# GETTLER-RYAN INC.

## TRANSMITTAL



September 30, 2002
G-R #386346

TO: Mr. James Brownell
Delta Environmental Consultants, Inc.
3164 Gold Camp Drive, Suite 200
Rancho Cordova, California 95670

CC: Ms. Karen Streich
Chevron Products Company
P.O. Box 6004
San Ramon, California 94583

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

**RE: Chevron Service Station**
**#9-8341**
**3530 MacArthur Boulevard**
**Oakland, California**

WE HAVE ENCLOSED THE FOLLOWING:

| COPIES | DATED | DESCRIPTION |
|---|---|---|
| 1 | September 13, 2002 | Groundwater Monitoring and Sampling Report<br>Third Quarter - Event of August 2, 2002 |

COMMENTS:

This report is being sent for your review. Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to ***October 14, 2002***, at which time the final report will be distributed to the following:

cc: Mr. Don Hwang, Alameda County Health Care Services, Dept. of Environmental Health, 1153 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577
Mr. Chuck Headlee, RWQCB-S.F. Bay Region, 1515 Clay St., Suite 1400, Oakland. CA 94612
Mr. Greg Gurss, Gettler-Ryan Inc., 3140 Gold Camp Drive, Suite 170, Rancho Cordova, CA 95670

Enclosures

trans/9-8341-KS

# GETTLER-RYAN INC.

September 13, 2002
G-R Job #386346

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

**RE: Third Quarter Event of August 2, 2002**
Groundwater Monitoring & Sampling Report
Chevron Service Station #9-8341
3530 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.

