusive)
City: Oakland, CA Sampler: FT

Well ID C-5 Date Monitored: 2.4.03 Well Condition: OK
Well Diameter 2 in.
Total Depth 20.24 ft.
Depth to Water 7.08 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

13.16 xVF .17 = 2.23 x3 (case volume) = Estimated Purge Volume: 6.71 gal.

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Other:

Time Started: (2400 hrs)
Time Bailed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 2:11 Weather Conditions: SUNNY
Sample Time/Date: 2:30 / 2.4.03 Water Color: CLOUDY | TAN Odor: NO
Purging Flow Rate: 1 gpm. Sediment Description: S. SILTY
Did well de-water? NO If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
2:16	2.5	7.40	802	16.3		
2:21	5.0	7.36	806	16.7		
2:25	7.0	7.28	812	17.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
C-5	3 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8021)

COMMENTS:

Add/Replaced Lock: ✓ Add/Replaced Plug: ✓ Size: 2"

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

020503-011

For Lancaster Laboratories use only
Acct. #: 10904 Sample #: 3990395-99 SCR#: gr 4 840466

Facility #: 9-0338 Job #386456 Global ID#T0600100347
Site Address: 5500 TELEGRAPH AVE., OAKLAND, CA
Chevron PM: KS Lead Consultant: CAMBRIA
Consultant/Office: G-R, Inc., 6747 Sierra Court, Dublin, Ca 94568
Consultant Prj. Mgr.: Deanna L. Harding (Deanna@grinc.com)
Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
Sampler: FRANK TERRINONI
Service Order #: ☐ Non SAR:

Analyses Requested / **Preservation Codes**: H, H

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water (☐ Potable ☐ NPDES)	Oil ☐ Air ☐	Total Number of Containers	BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	___ Oxygenates	Lead 7420 ☐ 7421 ☐
QA	2.4.03					W		2	X	X				
C-1A	↓	1506	X			↓		3	X	X				
C-2A	↓	1326	X			↓		3	X	X				
C-4	↓	1356	X			↓		3	X	X				
C-5	↓	1430	X			↓		3	X	X				

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

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

Relinquished by:	Date	Time	Received by:	Date	Time
F. Terrinoni	2.4.03		D Vano	2/5	2/5/03
D Vano	2/5/03	1335	Bernardo Amaya	2/5/03	1335
Bernardo Amaya	2/5/03	1630	Airborne	2/5/03	
Relinquished by Commercial Carrier: UPS FedEx Other Airborne			Kathy Rinkley	2-6-03	0930

Temperature Upon Receipt 3.0 & 2.2 °C
Custody Seals Intact? Yes (No) (N/A)

3460 Rev. 7/30/01

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

Analysis Report

Lancaster Laboratories

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 840466. Samples arrived at the laboratory on Thursday, February 06, 2003. The PO# for this group is 99011184 and the release number is STREICH.

Client Description			Lancaster Labs Number
QA-T-030204	NA	Water	3990395
C-1A-W-030204	Grab	Water	3990396
C-2A-W-030204	Grab	Water	3990397
C-4-W-030204	Grab	Water	3990398
C-5-W-030204	Grab	Water	3990399

1 COPY TO Cambria C/O Gettler- Ryan Attn: Deanna L. Harding

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

Respectfully Submitted,

Victoria M. Martell
Chemist

MEMBER ACIL
Lancaster Laboratories, Inc.
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PO Box 12425
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717-656-2300 Fax: 717-656-2681

CASE NARRATIVE

Prepared For:

Karen Streich
ChevronTexaco
6001 Bollinger Canyon Road L4310
San Ramon, CA 94583-0904

Prepared By:

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

SAMPLE GROUP

The sample group for this submittal is 840466. Samples arrived at the laboratory on Thursday, February 06, 2003.

METHODOLOGY

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

COMMENTS

The relative percent difference for TPH-GRO between the MS/MSD associated with samples C-4 and C-5 from Facility 90338 was outside QC criteria. This compound met RPD criteria in the LCS/LCSD analyses.

Analysis Report

Lancaster Laboratories

Lancaster Laboratories Sample No. WW 3990395

Collected:02/04/2003 00:00

Account Number: 10904

Submitted: 02/06/2003 09:15
Reported: 02/24/2003 at 10:01
Discard: 03/27/2003

ChevronTexaco
6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

QA-T-030204 NA Water GRD
Facility# 90338 Job# 386456
5500 Telegraph Ave T0600100347 QA

TELQA

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.					
02159	BTEX, MTBE					
02161	Benzene	71-43-2	N.D.	0.50	ug/l	1
02164	Toluene	108-88-3	N.D.	0.50	ug/l	1
02166	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
02171	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
02172	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	02/07/2003 10:07	Linda C Pape	1
02159	BTEX, MTBE	SW-846 8021B	1	02/07/2003 10:07	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	02/07/2003 10:07	Linda C Pape	n.a.

