Environmental Management Company
6001 Bollinger Canyon Rd, L4050
P.O. Box 6012
San Ramon, CA 94583-2324
Tel 925-842-1589
Fax 925-842-8370

Karen Streich
Project Manager

RO2438

January 21, 2004

ChevronTexaco

Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Service Station # 9-2029

Address: 890 West Mac Arthur Blvd., Oakland, California 94608

I have reviewed the attached routine groundwater monitoring report dated January 5, 2004.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Gettler-Ryan, Inc., upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Karen Streich

Karen Streich
Project Manager

Enclosure: Report

RO2438

GETTLER-RYAN INC.

TRANSMITTAL

January 5, 2004
G-R #386911

TO: Mr. Robert Foss
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608

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 94608

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	January 5, 2004	Groundwater Monitoring and Sampling Report Fourth Quarter - Event of December 3, 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 ***January 20, 2004***, 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

Enclosures

trans/9-2029-ks

6747 Sierra Court, Suite J • **Dublin**, CA 94568 • (925) 551-7555 • Fax (925) 551-7888
3140 Gold Camp Drive, Suite 170 • **Rancho Cordova**, CA 95670 • (916) 631-1300 • Fax (916) 631-1317
1364 N. McDowell Blvd., Suite B2 • **Petaluma**, CA 94954 • (707) 789-3255 • Fax (707) 789-3218

GETTLER-RYAN INC.

January 5, 2004
G-R Job #386911

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

RE: Fourth Quarter Event of December 3, 2003
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

6747 Sierra Court, Suite J • **Dublin**, CA 94568 • (925) 551-7555 • Fax (925) 551-7888
3140 Gold Camp Drive, Suite 170 • **Rancho Cordova**, CA 95670 • (916) 631-1300 • Fax (916) 631-1317
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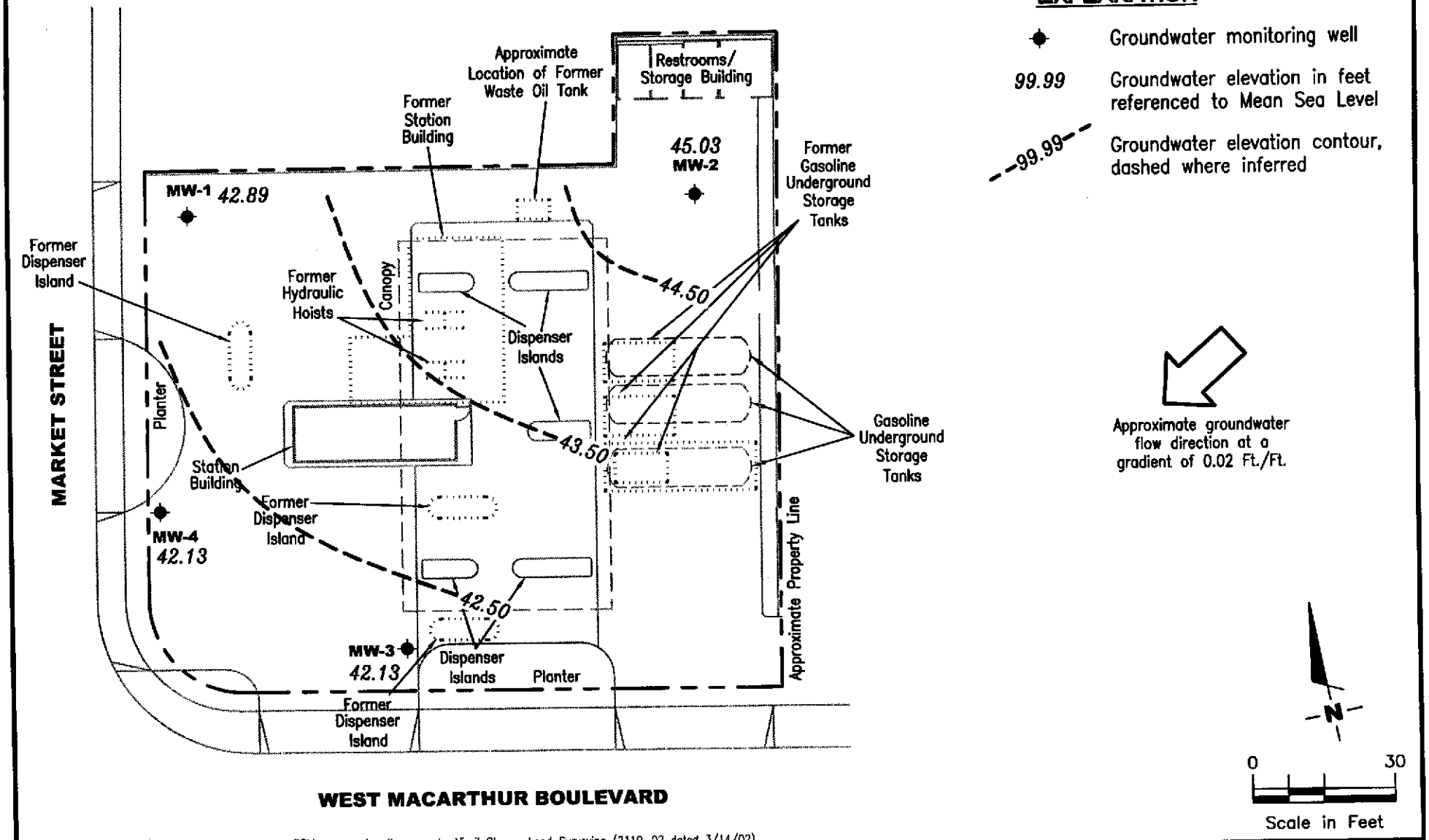

