



# GETTLER-RYAN INC.

## TRANSMITTAL

February 24, 2004

G-R #386498

TO: Ms. Kristene Wilder  
Cambria Environmental Technology, Inc.  
5900 Hollis Street, Suite A  
Emeryville, California 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 #206127**  
**(Former Signal Oil Marine Terminal)**  
**2301-2337 Blanding Avenue**  
**Alameda, California**

Alameda County  
MAR 12 2004  
Environmental Health

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 23, 2004	Groundwater Monitoring and Sampling Report First Quarter - Event of January 22, 2004

### 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 10, 2004**, at which time the final report will be distributed to the following:

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

Enclosures

trans/206127-ks



# GETTLER-RYAN INC.

February 23, 2004  
G-R Job #386498

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

**RE: First Quarter Event of January 22, 2004**  
Groundwater Monitoring & Sampling Report  
Chevron #206127 (Former Signal Oil Marine Terminal)  
2301-2337 Blanding Avenue  
Alameda, 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 level was measured and the well was checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevation, and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Groundwater Elevation Map is included as Figure 1.

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

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

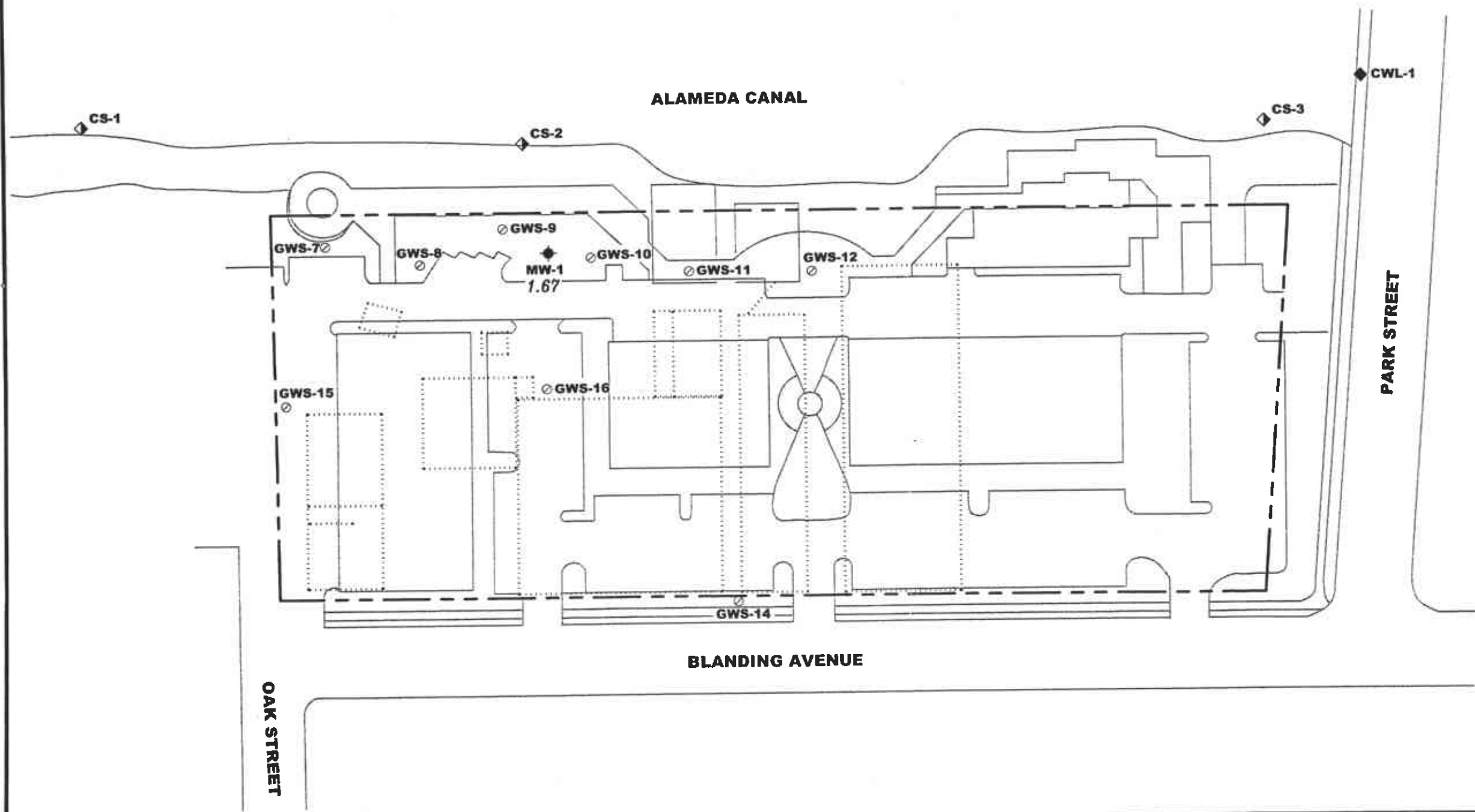
Sincerely,

Deanna L. Harding  
Project Coordinator

Hagop Kevork  
P.E. No. C55734

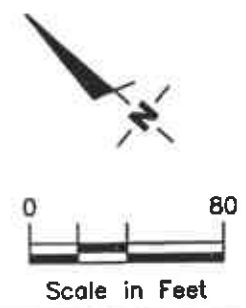


Figure 1: Groundwater Elevation Map  
Table 1: Groundwater Monitoring Data and Analytical Results  
Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports



**EXPLANATION**

- ◆ Groundwater monitoring well
  - ◆ Canal water level gauging station from Park Street Bridge (RRM, October 1998)
  - ◇ Canal grab surface water sample
  - ⊙ Shallow groundwater survey point (Geomatrix, April 1995)
  - ⋯ Site features noted on Sanborn Fire Insurance map, dated 1932
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level



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

FIGURE **1**

**GROUNDWATER ELEVATION MAP**  
 Chevron #206127 (Former Signal Oil Marine Terminal)  
 2301 - 2337 Blanding Avenue  
 Alameda, California

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

PROJECT NUMBER  
**346498**

REVIEWED BY  
 DATE  
 January 22, 2004

REVISED DATE

FILE NAME: P:\ENVIRO\CHEVRON\206127\00420-6127.DWG | Layout Tab: Plot

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Chevron #206127 (Former Signal Oil Marine Terminal)  
2301-2337 Blanding Avenue  
Alameda, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1 10.62	01/23/01 <sup>1</sup>	7.16	--	1,100 <sup>2,3</sup>	5,210 <sup>4</sup>	868	<50.0	<50.0	<50.0	<250