Analysis Report

Lancaster Laboratories

Lancaster Laboratories Sample No. WW 3990396

Collected:02/04/2003 15:06 by FT

Account Number: 10904

Submitted: 02/06/2003 09:15
Reported: 02/24/2003 at 10:01
Discard: 03/27/2003

ChevronTexaco
6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

C-1A-W-030204 Grab Water
Facility# 90338 Job# 386456 GRD
5500 Telegraph Ave T0600100347 C-1A

TEL1A

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.	640.	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.					
02159	BTEX, MTBE					
02161	Benzene	71-43-2	N.D.	2.0	ug/l	1
02164	Toluene	108-88-3	N.D.	2.0	ug/l	1
02166	Ethylbenzene	100-41-4	4.4	0.50	ug/l	1
02171	Total Xylenes	1330-20-7	6.3	1.5	ug/l	1
02172	Methyl tert-Butyl Ether	1634-04-4	7.8	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.					

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

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	1	02/07/2003 17:11	Linda C Pape	1
02159	BTEX, MTBE	Method SW-846 8021B	1	02/07/2003 17:11	Linda C Pape	1

Lancaster Laboratories

Lancaster Laboratories Sample No. WW 3990396

Collected:02/04/2003 15:06 by FT

Account Number: 10904

Submitted: 02/06/2003 09:15
Reported: 02/24/2003 at 10:01
Discard: 03/27/2003

ChevronTexaco
6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

C-1A-W-030204 Grab Water
Facility# 90338 Job# 386456 GRD
5500 Telegraph Ave T0600100347 C-1A

TEL1A

01146	GC VOA Water Prep	SW-846 5030B	1	02/07/2003 17:11	Linda C Pape	n.a.

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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories

Lancaster Laboratories Sample No. WW 3990397

Collected:02/04/2003 13:26 by FT

Account Number: 10904

Submitted: 02/06/2003 09:15
Reported: 02/24/2003 at 10:01
Discard: 03/27/2003

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

C-2A-W-030204 Grab Water
Facility# 90338 Job# 386456 GRD
5500 Telegraph Ave T0600100347 C-2A

TEL2A

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.					
02159	BTEX, MTBE					
02161	Benzene	71-43-2	N.D.	0.50	ug/l	1
02164	Toluene	108-88-3	N.D.	0.50	ug/l	1
02166	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
02171	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
02172	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	02/07/2003 17:44	Linda C Pape	1
02159	BTEX, MTBE	SW-846 8021B	1	02/07/2003 17:44	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	02/07/2003 17:44	Linda C Pape	n.a.

Analysis Report

Lancaster Laboratories

Lancaster Laboratories Sample No. WW 3990398

Collected:02/04/2003 13:56 by FT

Account Number: 10904

Submitted: 02/06/2003 09:15
Reported: 02/24/2003 at 10:01
Discard: 03/27/2003
C-4-W-030204 Grab Water
Facility# 90338 Job# 386456 GRD
5500 Telegraph Ave T0600100347 C-4

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

TELC4

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. The relative percent difference for TPH-GRO between the MS/MSD associated with this sample was outside QC criteria. This compound met RPD criteria in the LCS/LCSD analyses.					
02159	BTEX, MTBE					
02161	Benzene	71-43-2	N.D.	0.50	ug/l	1
02164	Toluene	108-88-3	N.D.	0.50	ug/l	1
02166	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
02171	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
02172	Methyl tert-Butyl Ether	1634-04-4	81.	2.5	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
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	02/07/2003 18:42	K. Robert Caulfeild-James	1
02159	BTEX, MTBE	SW-846 8021B	1	02/07/2003 18:42	K. Robert Caulfeild-James	1
01146	GC VOA Water Prep	SW-846 5030B	1	02/07/2003 18:42	K. Robert Caulfeild-James	n.a.

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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories

Lancaster Laboratories Sample No. WW 3990399

Collected:02/04/2003 14:30 by FT Account Number: 10904

Submitted: 02/06/2003 09:15 ChevronTexaco
Reported: 02/24/2003 at 10:01 6001 Bollinger Canyon Rd L4310
Discard: 03/27/2003
C-5-W-030204 Grab Water San Ramon CA 94583
Facility# 90338 Job# 386456 GRD
5500 Telegraph Ave T0600100347 C-5