Source: Figure modified from drawing provided by RRM eng. and well survey by Virgil Chavez Land Surveying (2119-02 dated 3/14/02).

FIGURE 1

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

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
386911		December 3, 2003	

FILE NAME: P:\ENVIRO\CHEVRON\9-2029\Q03-9-2029.DWG | Layout Tab: Plot4

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]
	09/13/02	9.28	41.43	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[2]
	12/13/02	8.48	42.23	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[2]
	03/01/03	7.34	43.37	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<0.5[2]
	06/27/03[3]	9.29	41.42	<50	<0.5	0.6	<0.5	<0.5	<0.5
	09/30/03[3]	10.17	40.54	<50	<0.5	0.6	<0.5	<0.5	<0.5
	12/03/03[3]	**7.82**	**42.89**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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]
	09/13/02	9.58	42.99	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[2]
	12/13/02	8.50	44.07	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[2]
	03/01/03	7.00	45.57	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<0.5[2]
	06/27/03[3]	9.59	42.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	09/30/03[3]	10.64	41.93	<50	<0.5	<0.5	<0.5	<0.5	0.7
	12/03/03[3]	**7.54**	**45.03**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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]
	09/13/02	9.73	40.58	3,000	270	3.2	200	11	600/640[2]
	12/13/02	8.60	41.71	24,000	1,100	14	2,400	220	650/540[2]
	03/01/03	6.75	43.56	16,000	500	9.0	1,200	130	460/330[2]
	06/27/03[3]	9.25	41.06	9,500	390	6	450	30	470
	09/30/03[3]	10.31	40.00	2,000	110	1	100	3	710
	12/03/03[3]	**8.18**	**42.13**	**19,000**	**970**	**8**	**2,100**	**85**	**420**

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-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]
	09/13/02	9.86	40.07	5,800	92	4.5	80	14	190/160[2]
	12/13/02	9.42	40.51	10,000	250	2.2	330	19	170/200[2]
	03/01/03	7.33	42.60	12,000	300	4.6	900	110	160/100[2]
	06/27/03[3]	9.62	40.31	7,500	110	2	200	58	130
	09/30/03[3]	11.13	38.80	3,600	18	<1	16	7	520
	12/03/03[3]	**7.80**	**42.13**	**16,000**	**1,000**	**6**	**720**	**52**	**73**
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
	09/13/02	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	12/13/02	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	03/01/03	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	06/27/03[3]	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	09/30/03[3]	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/03[3]	**--**	**--**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

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/Trip Blank

* 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.