	04/09/01	8.12	2.50	1,200 <sup>6</sup>	3,000 <sup>5</sup>	920	<20	<20	<20	<100
	07/30/01	9.15	1.47	550 <sup>3,8</sup>	2,000 <sup>7</sup>	730	13	<5.0	<5.0	<25
	10/08/01	7.86	2.76	2,200 <sup>9</sup>	1,200	120	2.4	5.9	6.4	<2.5
	01/13/02	7.02	3.60	3,300 <sup>3</sup>	930	320	0.78	0.87	3.8	<2.5
	04/08/02	9.60	1.02	1,200 <sup>3</sup>	960	50	1.4	2.6	9.0	<2.5
	07/31/02	9.27	1.35	2,800 <sup>3</sup>	930	64	1.4	1.9	11	<5.0
	10/15/02	8.00	2.62	1,000 <sup>3</sup>	620	25	0.78	1.4	4.3	<2.5
	01/14/03	7.05	3.57	960 <sup>3</sup>	1,600	20	1.3	1.3	<1.5	<2.5
	04/15/03	8.02	2.60	920 <sup>3</sup>	870	56	1	1.4	3.1	<2.5
	07/16/03 <sup>10</sup>	10.08	0.54	1,400 <sup>3</sup>	780	85	1	0.8	0.7	<0.5
10/18/03 <sup>10</sup>	8.51	2.11	1,200 <sup>3</sup>	640	42	0.8	<0.5	0.5	<0.5	
01/22/04 <sup>10</sup>	8.95	1.67	1,500 <sup>3</sup>	440	18	<0.5	<0.5	<0.5	<0.5	
CS-2	07/30/01	--	--	140 <sup>3,5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	10/08/01	--	--	53 <sup>9</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	01/13/02	--	--	<50 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	04/08/02	--	--	77 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	07/31/02	--	--	<50 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	10/15/02	--	--	<50 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	01/14/03	--	--	<50 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	04/15/03	--	--	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<1.5	<2.5
	07/16/03 <sup>10</sup>	--	--	<50 <sup>3</sup>	<50	<0.5	0.7	<0.5	0.6	<0.5
	10/18/03 <sup>10</sup>	--	--	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	01/22/04 <sup>10</sup>	--	--	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank TB-LB	01/23/01	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
	04/09/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/30/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Chevron #206127 (Former Signal Oil Marine Terminal)  
 2301-2337 Blanding Avenue  
 Alameda, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
QA	10/08/01	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	01/13/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	04/08/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	07/31/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	10/15/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
	01/14/03	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5
	04/15/03	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	07/16/03 <sup>10</sup>	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	10/18/03 <sup>10</sup>	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	01/22/04 <sup>10</sup>	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Chevron #206127 (Former Signal Oil Marine Terminal)  
 2301-2337 Blanding Avenue  
 Alameda, California

