



# GETTLER-RYAN Inc.

## TRANSMITTAL

TO: Mr. Bob Cochran  
 Chevron Product Company  
 P.O. Box 6004  
 San Ramon, California 94583

DATE: September 20, 1999  
 PROJ. #: 346338.02  
 SUBJECT: Former Chevron #20-6142  
 333 23<sup>rd</sup> Avenue  
 Oakland, CA

FROM:  
 David Herzog  
 Geologist  
 Gettler-Ryan Inc.  
 3164 Gold Camp Drive, Suite 240  
 Rancho Cordova, California 95670

*Still have a addressed  
 all my points in my 8/30/99  
 letter -*

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	September 20, 1999	Groundwater Monitoring Report

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COMMENTS:

If you have any questions, please call us in our Sacramento office at (916) 631-1300.

Cc: Mr. Barney Chan, Alameda County Health Care Services Agency  
 Mr. Roger Hoffmore, Secor International Inc.  
 Ms. Christine Lillie, Blaine Tech Services Inc.

99 SEP 22 PM 2:18  
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 PROTECTION



# GETTLER-RYAN INC.

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September 20, 1999

Bob Cochran  
Chevron Products Company  
P.O. Box 6004  
San Ramon, CA 94583-0904

**Subject: Groundwater Monitoring and Sampling Report, Former Chevron Service Station  
No. 20-6142, 333 23<sup>rd</sup> Avenue, Oakland, California**

Mr. Cochran:

At the request of Chevron Products Company (Chevron), Gettler-Ryan Inc. (GR) monitored and sampled two groundwater monitoring wells at the subject site. The purpose of this sampling event was to confirm the second quarter analytical results (Blaine Tech Services, Inc. Report No. 990624-S-1, *2nd-Quarter 1999 Monitoring at 206142*, dated August 11, 1999).

On August 22, 1999, GR located monitoring well MW-14, and monitored and sampled groundwater monitoring wells MW-1 and MW-14. Static groundwater levels were measured in the wells and each well was checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1.

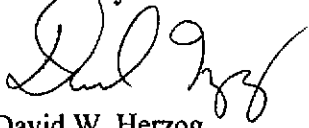
Groundwater samples were collected from the monitoring wells as specified by GR Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets are attached. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tert-butyl ether (MtBE), and total petroleum hydrocarbons as diesel (TPHd). The analytical results are summarized in Table 1.

The analytical results indicate that the water samples collected from the two wells did not contain detectable concentrations of any of the constituents analyzed with the exception of TPHd, which were detected in the sample from well MW-1 at a concentration of 1,990 parts per billion (ppb). This analytical data does not confirm the second quarter, 1999 analytical data from well MW-1, but does resemble the historical data. The data for well MW-14, which was not sampled during the second quarter, 1999, also resembles historical data.

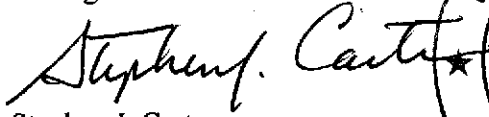
346338.02

If you should have any questions, please call our Sacramento office at (916) 631-1300.