3 BTEX and 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	ETHANOL (ppb)	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
	09/13/02	--	<100	<2	<2	<2	<2	<2	<2
	12/13/02	--	<100	<2	<2	<2	<2	<2	<2
	03/01/03	--	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	06/27/03	--	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	09/30/03	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/03	**<50**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-2	03/12/02	--	<100	3	<2	<2	<2	<2	<2
	06/07/02	--	<100	<2	<2	<2	<2	<2	<2
	09/13/02	--	<100	<2	<2	<2	<2	<2	<2
	12/13/02	--	<100	<2	<2	<2	<2	<2	<2
	03/01/03	--	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	06/27/03	--	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	09/30/03	<50	<5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/03	**<50**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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
	09/13/02	--	170	640	<2	<2	8	<2	<2
	12/13/02	--	240	540	<2	<2	29	31	<2
	03/01/03	--	160	330	<0.5	<0.5	10	<0.5	<0.5
	06/27/03	--	200	470	<0.5	<0.5	11	<0.5	<0.5
	09/30/03	<50	120	710	<0.5	<0.5	6	0.7	<0.5
	12/03/03	**<250**	**200**	**420**	**<3**	**<3**	**14**	**<3**	**<3**
MW-4	03/12/02	--	<100	170	<2	<2	13	<2	<2
	06/07/02	--	<100	120	<2	<2	14	<2	<2
	09/13/02	--	<100	160	<2	<2	14	<2	<2
	12/13/02	--	<100	200	<2	<2	17	<2	<2

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-4	03/01/03	--	19	100	<0.5	<0.5	8	<0.5	<0.5
(cont)	06/27/03	--	22	130	<0.5	<0.5	11	<0.5	<0.5
	09/30/03	<100	<10	520	<1	<1	9	<1	<1
	12/03/03	**<50**	**18**	**73**	**<0.5**	**<0.5**	**5**	**<0.5**	**<0.5**

Table 2

Groundwater Analytical Results - Oxygenate Compounds

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

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
-- = Not Analyzed

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, 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 #9-2029 Job Number: 386911
Site Address: 890 West Macarthur Blvd. Event Date: 12-3-03 (inclusive)
City: Oakland, CA Sampler: JDC

Well ID MW-1 Date Monitored: 12-3-03 Well Condition: O.K
Well Diameter 2 in.
Total Depth 24.82 ft.
Depth to Water 7.82 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

17.00 xVF 0.17 = 2.89 x3 (case volume) = Estimated Purge Volume: 9 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: 0 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): 0700 Weather Conditions: Foggy
Sample Time/Date: 0725 12-3-03 Water Color: Clear Odor:
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
0708	3	7.51	12.95	70.2		
0711	6	7.56	1302	70.3		
0714	9	7.52	12.89	70.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	6 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8260)/ OXYS(8260)
					8

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-2029 Job Number: 386911
Site Address: 890 West Macarthur Blvd. Event Date: 12-3-03 (inclusive)
City: Oakland, CA Sampler: JOE

Well ID MW-2 Date Monitored: 12-3-03 Well Condition: O.K
Well Diameter 2 in.
Total Depth 24.70 ft.
Depth to Water 7.54 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

17.16 xVF 0.17 = 2.92 x3 (case volume) = Estimated Purge Volume: 9 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: 0 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): 0733 Weather Conditions: Foggy
Sample Time/Date: 0753 12-3-03 Water Color: clear Odor:
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) X10^2	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
0740	3	7.15	9.55	69.6		
0743	6	7.27	10.38	70.5		
0746	9	7.26	10.42	70.7		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8260)/ 7 OXYS(8260)
					8