**EXPLANATIONS:**

TOC = Top of Casing	TPH-G = Total Petroleum Hydrocarbons as Gasoline	(ppb) = Parts per billion
(ft.) = Feet	B = Benzene	-- = Not Measured/Not Analyzed
DTW = Depth to Water	T = Toluene	CS-2 = Creek Sample
GWE = Groundwater Elevation	E = Ethylbenzene	QA = Quality Assurance/Trip Blank
(msl) = Mean sea level	X = Xylenes	
TPH-D = Total Petroleum Hydrocarbons as Diesel	MTBE = Methyl tertiary butyl ether	

\* TOC elevations were surveyed on January 25, 2001, by Virgil Chavez Land Surveying. The benchmark used for the survey was a City of Alameda benchmark being a cut square at the centerline return, south corner of Oak and Blanding, (Benchmark Elevation = 8.236 feet, NGVD 29).

- 1 Well development performed.
- 2 Laboratory report indicates unidentified hydrocarbons <C16.
- 3 TPH-D with silica gel cleanup.
- 4 Laboratory report indicates weathered gasoline C6-C12.
- 5 Laboratory report indicates discrete peaks.
- 6 Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.
- 7 Laboratory report indicates gasoline C6-C12.
- 8 Laboratory report indicates unidentified hydrocarbons C9-C24.
- 9 Analysis performed without silica gel cleanup although was requested on the Chain of Custody.
- 10 BTEX and MTBE by EPA Method 8260.

## 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 #206127 Job Number: 386498  
 Site Address: 2301-2337 Blanding Avenue Event Date: 1-22-04 (inclusive)  
 City: Alameda, CA Sampler: Joc

Well ID: MW-1 Date Monitored: 1-22-04 Well Condition: o.k.  
 Well Diameter: 2 in.  
 Total Depth: 17.16 ft.  
 Depth to Water: 8.95 ft.  
8.21 xVF 0.17 = 1.40 x3 (case volume) = Estimated Purge Volume: 4.5 gal.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	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): 0715 Weather Conditions: clear  
 Sample Time/Date: 0740, 1-22-04 Water Color: clear Odor: \_\_\_\_\_  
 Purging Flow Rate: 0.5 gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) <sup>x1000</sup>	Temperature (C/D)	D.O. (mg/L)	ORP (mV)
<u>0722</u>	<u>1.5</u>	<u>6.96</u>	<u>1.86</u>	<u>62.1</u>	_____	_____
<u>0726</u>	<u>3</u>	<u>6.58</u>	<u>2.09</u>	<u>63.0</u>	_____	_____
<u>0730</u>	<u>4.5</u>	<u>6.62</u>	<u>2.10</u>	<u>63.1</u>	_____	_____
_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>6 x vov vial</u>	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-G(8015)/BTEX+MTBE(8260)</u>
<u>MW-1</u>	<u>2 x amber</u>	<u>YES</u>	<u>NP</u>	<u>LANCASTER</u>	<u>TPH-Dw/sg</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

### COMMENTS:

Add/Replaced Lock: \_\_\_\_\_

Add/Replaced Plug: \_\_\_\_\_ Size: \_\_\_\_\_





# Chevron California Region Analysis Request/Chain of Custody



012304-17

For Lancaster Laboratories use only  
 Acc#: 10904 Sample #: 4204145-91 SCR#: 882406

Facility #: SS#206127 G-R#386498 Global ID#  
 Site Address: 2301-2337 BLANDING AVENUE, ALAMEDA, 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 ASEMIAN  
 Service Order #: \_\_\_\_\_  Non SAR:

Matrix		Analyses Requested									
		Preservation Codes									
Soil	Water	8021	8260	8260	8260	8260	8260	8260	8260	8260	8260
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Preservative Codes**  
 H = HCl      T = Thiosulfate  
 N = HNO<sub>3</sub>    B = NaOH  
 S = H<sub>2</sub>SO<sub>4</sub>    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	Soil	Water	GW	Air	Total Number of Containers	BTX + MTBE 8260	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Lead 7420	7421
<u>QA</u>	<u>-</u>	<u>-</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>2</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>MW-1</u>	<u>1-22-04</u>	<u>0740</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>8000</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>CS-2</u>	<u>"</u>	<u>0800</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>8000</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**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: <u>[Signature]</u>	Date: <u>1-22-04</u>	Time: <u>0950</u>	Received by: <u>[Signature]</u>	Date: <u>1/23/04</u>	Time: <u>1125</u>
Relinquished by: <u>[Signature]</u>	Date: <u>1/23/04</u>	Time: <u>1400</u>	Received by: <u>[Signature]</u>	Date: <u>1/23/04</u>	Time: <u>1400</u>
Relinquished by: <u>[Signature]</u>	Date: <u>1/23/04</u>	Time: <u>1615</u>	Received by: <u>Airborne</u>	Date: <u>1/23/04</u>	Time: _____
Relinquished by Commercial Carrier: UPS      FedEx      Other <u>Airborne</u>	Temperature Upon Receipt: _____ C°		Received by: <u>Jimmy Huetz</u>	Date: <u>1/24/04</u>	Time: <u>1120</u>
Custody Seal Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					

## 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 882406. Samples arrived at the laboratory on Saturday, January 24, 2004. The PO# for this group is 99011184 and the release number is STREICH.

<u>Client Description</u>		<u>Lancaster Labs Number</u>
QA-T-040122	NA Water	4204145
MW-1-W-040122	Grab Water	4204146
CS-2-W-040122	Grab Water	4204147

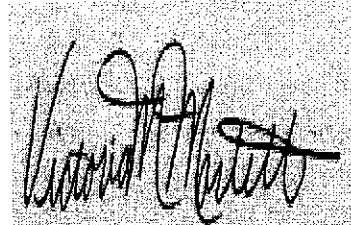
1 COPY TO  
ELECTRONIC  
COPY TO

Cambria C/O Gettler- Ryan  
Gettler-Ryan

Attn: Deanna L. Harding  
Attn: Cheryl Hansen

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

Respectfully Submitted,



Victoria M. Martell  
Chemist

Lancaster Laboratories Sample No. WW 4204145

 QA-T-040122 NA Water  
 Facility# 206127 Job# 386498 GRD  
 2301-2337 Blanding-Alamed NA QA  
 Collected: 01/22/2004 00:00

Account Number: 10904

 Submitted: 01/24/2004 11:20  
 Reported: 01/30/2004 at 12:01  
 Discard: 03/01/2004

 ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

BAAQA

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. The analysis was performed from a previously opened vial and the results are therefore estimated.						
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

State of California Lab Certification No. 2116

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date	Time		
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	01/29/2004	04:51	Todd T Smythe	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	01/27/2004	07:43	Elizabeth M Taylor	1
01146	GC VOA Water Prep	SW-846 5030B	1	01/29/2004	04:51	Todd T Smythe	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/27/2004	07:43	Elizabeth M Taylor	n.a.

Lancaster Laboratories Sample No. **WW 4204146**

MW-1-W-040122                      **Grab**                      **Water**  
 Facility# 206127 Job# 386498                      **GRD**  
 2301-2337 Blanding-Alamed NA                      **NA**  
 Collected: 01/22/2004 07:40                      by JA

Account Number: 10904

Submitted: 01/24/2004 11:20  
 Reported: 01/30/2004 at 12:01  
 Discard: 03/01/2004

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

BAA01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	440.	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.					
02202	TPH-DRO CALUFT(Water) w/Si Gel	n.a.	1,500.	50.	ug/l	1
	According to the California LUFT Protocol, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 fuel oil reference standard (between C10 and C28 normal hydrocarbons). Site-specific MS/MSD samples were 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	18.	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

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	01/29/2004 12:54	Todd T Smythe	1
02202	TPH-DRO CALUFT(Water) w/Si Gel	CALUFT-DRO/8015B, Modified	1	01/28/2004 04:23	Tracy A Cole	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	01/27/2004 08:10	Elizabeth M Taylor	1
01146	GC VOA Water Prep	SW-846 5030B	1	01/29/2004 12:54	Todd T Smythe	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/27/2004 08:10	Elizabeth M Taylor	n.a.
02135	Extraction - DRO Water Special	TPH by CA LUFT	1	01/26/2004 08:15	Danette S Blystone	1