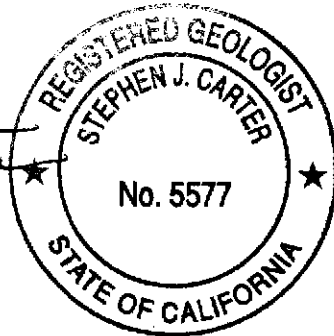
Sincerely,  
**Gettler-Ryan Inc.**



David W. Herzog  
Geologist

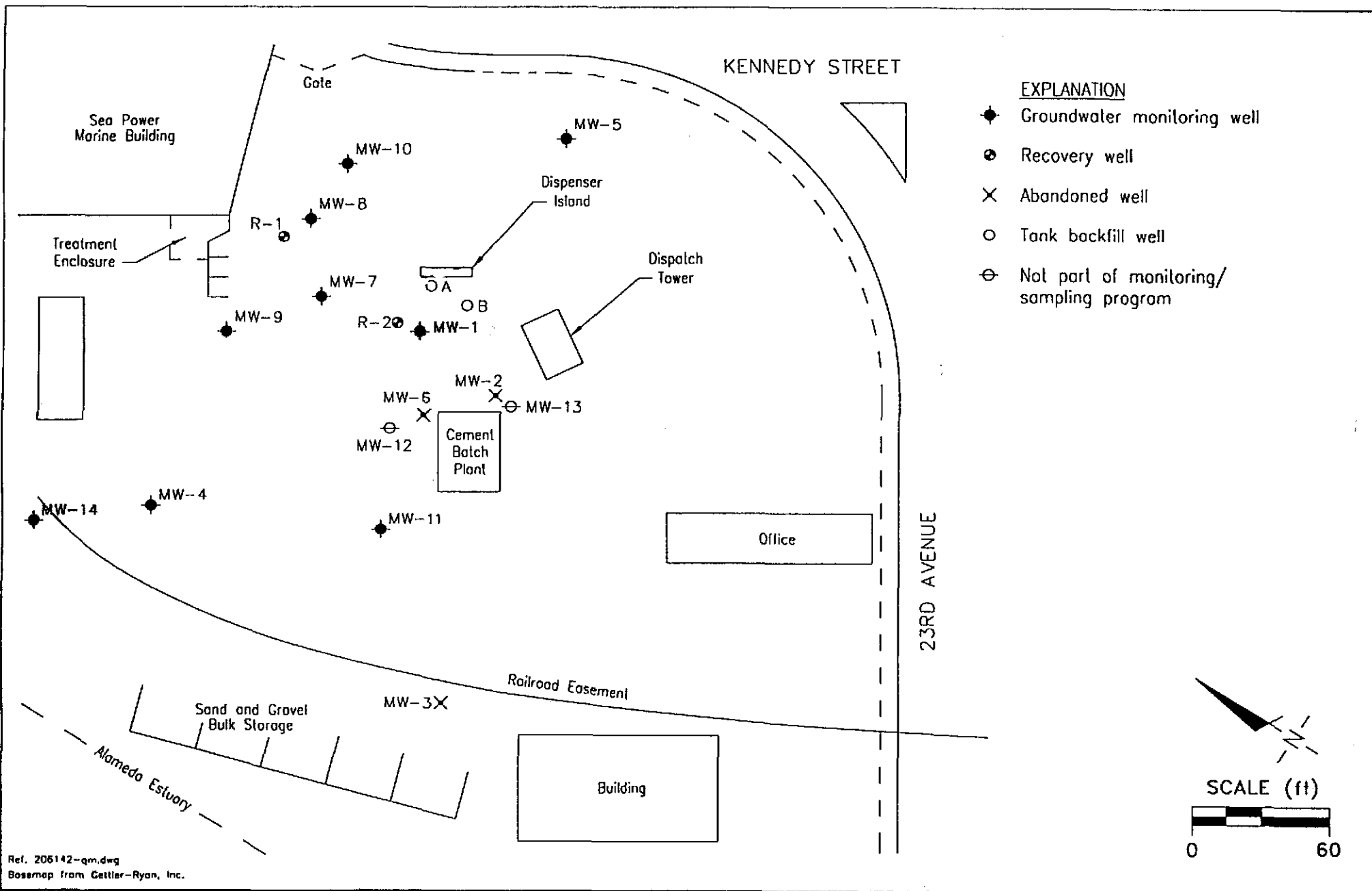


Stephen J. Carter  
Senior Geologist  
R.G. No. 5577



- Figure 1: Site Map
- Table 1: Groundwater Monitoring and Chemical Data
- Attachments: Standard Operating Procedure – Groundwater Sampling  
Field Data Sheets  
Chain-Of-Custody Document and Laboratory Analytical Reports

Cc: Barney Chan, Alameda County Health Care Services Agency  
Roger Hoffmore, Secor International Inc.  
Christine Lillie, Blaine Tech Services, Inc.



Ref. 206142-qm.dwg  
 Base map from Gettler-Ryan, Inc.