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-2029 Job Number: 386911
Site Address: 890 West Macarthur Blvd. Event Date: 12-3-03 (inclusive)
City: Oakland, CA Sampler: Joe

Well ID MW-3 Date Monitored: 12-3-03 Well Condition: ok
Well Diameter 2 in.
Total Depth 24.60 ft.
Depth to Water 8.18 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

16.42 xVF 0.17 = 2.79 x3 (case volume) = Estimated Purge Volume: 8.5 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: 0 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): 0804 Weather Conditions: Foggy
Sample Time/Date: 0826 12-3-03 Water Color: Clear Odor:
Purging Flow Rate: ~1 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) X(W)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
0812	3	6.76	4.02	69.9		
0815	5.5	6.70	3.21	70.5		
0817	8.5	6.68	2.95	70.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8260)/ 7 OXYS(8260)
					8

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-2029 Job Number: 386911
Site Address: 890 West Macarthur Blvd. Event Date: 12-3-03 (inclusive)
City: Oakland, CA Sampler: Joe

Well ID MW-4 Date Monitored: 12-3-03 Well Condition: ok
Well Diameter 2 in.
Total Depth 24.65 ft.
Depth to Water 7.80 ft.
16.85 xVF 0.17 = 2.86 x3 (case volume) = Estimated Purge Volume: 9 gal.

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

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: 0 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): 0835 Weather Conditions: Foggy
Sample Time/Date: 0855 / 12-3-03 Water Color: clear Odor:
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
0842	3	6.85	2.10	72.1		
0845	6	6.80	2.44	70.5		
0847	9	6.84	2.55	70.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	6 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8260)/ OXYS(8260)
					8

COMMENTS:

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

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

120303-006

For Lancaster Laboratories use only
Acct. #: 10104 Sample #: 4176815-19 SCR#: 677188

Facility #: SS#9-2029 G-R#386911 Global ID#
Site Address: 890 WEST MACARTHUR BLVD., OAKLAND, CA
Chevron PM: KS Lead Consultant: CAMBRIA
Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, Ca. 94568
Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)
Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
Sampler: JOE A JEMIAN
Service Order #: ☐ Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (Potable ☐ NPDES ☐)	Matrix: Oil ☐ Air ☐	Total Number of Containers	BTEX + MTBE 8260 ☑ 8021 ☐ (H)	TPH 8015 MOD GRO (H)	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates (H)	Lead 7420 ☐ 7421 ☐
QA	—	—	✓			✓		2	✓	✓			✓	
mw-1	12-3-03	0725	✓			✓		6	✓	✓			✓	
mw-2	"	0755	✓			✓		6	✓	✓			✓	
mw-3	"	0826	✓			✓		6	✓	✓			✓	
mw-4	"	0855	✓			✓		6	✓	✓			✓	

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

	Date	Time		Date	Time
Relinquished by:	12-3-03	0945	Received by:	12/3/03	1204
Relinquished by:	12/3/03		Received by:	12/3/03	1445
Relinquished by:	12/3/03	1545	Received by: Airborne	12/3/03	
Relinquished by Commercial Carrier: UPS FedEx Other Airborne			Received by:	12/4/03	0945
Temperature Upon Receipt 3.5 C°			Custody Seals Intact? Yes No		

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.

Lancaster Laboratories

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Analysis Report

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 877188. Samples arrived at the laboratory on Thursday, December 04, 2003. The PO# for this group is 99011184 and the release number is STREICH.