TELC5

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.	2,300.	50.	ug/l	1
	The relative percent difference for TPH-GRO between the MS/MSD associated with this sample was outside QC criteria. This compound met RPD criteria in the LCS/LCSD analyses.					
02159	BTEX, MTBE					
02161	Benzene	71-43-2	210.	0.50	ug/l	1
02164	Toluene	108-88-3	4.4	0.50	ug/l	1
02166	Ethylbenzene	100-41-4	250.	0.50	ug/l	1
02171	Total Xylenes	1330-20-7	53.	1.5	ug/l	1
02172	Methyl tert-Butyl Ether	1634-04-4	490.	2.5	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
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	02/07/2003 19:15	K. Robert Caulfeild-James	1
02159	BTEX, MTBE	SW-846 8021B	1	02/07/2003 19:15	K. Robert Caulfeild-James	1
01146	GC VOA Water Prep	SW-846 5030B	1	02/07/2003 19:15	K. Robert Caulfeild-James	n.a.

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

Lancaster Laboratories

Quality Control Summary

Client Name: ChevronTexaco
Group Number: 840466
Reported: 02/24/03 at 10:01 AM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 03037A51A	Sample number(s): 3990395							
TPH-GRO - Waters	N.D.	50.	ug/l	100	109	70-130	9	30
Benzene	N.D.	.5	ug/l	95	97	80-118	2	30
Toluene	N.D.	.5	ug/l	94	95	82-119	1	30
Ethylbenzene	N.D.	.5	ug/l	92	93	81-119	1	30
Total Xylenes	N.D.	1.5	ug/l	95	95	82-120	0	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	91	90	79-127	1	30
Batch number: 03037A51B	Sample number(s): 3990396-3990397							
TPH-GRO - Waters	N.D.	50.	ug/l	100	109	70-130	9	30
Benzene	N.D.	.5	ug/l	95	97	80-118	2	30
Toluene	N.D.	.5	ug/l	94	95	82-119	1	30
Ethylbenzene	N.D.	.5	ug/l	92	93	81-119	1	30
Total Xylenes	N.D.	1.5	ug/l	95	95	82-120	0	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	91	90	79-127	1	30
Batch number: 03038A53A	Sample number(s): 3990398-3990399							
TPH-GRO - Waters	N.D.	50.	ug/l	92	95	70-130	2	30
Benzene	N.D.	.5	ug/l	104	94	80-118	10	30
Toluene	N.D.	.5	ug/l	111	101	82-119	9	30
Ethylbenzene	N.D.	.5	ug/l	103	95	81-119	9	30
Total Xylenes	N.D.	1.5	ug/l	104	96	82-120	9	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	94	91	79-127	3	30

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: 03037A51A	Sample number(s): 3990395								
TPH-GRO - Waters	88		70-130						
Benzene	92		67-136						
Toluene	89		78-129						
Ethylbenzene	86		75-133						
Total Xylenes	87		86-132						
Methyl tert-Butyl Ether	84		66-136						
Batch number: 03037A51B	Sample number(s): 3990396-3990397								
TPH-GRO - Waters	88		70-130						
Benzene	92		67-136						
Toluene	89		78-129						

*- 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.

Lancaster Laboratories

Quality Control Summary

Client Name: ChevronTexaco Group Number: 840466
Reported: 02/24/03 at 10:01 AM

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
Ethylbenzene	86		75-133						
Total Xylenes	87		86-132						
Methyl tert-Butyl Ether	84		66-136						
Batch number: 03038A53A	Sample number(s): 3990398-3990399								
TPH-GRO - Waters	76	112	70-130	39*	30				
Benzene	107	110	67-136	3	20				
Toluene	113	112	78-129	1	30				
Ethylbenzene	105	103	75-133	2	30				
Total Xylenes	105	102	86-132	2	30				
Methyl tert-Butyl Ether	100	105	66-136	4	30				

Surrogate Quality Control

Analysis Name: BTEX, MTBE
Batch number: 03037A51A

	Trifluorotoluene-F	Trifluorotoluene-P
3990395	96	90
Blank	97	90
LCS	97	91
LCSD	99	92
MS	97	92
Limits:	57-146	66-136

Analysis Name: BTEX, MTBE
Batch number: 03037A51B

	Trifluorotoluene-F	Trifluorotoluene-P
3990396	109	92
3990397	95	92
Blank	95	92
LCS	97	91
LCSD	99	92
MS	97	92
Limits:	57-146	66-136

Analysis Name: BTEX, MTBE
Batch number: 03038A53A

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

Lancaster Laboratories

Quality Control Summary

Client Name: ChevronTexaco
Group Number: 840466
Reported: 02/24/03 at 10:01 AM

Surrogate Quality Control

	Trifluorotoluene-F	Trifluorotoluene-P
3990398	95	98
3990399	111	105
Blank	100	95
LCS	98	101
LCSD	95	96
MS	97	104
MSD	96	107
Limits:	57-146	66-136

*- 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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