PREPARED BY  
**RRM**  
 engineering contracting firm

Chevron/RMC Lonestar Facility CPS #206142  
 333 23rd Avenue  
 Oakland, California

SITE MAP

FIGURE  
**1**

## TABLE 1 - GROUNDWATER MONITORING AND CHEMICAL DATA

Former Chevron Service Station No. 206142  
333 23rd Avenue  
Oakland, California

Well ID/ Casing Elev. (ft MSL)	Date Sampled	Total Well Depth (ft TOC)	Depth to Water (ft TOC)	Product Thickness (ft)	Groundwater Elevation (ft MSL)	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	TPHd (ppb)
MW-1/ 10.16	8/22/99	17	8.39	0	1.77	<100	<0.5	<0.5	<0.5	<0.5	<10	1990
MW-14/ 5.56	8/22/99	20	7.55	0	-1.99	<100	<0.5	<0.5	<0.5	<0.5	<10	<50
TB-LB	---	---	---	---	---	<100	<0.5	<0.5	<0.5	<0.5	<10	---

TPHg - Total Petroleum Hydrocarbons as gasoline

BTEX - benzene, toluene, ethylbenzene, xylenes

MTBE - Methyl t-Butyl Ether

TPHd - Total Petroleum Hydrocarbons as diesel

ft TOC - feet below top of casing

ft MSL - feet relative to Mean Sea Level

ppb - parts per billion

TB-LB - Trip Blank

Analytical Laboratory:

Core Lab (ELAP #1174)

Analytical Method:

TPHg and TPHd- EPA Method 8015 (Modified)

BTEX and MtBE - EPA Method 8021B

## STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analyses by the analytical laboratory. Prior to sample collection, the type of analyses to be performed is determined. *Loss prevention of volatile compounds is controlled and sample preservation for subsequent analyses is maintained.*

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is recorded in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH, and electrical conductivity are measured a minimum of three times during 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 job number, sample identification, collection date and time, analyses, preservative (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 delivery to the laboratory.

The chain of custody includes the job number, type of preservation, if any, analyses 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.

MONITORING WELL  
OBSERVATION SUMMARY SHEET

CLIENT/  
FACILITY #: CHEVRON - RMC Lonestar  
206142

G-R JOB #: 346338.02

LOCATION: 333 - 23<sup>rd</sup> Avenue

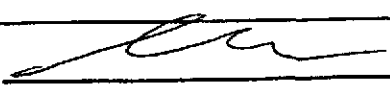
DATE: 8-22-99

CITY: OAKLAND, CA

TIME: \_\_\_\_\_

Well ID	Total Depth	Depth to Water	Product Thickness	TOB or TOC	Comments
<u>MW-1</u>	<u>17'</u>	<u>8.39</u>	<u>Ø</u>	<u>TOC</u>	
<u>MW-14</u>	<u>20'</u>	<u>7.55</u>	<u>Ø</u>	<u>TOC</u>	

Comments: \_\_\_\_\_

Sampler: 

Assistant: \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ CHEVRON  
 Facility # 206142  
 Address: 333-23<sup>rd</sup> Avenue  
 City: OAKLAND, CA

Job#: 346338.02  
 Date: 8-22-99  
 Sampler: F.C

Well ID MW-14  
 Well Diameter 2" in.  
 Total Depth 20' ft.  
 Depth to Water 7.55 ft.

Well Condition: OK

Hydrocarbon Thickness: 0 (feet) Amount Bailed 0 (Gallons)  
 Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66  
 6" = 1.50 12" = 5.80

12.95 X VF 0.17 = 2.1 X 3 (case volume) = Estimated Purge Volume: 6.4 (gal.)

Purge Equipment: Disposable Bailer  
Stack  
 Suction  
 Grundfos  
 Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
 Bailer  
 Pressure Bailer  
 Grab Sample  
 Other: \_\_\_\_\_

Starting Time: 1400  
 Sampling Time: 1402  
 Purging Flow Rate: 1.3 gpm.  
 Did well de-water? \_\_\_\_\_

Weather Conditions: clear warm  
 Water Color: clear Odor: None  
 Sediment Description: None  
 If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1402</u>	<u>2.0</u>	<u>7.52</u>	<u>1526</u>	<u>20.8</u>			
<u>1403</u>	<u>5.2</u>	<u>7.42</u>	<u>1541</u>	<u>18.7</u>			
<u>1406</u>	<u>7.8</u>	<u>7.48</u>	<u>1540</u>	<u>18.7</u>			
<u>1407</u>	<u>8.0</u>	<u>7.46</u>	<u>1541</u>	<u>18.7</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-14</u>	<u>300ml VOA</u>	<u>Y</u>	<u>HC</u>		<u>TPH(G)/btex/mtbe</u>
	<u>1X/10</u>		<u>None</u>		<u>TPH Diesel</u>