Client Description			Lancaster Labs Number
QA-T-031203	NA	Water	4176815
MW-1-W-031203	Grab	Water	4176816
MW-2-W-031203	Grab	Water	4176817
MW-3-W-031203	Grab	Water	4176818
MW-4-W-031203	Grab	Water	4176819

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

Lancaster Laboratories

Analysis Report

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

Respectfully Submitted,

Tina L. Thoman
Senior Chemist, Coordinator

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 4176815

QA-T-031203 NA Water
Facility# 92029 Job# 386911 GRD
890 W Macarthur Oakland NA QA
Collected:12/03/2003 00:00

Account Number: 10904

Submitted: 12/04/2003 09:45
Reported: 12/11/2003 at 23:58
Discard: 01/11/2004

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

OAKTB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	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.					
06054	BTEX+MTBE by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	12/08/2003 05:13	Linda C Pape	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	12/09/2003 13:41	Stephanie R Sherant	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/08/2003 05:13	Linda C Pape	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/09/2003 13:41	Stephanie R Sherant	n.a.

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Analysis Report

Lancaster Laboratories Sample No. WW 4176816

MW-1-W-031203 Grab Water
Facility# 92029 Job# 386911 GRD
890 W Macarthur Oakland NA MW-1
Collected:12/03/2003 07:25 by JA

Account Number: 10904

Submitted: 12/04/2003 09:45
Reported: 12/11/2003 at 23:58
Discard: 01/11/2004

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

OAK-1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	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.					
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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
01728	TPH-GRO - Waters	N. CA LUFT Gasoline	1	12/06/2003 03:48	Martha L Seidel	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	Method SW-846 8260B	1	12/06/2003 22:21	Lauren C Marzario	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/06/2003 03:48	Martha L Seidel	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2003 22:21	Lauren C Marzario	n.a.

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Analysis Report

Lancaster Laboratories Sample No. WW 4176817

MW-2-W-031203 Grab Water
Facility# 92029 Job# 386911 GRD
890 W Macarthur Oakland NA MW-2
Collected:12/03/2003 07:55 by JA

Account Number: 10904

Submitted: 12/04/2003 09:45
Reported: 12/11/2003 at 23:58
Discard: 01/11/2004

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

OAK-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	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.					
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1
	Matrix QC was performed on this sample for the GCMS volatile analysis. Please see the attached QC summary report for compounds showing a matrix bias.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	12/06/2003 04:26	Martha L Seidel	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	12/08/2003 10:49	Lauren C Marzario	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/06/2003 04:26	Martha L Seidel	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/08/2003 10:49	Lauren C Marzario	n.a.

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Analysis Report

Lancaster Laboratories Sample No. WW 4176818

MW-3-W-031203 Grab Water
Facility# 92029 Job# 386911 GRD
890 W Macarthur Oakland NA MW-3
Collected:12/03/2003 08:26 by JA

Account Number: 10904

Submitted: 12/04/2003 09:45
Reported: 12/11/2003 at 23:58
Discard: 01/11/2004

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

OAK-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	19,000.	500.	ug/l	10

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.

01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	250.	ug/l	5
02010	Methyl Tertiary Butyl Ether	1634-04-4	420.	3.	ug/l	5
02011	di-Isopropyl ether	108-20-3	N.D.	3.	ug/l	5
02013	Ethyl t-butyl ether	637-92-3	N.D.	3.	ug/l	5
02014	t-Amyl methyl ether	994-05-8	14.	3.	ug/l	5
02015	t-Butyl alcohol	75-65-0	200.	25.	ug/l	5
05401	Benzene	71-43-2	970.	25.	ug/l	50
05402	1,2-Dichloroethane	107-06-2	N.D.	3.	ug/l	5
05407	Toluene	108-88-3	8.	3.	ug/l	5
05412	1,2-Dibromoethane	106-93-4	N.D.	3.	ug/l	5
05415	Ethylbenzene	100-41-4	2,100.	25.	ug/l	50
06310	Xylene (Total)	1330-20-7	85.	3.	ug/l	5

The reporting limits for the GC/MS volatile compounds were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	12/08/2003 05:50	Linda C Pape	10
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	12/08/2003 14:00	Lauren C Marzario	5
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	12/08/2003 14:21	Lauren C Marzario	50
01146	GC VOA Water Prep	SW-846 5030B	1	12/08/2003 05:50	Linda C Pape	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/08/2003 14:00	Lauren C Marzario	n.a.