## Quality Control Summary

 Client Name: ChevronTexaco  
 Reported: 01/30/04 at 12:02 PM

Group Number: 882406

### Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 040250006A TPH-DRO CALUFT(Water) w/Si Gel	N.D.	50.	Sample number(s): 4204146-4204147 ug/l	94	90	61-126	4	20
Batch number: 04029A07A TPH-GRO - Waters	N.D.	50.	Sample number(s): 4204145 ug/l	94		70-130		
Batch number: 04029A07B TPH-GRO - Waters	N.D.	50.	Sample number(s): 4204146-4204147 ug/l	94		70-130		
Batch number: P040262AA Methyl Tertiary Butyl Ether	N.D.	0.5	Sample number(s): 4204145-4204147 ug/l	97		77-127		
Benzene	N.D.	0.5	ug/l	95		85-117		
Toluene	N.D.	0.5	ug/l	95		85-115		
Ethylbenzene	N.D.	0.5	ug/l	96		82-119		
Xylene (Total)	N.D.	0.5	ug/l	95		84-120		

### Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	MAX	EKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 04029A07A TPH-GRO - Waters	103	101	Sample number(s): 4204145 63-154	1	30				
Batch number: 04029A07B TPH-GRO - Waters	103	101	Sample number(s): 4204146-4204147 63-154	1	30				
Batch number: P040262AA Methyl Tertiary Butyl Ether	98	99	Sample number(s): 4204145-4204147 69-134	1	30				
Benzene	103	118	83-128	12	30				
Toluene	103	115	83-127	10	30				
Ethylbenzene	103	110	82-129	6	30				
Xylene (Total)	104	137*	82-130	22	30				

### Surrogate Quality Control

 Analysis Name: TPH-DRO CALUFT(Water) w/Si Gel  
 Batch number: 040250006A  
 Orthoterphenyl

4204146	86
4204147	95
Blank	90
LCS	111
LCSD	107

Limits: 59-139

Analysis Name: TPH-GRO - Waters

\*- 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: 01/30/04 at 12:02 PM

Group Number: 882406

### Surrogate Quality Control

Batch number: 04029A07A  
Trifluorotoluene-F

4204145	77
Blank	78
LCS	99
MS	117
MSD	116

Limits: 57-146

Analysis Name: TPH-GRO - Waters  
Batch number: 04029A07B  
Trifluorotoluene-F

4204146	124
4204147	78
Blank	77
LCS	99
MS	117
MSD	116

Limits: 57-146

Analysis Name: BTEX+MTBE by 8260B  
Batch number: P040262AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4204145	104	105	104	101
4204146	104	104	104	104
4204147	103	106	105	101
Blank	104	104	105	101
LCS	103	102	105	102
MS	105	105	105	101
MSD	105	104	104	103

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.

# Explanation of Symbols and Abbreviations

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

<b>N.D.</b>	none detected	<b>BMQL</b>	Below Minimum Quantitation Level
<b>TNTC</b>	Too Numerous To Count	<b>MPN</b>	Most Probable Number
<b>IU</b>	International Units	<b>CP Units</b>	cobalt-chloroplatinate units
<b>umhos/cm</b>	micromhos/cm	<b>NTU</b>	nephelometric turbidity units
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>ug</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>ml</b>	milliliter(s)	<b>l</b>	liter(s)
<b>m3</b>	cubic meter(s)	<b>ul</b>	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	Inorganic Qualifiers
<b>A</b> TIC is a possible aldol-condensation product	<b>B</b> Value is <CRDL, but ≥IDL
<b>B</b> Analyte was also detected in the blank	<b>E</b> Estimated due to interference
<b>C</b> Pesticide result confirmed by GC/MS	<b>M</b> Duplicate injection precision not met
<b>D</b> Compound quantitated on a diluted sample	<b>N</b> Spike sample not within control limits
<b>E</b> Concentration exceeds the calibration range of the instrument	<b>S</b> Method of standard additions (MSA) used for calculation
<b>N</b> Presumptive evidence of a compound (TICs only)	<b>U</b> Compound was not detected
<b>P</b> Concentration difference between primary and confirmation columns >25%	<b>W</b> Post digestion spike out of control limits
<b>U</b> Compound was not detected	<b>*</b> Duplicate analysis not within control limits
<b>X,Y,Z</b> Defined in case narrative	<b>+</b> 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.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.