COMMENTS: Well located  $\approx$  18' from corner of Pond Fence - steel post & diagonal supports. No well Box well okay Buried in gravel & concrete parts



**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ CHEVRON  
 Facility # 206142  
 Address: 333-23<sup>rd</sup> Avenue  
 City: OAKLAND, CA

Job#: 346338.02  
 Date: 8-22-99  
 Sampler: F.C

Well ID MW-1 Well Condition: OK  
 Well Diameter 4" in. Hydrocarbon None Amount Bailed None  
 Thickness: (feet) (product/water): (Gallons)  
 Total Depth 17' ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66  
 Depth to Water 8.39 ft. Factor (VF) 6" = 1.50 12" = 5.80  
8.61 x VF 0.64 = 5.7 x 3 (case volume) = Estimated Purge Volume: 17.0 (gal.)

Purge Equipment: Disposable Bailer Bailer Stack Suction Grundfos Other: \_\_\_\_\_  
 Sampling Equipment: Disposable Bailer Bailer Pressure Bailer Grab Sample Other: \_\_\_\_\_

Starting Time: 1426 Weather Conditions: clear warm  
 Sampling Time: 1432 Water Color: clear Odor: None  
 Purging Flow Rate: 2.0 gpm. Sediment Description: None  
 Did well de-water? NC If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (°C)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1430</u>	<u>6</u>	<u>7.66</u>	<u>2370</u>	<u>18.5</u>			
<u>1436</u>	<u>12</u>	<u>7.00</u>	<u>2000</u>	<u>17.9</u>			
<u>1439</u>	<u>18</u>	<u>6.94</u>	<u>2010</u>	<u>17.3</u>			
<u>1438</u>	<u>19</u>	<u>6.96</u>	<u>2010</u>	<u>17.9</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>3 1/2 gal</u>	<u>Y</u>	<u>IKL</u>	<u>Core</u>	<u>TPH(GI)/btex/mtba</u>
	<u>10/100</u>			<u>Core</u>	<u>TPH Diesel</u>

COMMENTS: OK in well



CORE LABORATORIES

RECEIVED

SEP 08 1999

GETTLER-RYAN INC.  
GENERAL CONTRACTORS

ANALYTICAL REPORT

JOB NUMBER: 991690

Prepared For:

Gettler-Ryan Inc.  
6747 Sierra Ct., Suite J  
Dublin, CA 94568

Attention: Deanna Harding

Date: 09/03/1999

*Paul Christie for*

Signature

9/3/99

Date

Name: Tim Scott

Title: Laboratory Manager

1250 E. Gene Autry Way  
Anaheim, CA 92805

PHONE: (714) 937-1094  
FAX: (714) 937-1170

C.A.E.L.A.P. 1074  
L.A.C.S.D. 10148



**CORE LABORATORIES**

**SAMPLE INFORMATION**  
Date: 09/03/1999

Job Number.: 991690  
Customer....: Gettler-Ryan Inc.  
Attn.....: Deanna Harding

Project Number.....: 97000255  
Customer Project ID....: CPS# 206142  
Project Description....: Refer to Customer Project I.D.

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
991690-1	TB-LB	Water	08/22/1999	00:00	08/25/1999	10:30
991690-2	MW-14	Water	08/22/1999	00:00	08/25/1999	10:30
991690-3	MW-1	Water	08/22/1999	00:00	08/25/1999	10:30

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# CORE LABORATORIES

## LABORATORY TEST RESULTS

Job Number: 991690

Date: 09/03/1999

CUSTOMER: Gettler-Ryan, Inc.