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Analysis Report

Lancaster Laboratories Sample No. WW 4176819

MW-4-W-031203 Grab Water
Facility# 92029 Job# 386911 GRD
890 W Macarthur Oakland NA MW-4
Collected:12/03/2003 08:55 by JA

Account Number: 10904

Submitted: 12/04/2003 09:45
Reported: 12/11/2003 at 23:58
Discard: 01/11/2004

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

OAK-4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	16,000.	500.	ug/l	10
	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.					
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	73.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	5.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	18.	5.	ug/l	1
05401	Benzene	71-43-2	1,000.	5.	ug/l	10
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	6.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	720.	5.	ug/l	10
06310	Xylene (Total)	1330-20-7	52.	0.5	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
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	12/08/2003 06:27	Linda C Pape	10
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	12/08/2003 14:42	Lauren C Marzario	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	12/08/2003 15:03	Lauren C Marzario	10
01146	GC VOA Water Prep	SW-846 5030B	1	12/08/2003 06:27	Linda C Pape	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/08/2003 14:42	Lauren C Marzario	n.a.

Lancaster Laboratories

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco
Reported: 12/11/03 at 11:58 PM

Group Number: 877188

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 03339A53A	Sample number(s): 4176816-4176817							
TPH-GRO - Waters	N.D.	50.	ug/l	102	106	70-130	4	30
Batch number: 03339A53B	Sample number(s): 4176815,4176818-4176819							
TPH-GRO - Waters	N.D.	50.	ug/l	102	106	70-130	4	30
Batch number: P033401AA	Sample number(s): 4176816							
Ethanol	N.D.	50.	ug/l	113		46-145		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	94		77-127		
di-Isopropyl ether	N.D.	0.5	ug/l	96		74-125		
Ethyl t-butyl ether	N.D.	0.5	ug/l	98		74-120		
t-Amyl methyl ether	N.D.	0.5	ug/l	96		79-113		
t-Butyl alcohol	N.D.	5.	ug/l	103		53-147		
Benzene	N.D.	0.5	ug/l	93		85-117		
1,2-Dichloroethane	N.D.	0.5	ug/l	95		77-132		
Toluene	N.D.	0.5	ug/l	92		85-115		
1,2-Dibromoethane	N.D.	0.5	ug/l	95		81-114		
Ethylbenzene	N.D.	0.5	ug/l	94		82-119		
Xylene (Total)	N.D.	0.5	ug/l	93		84-120		
Batch number: P033421AA	Sample number(s): 4176817-4176819							
Ethanol	N.D.	50.	ug/l	106		46-145		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	92		77-127		
di-Isopropyl ether	N.D.	0.5	ug/l	96		74-125		
Ethyl t-butyl ether	N.D.	0.5	ug/l	95		74-120		
t-Amyl methyl ether	N.D.	0.5	ug/l	95		79-113		
t-Butyl alcohol	N.D.	5.	ug/l	103		53-147		
Benzene	N.D.	0.5	ug/l	93		85-117		
1,2-Dichloroethane	N.D.	0.5	ug/l	94		77-132		
Toluene	N.D.	0.5	ug/l	90		85-115		
1,2-Dibromoethane	N.D.	0.5	ug/l	93		81-114		
Ethylbenzene	N.D.	0.5	ug/l	92		82-119		
Xylene (Total)	N.D.	0.5	ug/l	93		84-120		
Batch number: W033421AB	Sample number(s): 4176815							
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	105	103	77-127	2	30
Benzene	N.D.	0.5	ug/l	107	104	85-117	3	30
Toluene	N.D.	0.7	ug/l	99	97	85-115	2	30
Ethylbenzene	N.D.	0.8	ug/l	104	102	82-119	2	30
Xylene (Total)	N.D.	0.8	ug/l	100	99	84-120	1	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: 03339A53A	Sample number(s): 4176816-4176817								
TPH-GRO - Waters	109		63-154						
Batch number: 03339A53B	Sample number(s): 4176815,4176818-4176819								
TPH-GRO - Waters	109		63-154						
Batch number: P033401AA	Sample number(s): 4176816								