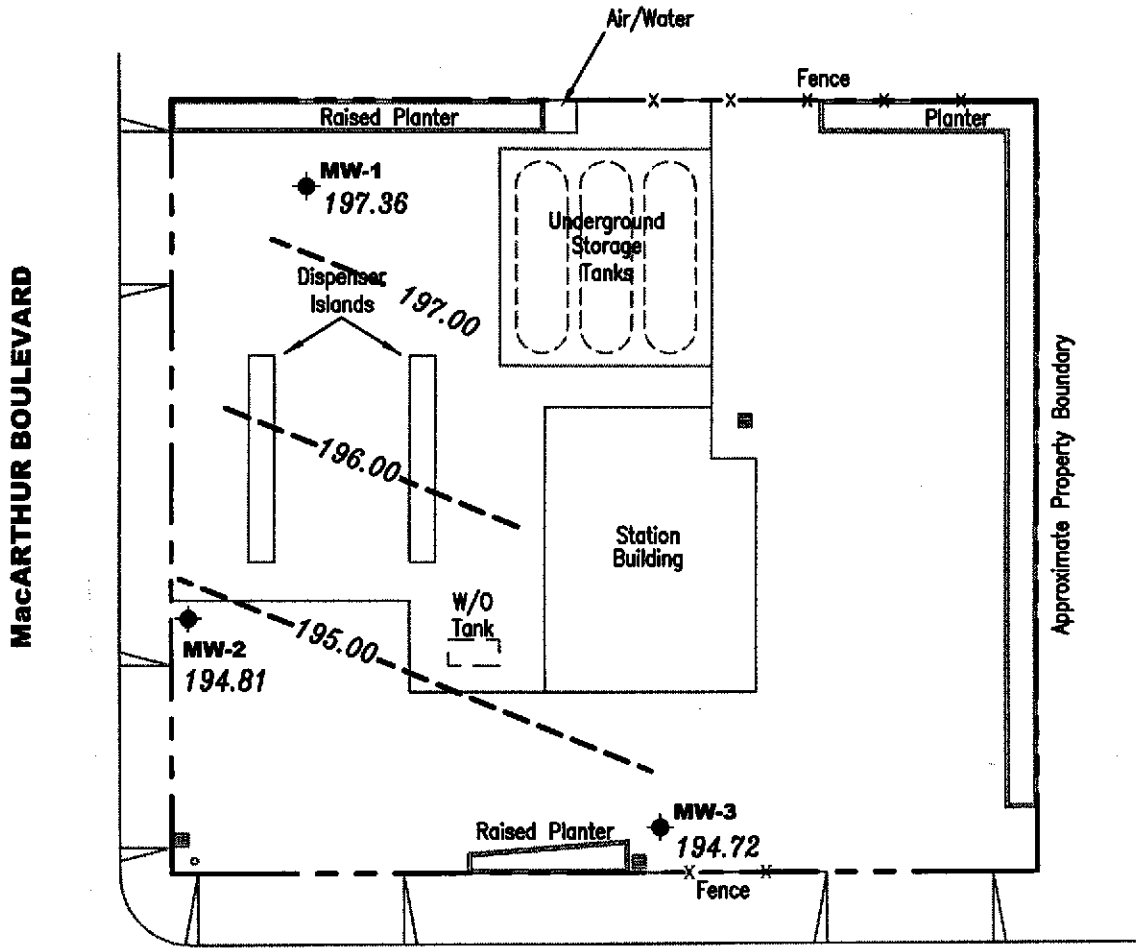
Sincerely,

Deanna L. Harding
Project Coordinator

REGISTERED GEOLOGIST
DOUGLAS J. LEE
No. 6882
STATE OF CALIFORNIA

Douglas J. Lee
Senior Geologist, R.G. No. 6882

Figure 1: Potentiometric 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
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level
- 99.99 — Groundwater elevation contour, dashed where inferred
- Approximate groundwater flow direction at a gradient of 0.04 Ft./Ft.

N

0 30

Scale in Feet


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


**POTENTIOMETRIC MAP**
Chevron Service Station #9-8341
3530 MacArthur Boulevard
Oakland, California

FIGURE
1

| JOB NUMBER | REVIEWED BY | DATE | REVISED DATE |
|---|---|---|---|
| 386346 | | August 2, 2002 | |

FILE NAME: P:\ENVIRO\CHEVRON\9-8341\002-9-8341.DWG | Layout Tab: Pot3

# Table 1

## Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-8341

3530 MacArthur Boulevard

Oakland, California

| WELL ID/ DATE | TOC (ft.) | GWE (msl) | DTW (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|
| **MW-1** | | | | | | | | | |
| 04/04/96 | 202.47 | 198.65 | 3.82 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | ND |
| 11/01/96 | 202.47 | 197.45 | 5.02 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/06/97 | 202.47 | 199.72 | 2.75 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 14 |
| 04/14/97 | 202.47 | 197.71 | 4.76 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 07/17/97 | 202.47 | 196.72 | 5.75 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/29/97 | 202.47 | 196.97 | 5.50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 02/04/98 | 202.47 | 199.80 | 2.67 | <50 | 4.2 | <0.5 | <0.5 | <0.5 | 94 |
| 04/03/98 | 202.47 | 197.06 | 5.41 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 07/29/98 | 202.47 | 192.26 | 10.21 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/26/98 | 202.47 | 195.66 | 6.81 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/18/99 | 202.47 | 196.05 | 6.42 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.0 |
| 04/15/99 | 202.47 | 197.13 | 5.34 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| 07/22/99 | 202.47 | 196.97 | 5.50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/13/99 | 202.47 | 196.43 | 6.04 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/21/00 | 202.47 | 197.11 | 5.36 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/10/00 | 202.47 | 197.60 | 4.87 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 07/12/00 | 202.47 | 197.05 | 5.42 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 |
| 10/05/00 | 202.47 | 196.79 | 5.68 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 |
| 01/05/01 | 202.47 | 197.30 | 5.17 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 04/05/01 | 202.47 | 197.83 | 4.64 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 08/20/01 | 202.47 | 197.29 | 5.18 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 11/26/01 | 202.47 | 197.65 | 4.82 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| 02/14/02 | 202.47 | 197.68 | 4.79 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| 05/07/02 | 202.47 | 197.55 | 4.92 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| **08/02/02** | **202.47** | **197.36** | **5.11** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<1.5** | **<2.5** |
| **MW-2** | | | | | | | | | |
| 04/04/96 | 198.88 | 196.07 | 2.81 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6,100 |
| 11/01/96 | 198.88 | 195.27 | 3.61 | <500 | <5.0 | <5.0 | <5.0 | <5.0 | 2,600 |
| 01/06/97 | 198.88 | 195.97 | 2.91 | <2,000 | 31 | <20 | <20 | <20 | 4,000 |