PROJECT: CPS# 206142

ATTN: Deanna Harding

Customer Sample ID: TB-LB  
 Date Sampled.....: 08/22/1999  
 Time Sampled.....: 00:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 991690-1  
 Date Received.....: 08/25/1999  
 Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8015Mod	Total Volatile Petroleum Hydrocarbons Gasoline Range Petroleum Hydrocarbons, Liquids	<100.0	100.0	ug/L	08/25/99	evd
EPA 8021B	Volatile Organics -Aromatics					
	Benzene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Ethylbenzene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Methyl-t-Butyl Ether (MTBE), Liquids	<10.00	10.00	ug/L	08/25/99	evd
	Toluene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Xylenes (total), Liquids	<0.50	0.50	ug/L	08/25/99	evd



# CORE LABORATORIES

## LABORATORY TEST RESULTS

Job Number: 991690

Date: 09/03/1999

CUSTOMER: Gettler-Ryan Inc.

PROJECT: CPS# 206142

ATTN: Deanna Harding

Customer Sample ID: MW-14  
 Date Sampled.....: 08/22/1999  
 Time Sampled.....: 00:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 991690-2  
 Date Received.....: 08/25/1999  
 Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
LUFT - CA DOHS	LUFT Extraction - 1 liter, Liquids	Complete			08/31/99	tmp
EPA 8015 Mod	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Liquids	<50.00	50.00	ug/L	09/01/99	evd
EPA 8015Mod	Total Volatile Petroleum Hydrocarbons Gasoline Range Petroleum Hydrocarbons, Liquids	<100.0	100.0	ug/L	08/25/99	evd
EPA 8021B	Volatile Organics -Aromatics					
	Benzene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Ethylbenzene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Methyl-t-Butyl Ether (MTBE), Liquids	<10.00	10.00	ug/L	08/25/99	evd
	Toluene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Xylenes (total), Liquids	<0.50	0.50	ug/L	08/25/99	evd



# CORE LABORATORIES

## LABORATORY TEST RESULTS

Job Number: 991690

Date: 09/03/1999

CUSTOMER: Gettler-Ryan Inc.

PROJECT: CPS# 206142

ATTN: Deanna Harding

Customer Sample ID: MW-1  
 Date Sampled.....: 08/22/1999  
 Time Sampled.....: 00:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 991690-3  
 Date Received.....: 08/25/1999  
 Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
LUFT - CA DOHS	LUFT Extraction - 1 liter, Liquids	Complete			08/31/99	tmp
EPA 8015 Mod	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Liquids	1990	50.00	ug/L	09/01/99	evd
EPA 8015Mod	Total Volatile Petroleum Hydrocarbons Gasoline Range Petroleum Hydrocarbons, Liquids	<100.0	100.0	ug/L	08/25/99	evd
EPA 8021B	Volatile Organics -Aromatics					
	Benzene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Ethylbenzene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Methyl-t-Butyl Ether (MTBE), Liquids	<10.00	10.00	ug/L	08/25/99	evd
	Toluene, Liquids	<0.50	0.50	ug/L	08/25/99	evd
	Xylenes (total), Liquids	<0.50	0.50	ug/L	08/25/99	evd



# CORE LABORATORIES

Job Number.: 991690	QUALITY CONTROL RESULTS	Report Date.: 09/03/1999
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CUSTOMER: Gettler-Ryan Inc.	PROJECT: Refer to Customer Project I.D.	ATTN: Deanna Harding
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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

Test Method.....: EPA 8015 Mod	Batch.....: 8286	Analyst...: evd
Method Description.: Total Extractable Petroleum Hydrocarbons Units.....: mg/L		

MB	Method Blank				09/01/1999	1908
----	--------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TEPH - as Diesel	0						

SB	Spiked Blank		090166			09/01/1999	1947
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TEPH - as Diesel	737		1000.000000		73.7	50-150	

SBD	Spiked Blank Duplicate		090166			09/01/1999	2026
-----	------------------------	--	--------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TEPH - as Diesel	699	737	1000.000000		69.9 5.3	50-150 30	

Test Method.....: EPA 8015Mod	Batch.....: 8161	Analyst...: evd
Method Description.: Total Volatile Petroleum Hydrocarbons Units.....: ug/L		

MB	Method Blank				08/25/1999	1111
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Petroleum Hydrocarbons	5						

LCS	Laboratory Control Sample		09072803			08/25/1999	1149
-----	---------------------------	--	----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Petroleum Hydrocarbons	846		1000.0		84.6	50-150	