*- 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.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 12/11/03 at 11:58 PM

Group Number: 877188

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
Ethanol	121	126	38-149	4	30				
Methyl Tertiary Butyl Ether	98	97	69-134	1	30				
di-Isopropyl ether	99	100	75-130	1	30				
Ethyl t-butyl ether	99	100	78-119	1	30				
t-Amyl methyl ether	97	98	77-117	1	30				
t-Butyl alcohol	116	111	44-150	4	30				
Benzene	99	100	83-128	1	30				
1,2-Dichloroethane	97	96	73-136	0	30				
Toluene	98	101	83-127	3	30				
1,2-Dibromoethane	96	98	78-120	1	30				
Ethylbenzene	98	100	82-129	2	30				
Xylene (Total)	97	98	82-130	2	30				
Batch number: P033421AA	Sample number(s): 4176817-4176819								
Ethanol	104	109	38-149	5	30				
Methyl Tertiary Butyl Ether	91	87	69-134	4	30				
di-Isopropyl ether	87	85	75-130	3	30				
Ethyl t-butyl ether	89	85	78-119	4	30				
t-Amyl methyl ether	90	85	77-117	6	30				
t-Butyl alcohol	114	99	44-150	14	30				
Benzene	96	93	83-128	3	30				
1,2-Dichloroethane	94	89	73-136	5	30				
Toluene	92	87	83-127	5	30				
1,2-Dibromoethane	96	87	78-120	10	30				
Ethylbenzene	87	82	82-129	6	30				
Xylene (Total)	83	77*	82-130	7	30				
Batch number: W033421AB	Sample number(s): 4176815								
Methyl Tertiary Butyl Ether	98		69-134						
Benzene	112		83-128						
Toluene	101		83-127						
Ethylbenzene	103		82-129						
Xylene (Total)	104		82-130						

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters
Batch number: 03339A53A

	Trifluorotoluene-F
4176816	77
4176817	81
Blank	76
LCS	85
LCSD	81
MS	82
Limits:	57-146

Analysis Name: TPH-GRO - Waters
Batch number: 03339A53B

	Trifluorotoluene-F

*- 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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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco
Reported: 12/11/03 at 11:58 PM

Group Number: 877188

Surrogate Quality Control

4176815	87
4176818	100
4176819	107
Blank	83
LCS	85
LCSD	81
MS	82
Limits:	57-146

Analysis Name: BTEX+5 Oxygenates+EDC+EDB+ETOH
Batch number: P033401AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4176816	100	101	94	95
Blank	99	101	103	97
LCS	101	100	102	98
MS	101	102	103	98
MSD	101	100	103	97
Limits:	81-120	82-112	85-112	83-113

Analysis Name: BTEX+5 Oxygenates+EDC+EDB+ETOH
Batch number: P033421AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4176817	101	102	92	94
4176818	101	100	102	99
4176819	98	94	103	102
Blank	100	99	102	99
LCS	101	101	101	97
MS	102	102	97	97
MSD	101	103	99	97
Limits:	81-120	82-112	85-112	83-113

Analysis Name: BTEX+MTBE by 8260B
Batch number: W033421AB

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4176815	92	89	86	95
Blank	91	87	87	97
LCS	94	91	88	99
LCSD	94	92	88	100
MS	91	88	90	95
Limits:	81-120	82-112	85-112	83-113

*- 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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2425 New Holland Pike • Lancaster, PA 17601

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result falls within the Method Detection Limit (MDL) and Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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