LCD	Laboratory Control Sample Duplicate		09072803			08/25/1999	1215
-----	-------------------------------------	--	----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Petroleum Hydrocarbons	907	846	1000.0		90.7 7.0	50-150 30	



# CORE LABORATORIES

Job Number.: 991690	QUALITY CONTROL RESULTS	Report Date.: 09/03/1999
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CUSTOMER: Gettler-Ryan Inc.	PROJECT: Refer to Customer Project I.D.	ATTN: Deanna Harding
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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

MS	Matrix Spike	09072803	991690-3		08/25/1999	1831
----	--------------	----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Petroleum Hydrocarbons	837		1000.0	11	83	50-150	

MSD	Matrix Spike Duplicate	09072803	991690-3		08/27/1999	1259
-----	------------------------	----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Petroleum Hydrocarbons	940	837	1000.0	11	93 11.6	50-150 30	

Test Method.....: EPA 8021B	Batch.....: 8160	Analyst....: evd
Method Description.: Volatile Organics -Aromatics	Units.....: ug/L	

.MB	Method Blank				08/25/1999	1111
-----	--------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene	0.00						
Ethylbenzene	0.00						
Methyl-t-Butyl Ether (MTBE)	0.00						
Toluene	0.00						
Xylenes (total)	0.00						

LCS	Laboratory Control Sample	09072801			08/25/1999	1240
-----	---------------------------	----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene	48.91		50		97.8	39-150	
Ethylbenzene	50.52		50		101.0	32-160	
Methyl-t-Butyl Ether (MTBE)	276.25		250		110.5	50-150	
Toluene	51.59		50		103.2	46-148	
Xylenes (total)	156.90		150		104.6	75-125	

LCD	Laboratory Control Sample Duplicate	09072801			08/25/1999	1306
-----	-------------------------------------	----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene	50.50	48.91	50		101.0 3.2	39-150 20	
Ethylbenzene	52.29	50.52	50		104.6 3.4	32-160 20	
Methyl-t-Butyl Ether (MTBE)	247.18	276.25	250		98.9 11.1	50-150 25	
Toluene	51.94	51.59	50		103.9 0.7	46-148 20	
Xylenes (total)	160.53	156.90	150		107.0 2.3	75-125 20	





# CORE LABORATORIES

Job Number.: 991690	QUALITY CONTROL RESULTS	Report Date.: 09/03/1999
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CUSTOMER: Gettler-Ryan Inc.	PROJECT: Refer to Customer Project I.D.	ATTN: Deanna Harding
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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MS	Matrix Spike	09072801	991690-3		08/25/1999	1856
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene	50.93		50	0.00	101.9	39-150	
Ethylbenzene	52.85		50	0.00	105.7	32-160	
Methyl-t-Butyl Ether (MTBE)	242.59		250	0.00	97.0	50-150	
Toluene	52.25		50	0.00	104.5	46-148	
Xylenes (total)	162.49		150	0.00	108.3	75-125	

MSD	Matrix Spike Duplicate	09072801	991690-3		08/25/1999	1922
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene	50.59	50.93	50	0.00	101.2 1	39-150 20	
Ethylbenzene	52.60	52.85	50	0.00	105.2 0	32-160 20	
Methyl-t-Butyl Ether (MTBE)	267.80	242.59	250	0.00	107.1 10	50-150 25	
Toluene	52.85	52.25	50	0.00	105.7 1	46-148 20	
Xylenes (total)	162.35	162.49	150	0.00	108.2 0	75-125 20	



# CORE LABORATORIES

## SURROGATE RECOVERIES REPORT

Job Number.: 991690

Report Date.: 09/03/1999

CUSTOMER: Gettler-Ryan Inc.

PROJECT: Refer to Customer Project I.D. ATTN: Deanna Harding

Method.....: Volatile Organics -Aromatics  
 Method Code.....: 80208X

Batch.....: 8160  
 Analyst.....: evd

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	51.09	50.0000	102.2	64-147		08/25/1999	1111
		LCS	1	51.67	50.0000	103.3	64-147		08/25/1999	1240
		LCD	1	50.96	50.0000	101.9	64-147		08/25/1999	1306
991690-1	Liquids		1	49.32	50.0000	98.6	64-147		08/25/1999	1649
991690-2	Liquids		1	50.18	50.0000	100.4	64-147		08/25/1999	1714
991690-3	Liquids		1	50.49	50.0000	101.0	64-147		08/25/1999	1740
991690-3	Liquids	MS	1	51.87	50.0000	103.7	64-147		08/25/1999	1856
991690-3	Liquids	MSD	1	52.42	50.0000	104.8	64-147		08/25/1999	1922



# CORE LABORATORIES

## ANALYTICAL SUMMARY REPORT

Job Number: 991690

Report Date: 09/03/19

CUSTOMER: Gettler-Ryan Inc.

PROJECT: CPS# 206142

ATTN: Deanna Harding

BATCH	8286	ANALYTICAL METHOD	EPA 8015 Mod	DESCRIPTION	Total Extractable Petroleum Hydrocarbons				ANALYST	evd
Lab Sample ID	Client Sample Identification		Sample Matrix	Test Matrix	Sample Date Time		Analysis Date Time		Dil/Corr. Factor	
991690-2	MW-14		Water	Liquids	08/22/99	0000	09/01/99	2106	1	
991690-3	MW-1		Water	Liquids	08/22/99	0000	09/01/99	2145	1	

BATCH	8161	ANALYTICAL METHOD	EPA 8015Mod	DESCRIPTION	Total Volatile Petroleum Hydrocarbons				ANALYST	evd
Lab Sample ID	Client Sample Identification		Sample Matrix	Test Matrix	Sample Date Time		Analysis Date Time		Dil/Corr. Factor	
991690-1	TB-LB		Water	Liquids	08/22/99	0000	08/25/99	1649	1	
991690-2	MW-14		Water	Liquids	08/22/99	0000	08/25/99	1714	1	
991690-3	MW-1		Water	Liquids	08/22/99	0000	08/25/99	1740	1	

BATCH	8160	ANALYTICAL METHOD	EPA 8021B	DESCRIPTION	Volatile Organics -Aromatics				ANALYST	evd
Lab Sample ID	Client Sample Identification		Sample Matrix	Test Matrix	Sample Date Time		Analysis Date Time		Dil/Corr. Factor	
991690-1	TB-LB		Water	Liquids	08/22/99	0000	08/25/99	1649	1	
991690-2	MW-14		Water	Liquids	08/22/99	0000	08/25/99	1714	1	
991690-3	MW-1		Water	Liquids	08/22/99	0000	08/25/99	1740	1	

BATCH	8237	ANALYTICAL METHOD	LUFT - CA DOHS	DESCRIPTION	Leaking Underground Fuel Tank Extraction				ANALYST	tmp
Lab Sample ID	Client Sample Identification		Sample Matrix	Test Matrix	Sample Date Time		Analysis Date Time		Dil/Corr. Factor	
991690-2	MW-14		Water	Liquids	08/22/99	0000	08/31/99	0000	1	
991690-3	MW-1		Water	Liquids	08/22/99	0000	08/31/99	0000	1	



# CORE LABORATORIES

rpjsckl

Job Sample Receipt Checklist Report  
08/25/1999

V2

Job Number.....: 991690	Location.: 57218	Customer Job ID.....:	Job Check List Date.: 08/25/1999
Project Number.: 97000255	Project Description.: Refer to Customer Project I.D.		Project Manager.....: tas
Customer.....: Gettler-Ryan Inc.		Contact.: Deanna Harding	

Questions ?	(Y/N)	Comments
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Chain-of-Custody Present?.....	Y	
...If "yes", completed properly?.....	Y	
Custody seal on shipping container?.....	N	
...If "yes", custody seal intact?.....	N	
Custody seals on sample containers?.....	N	
...If "yes", custody seal intact?.....	N	
Samples chilled?.....	Y	3
Temperature of cooler acceptable? (4 deg C +/- 2).	Y	
Temperature measured from temperature blank?.....	N	
Samples received intact (good condition)?.....	Y	
Volatile samples acceptable? (no headspace).....	Y	
Correct containers used?.....	Y	
Adequate sample volume provided?.....	Y	
Samples preserved correctly?.....	Y	
Samples received within holding-time?.....	Y	
Agreement between COC and sample labels?.....	Y	
Open cooler radioactive screen at or below bkgd?.		
Additional.....		
Comments.....		
Sample Custodian Signature/Date.....	Y	



QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, September 1986, and Updates I, II, IIA, IIB, and III
- (2) Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on limits specified in the referenced method or on actual laboratory performance. The date and time of analysis indicated on the QC report may not reflect the actual time of analysis for QC samples. Data reported in the QA report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis unless otherwise indicated. Unless otherwise indicated, volatiles by gas chromatography (GC) are reported from a single column. Volatiles analyses by GC on low level soils are conducted at room temperature. TCLP extractions are performed at sample amounts, approved by the State of California.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- |  |  |
|--|--|
| NA = Not analyzed  | N.I. = Not Ignitable                           |
| N/A = Not applicable   | S.I. = Sustains Ignition                       |
| ug/L = Micrograms per liter  | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter  | RPD = Relative Percent Difference              |
| ND = Not detected at a value greater than the reporting limit  |  |
| NC = Not calculable due to values lower than the detection limit   |  |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects.   |  |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate.   |  |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects.  |  |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix.   |  |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. |  |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern.  |  |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern.                                    |  |
| (h) = High dilution due to matrix effects  |  |

QC SAMPLE IDENTIFICATIONS

- |   |                                   |
|---|-----------------------------------|
| MB = Method Blank                         | SB = Storage Blank                |
| RB = Reagent Blank                        | MS = Matrix Spike                 |
| ICB = Initial Calibration Blank           | MSD = Matrix Spike Duplicate      |
| CCB = Continuing Calibration Blank        | MD = Matrix Duplicate             |
| CS = Calibration Standard                 | BS = Blank Spike                  |
| ICV = Initial Calibration Verification    | SS = Surrogate Spike              |
| CCV = Continuing Calibration Verification | LCS = Laboratory Control Standard |
|   | RS = Reference Standard           |

SUBCONTRACTED LABORATORY LOCATIONS

- |                    |                         |     |
|--------------------|-------------------------|-----|
| Core Laboratories: | Aurora, Colorado        | *AU |
|                    | Casper, Wyoming         | *CA |
|                    | Corpus Christi, Texas   | *CC |
|                    | Edison, New Jersey      | *ED |
|                    | Houston, Texas (Env)    | *HE |
|                    | Houston, Texas (Pet)    | *HP |
|                    | Indianapolis, Indiana   | *IN |
|                    | Lake Charles, Louisiana | *LC |
|                    | Long Beach, California  | *LB |
|                    | Valparaiso, Indiana     | *VP |
|                    | Bakersfield, California | *BK |

1250 Gene Autry Way  
 Anaheim, CA 92805  
 (714) 937-1094 /u/matt/logs\_n\_forms/footer.form

991690  
 Chevron U.S.A. Inc.  
 P.O. BOX 5004  
 San Ramon, CA 94583  
 FAX (415)842-9591

Chevron Facility Number: Chevron RMC Lonestar - CPS #206142  
 Facility Address: 333 23rd Avenue, OAKLAND CA  
 Consultant Project Number: 346338.02  
 Consultant Name: Gettler-Ryan  
 Address: 6747 Sierra Ct, Ste J, Dublin 94568  
 Project Contact (Name): Deanna Harding  
 (Phone) 551-7555 (Fax Number) 551-7888

Chevron Contact (Name) MR. BOB COCHRAN  
 (Phone) (925) 842-9655  
 Laboratory Name CORE LABORATORY  
 Laboratory Service Order # \_\_\_\_\_  
 Samples Collected by (Name) F. Clime  
 Collection Date 8-22-99  
 Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed											Remarks					
								TPH Gas + BTEX w/MTBE (8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)									
TB-LB		1	W	TB	F	HCC	Y	X																
MW-1		4	W	G	1432	HCC, None	Y	X	X															
MW-1		4	W	G	1432	↓	Y	X	X															

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>G-R Inc.</u>	Date/Time <u>8-24-99/08</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>G-R Inc.</u>	Date/Time <u>0800 8-24-99</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>G-R INC</u>	Date/Time <u>16:00 8-24-99</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>CORE</u>	Date/Time <u>1030 8/25/99</u>	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) _____	Organization _____	Date/Time _____	

COC-3.DWG/03 91/HCH