# Table 1

**Groundwater Monitoring Data and Analytical Results**

Chevron Service Station #9-8341

3530 MacArthur Boulevard

Oakland, California

| WELL ID/ DATE | TOC (ft.) | GWE (msl) | DTW (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|
| **MW-2 (cont)** | | | | | | | | | |
| 04/14/97 | 198.88 | 195.43 | 3.45 | <2,000 | <20 | <20 | <20 | <20 | 5,100/5,800[1] |
| 07/17/97 | 198.88 | 194.98 | 3.90 | <500 | <5.0 | <5.0 | <5.0 | <5.0 | 2,300/2,900[1] |
| 10/29/97 | 198.88 | 192.96 | 5.92 | 120[2] | 12 | <0.5 | <0.5 | <0.5 | 810/900[1] |
| 02/04/98 | 198.88 | 195.05 | 3.83 | <1,000 | <10 | <10 | <10 | <10 | 2,100/2,800[1] |
| 04/03/98 | 198.88 | 191.55 | 7.33 | <1,000 | <10 | <10 | <10 | <10 | 3,800/3,600[1] |
| 07/29/98 | 198.88 | 189.86 | 9.02 | 120[3] | <0.5 | <0.5 | <0.5 | <0.5 | 2,800/3,900[1] |
| 10/26/98 | 198.88 | 192.77 | 6.11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1,200 |
| 01/18/99 | 198.88 | 194.67 | 4.21 | <1,000 | <10 | <10 | <10 | 10.5 | 2,530 |
| 04/15/99 | 198.88 | 194.56 | 4.32 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5,270 |
| 07/22/99 | 198.88 | 193.73 | 5.15 | <50 | 8.92 | <0.5 | <0.5 | <0.5 | 1,450 |
| 10/13/99 | 198.88 | 192.23 | 6.65 | <250 | <2.5 | <2.5 | <2.5 | <2.5 | 1,740 |
| 01/21/00 | 198.88 | 192.78 | 6.10 | 69.6 | <0.5 | <0.5 | <0.5 | <0.5 | 1,110 |
| 04/10/00 | 198.88 | 194.42 | 4.46 | <500 | <5.0 | <5.0 | <5.0 | <5.0 | 1,700 |
| 07/12/00 | 198.88 | 195.24 | 3.64 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 187 |
| 10/05/00 | 198.88 | 194.06 | 4.82 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 |
| 01/05/01 | 198.88 | 195.17 | 3.71 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 1,800 |
| 04/05/01 | 198.88 | 192.94 | 5.94 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 5,500 |
| 08/20/01 | 198.88 | 193.18 | 5.70 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 2,000 |
| 11/26/01 | 198.88 | 193.55 | 5.33 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | 990 |
| 02/14/02 | 198.88 | 194.42 | 4.46 | 58 | <0.50 | <0.50 | <0.50 | <1.5 | 1,200 |
| 05/07/02 | 198.88 | 194.49 | 4.39 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| **08/02/02** | **198.88** | **194.81** | **4.07** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<1.5** | **490** |
| **MW-3** | | | | | | | | | |
| 04/04/96 | 199.10 | 195.22 | 3.88 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | ND |
| 11/01/96 | 199.10 | 194.91 | 4.19 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/06/97 | 199.10 | 195.29 | 3.81 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/14/97 | 199.10 | 194.93 | 4.17 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 07/17/97 | 199.10 | 194.92 | 4.18 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/29/97 | 199.10 | 193.90 | 5.20 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |

# Table 1

## Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-8341
3530 MacArthur Boulevard
Oakland, California

| WELL ID/ DATE | TOC (ft.) | GWE (msl) | DTW (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|
| **MW-3 (cont)** | | | | | | | | | |
| 02/04/98 | 199.10 | 194.71 | 4.39 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/03/98 | 199.10 | 195.78 | 3.32 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 07/29/98 | 199.10 | 189.24 | 9.86 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/26/98 | 199.10 | 193.59 | 5.51 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/18/99 | 199.10 | 194.68 | 4.42 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.0 |
| 04/15/99 | 199.10 | 194.54 | 4.56 | <50 | <0.5 | <0.5 | <0.5 | 1.16 | <5.0 |
| 07/22/99 | 199.10 | 192.45 | 6.65 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3.94 |
| 10/13/99 | 199.10 | 193.79 | 5.31 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6.55 |
| 01/21/00 | 199.10 | 193.18 | 5.92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/10/00 | 199.10 | 194.32 | 4.78 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 07/12/00 | 199.10 | 193.86 | 5.24 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 |
| 10/05/00 | 199.10 | 195.17 | 3.93 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 39.7 |
| 01/05/01 | 199.10 | 194.85 | 4.25 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 2.9 |
| 04/05/01 | 199.10 | 194.72 | 4.38 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 08/20/01 | 199.10 | 194.35 | 4.75 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 11/26/01 | 199.10 | 193.60 | 5.50 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| 02/14/02 | 199.10 | 194.82 | 4.28 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| 05/07/02 | 199.10 | 194.58 | 4.52 | 85 | <0.50 | <0.50 | <0.50 | <1.5 | 610 |
| **08/02/02** | **199.10** | **194.72** | **4.38** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<1.5** | **<2.5** |
| **TRIP BLANK** | | | | | | | | | |
| 11/01/96 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/06/97 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/14/97 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 07/17/97 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/29/97 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 02/04/98 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/03/98 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 07/29/98 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/26/98 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |

# Table 1

## Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-8341
3530 MacArthur Boulevard
Oakland, California

| WELL ID/ DATE | TOC (ft.) | GWE (msl) | DTW (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|
| **TRIP BLANK (cont)** | | | | | | | | | |
| 01/18/99 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.0 |
| 04/15/99 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| 07/22/99 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/13/99 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/21/00 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/10/00 | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 07/12/00 | -- | -- | -- | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 |
| 10/05/00 | -- | -- | -- | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 |
| 01/05/01 | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 04/05/01 | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| 08/20/01 | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 |
| **QA** | | | | | | | | | |
| 11/26/01 | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| 02/14/02 | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| 05/07/02 | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <1.5 | <2.5 |
| **08/02/02** | **--** | **--** | **--** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<1.5** | **<2.5** |

# Table 1

## Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-8341
3530 MacArthur Boulevard
Oakland, California

**EXPLANATIONS:**

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

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

TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes

MTBE = Methyl tertiary butyl ether
ND = Not Detected
-- = Not Measured/Not Analyzed
(ppb) = Parts per billion
QA = Quality Assurance

[1] Confirmation run.

[2] Chromatogram report indicates an unidentified hydrocarbon and gas.

[3] Chromatogram report indicates an unidentified hydrocarbon.

# STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using Chevron-designated disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.

# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING
## FIELD DATA SHEET

Client/Facility #: **ChevronTexaco #9-8341** Job Number: **386346**

Site Address: **3530 Macarthur Blvd.** Event Date: 8/2/01

City: **Oakland, CA** Sampler: G. L

Well ID: MW-1 Well Condition: Ok

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

Total Depth: 26.85 ft.

Depth to Water: 5.11 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 |

21.74 xVF 0.17 = 3.70 x3 (case volume) = Estimated Purge Volume: 12 gal.

**Purge Equipment:**

| | |
|---|---|
| Disposable Bailer | |
| Stainless Steel Bailer | |
| Stack Pump | ✓ |
| Suction Pump | |
| Grundfos | |
| Other: | |

**Sampling Equipment:**

| | |
|---|---|
| Disposable Bailer | ✓ |
| Pressure Bailer | |
| Discrete Bailer | |
| Other: | |

Start Time (purge): 1045 Weather Conditions: Overcast

Sample Time/Date: 1125 / 8/2/01 Water Color: Clear Odor: No

Purging Flow Rate: ≈1.5 gpm. Sediment Description:

Did well de-water? NO If yes, Time: _____ Volume: _____ gal.

| Time (2400 hr.) | Volume (gal.) | pH | Conductivity (umhos/cm) | Temperature (C/F) | D.O. (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| 1055 | 4 | 7.89 | 467 | 23.6 | | |
| 1100 | 8 | 7.79 | 464 | 23.7 | | |
| 1105 | 12 | 7.72 | 460 | 23.8 | | |
| | | | | | | |

### LABORATORY INFORMATION

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

**COMMENTS:**

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

# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING
## FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-8341 Job Number: 386346
Site Address: 3530 Macarthur Blvd. Event Date: 8/2/02
City: Oakland, CA Sampler: G.D.

Well ID: MW-2 Well Condition: OK
Well Diameter: 2 in. Hydrocarbon Thickness: 0 ft. Amount Bailed (product/water): 0 gal.
Total Depth: 33.15 ft.
Depth to Water: 4.07 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 |

29.08 xVF 0.17 = 4.94 x3 (case volume) = Estimated Purge Volume: 15 gal.

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

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

Start Time (purge): 1135 Weather Conditions: Overcast
Sample Time/Date: 1215 / 8/2/02 Water Color: Clear Odor: No
Purging Flow Rate: >1.5 gpm. Sediment Description: ____
Did well de-water? No If yes, Time: ____ Volume: ____ gal.

| Time (2400 hr.) | Volume (gal.) | pH | Conductivity (umhos/cm) | Temperature (C/F) | D.O. (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| 1145 | 5 | 7.11 | 494 | 24.8 | | |
| 1150 | 10 | 7.02 | 491 | 24.2 | | |
| 1155 | 15 | 6.99 | 489 | 24.3 | | |
| | | | | | | |

### LABORATORY INFORMATION

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

**COMMENTS:** ____

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

# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING
## FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-8341 Job Number: 386346
Site Address: 3530 Macarthur Blvd. Event Date: 8/2/02
City: Oakland, CA Sampler: GR

Well ID: MW-3 Well Condition: OK
Well Diameter: 2 in. Hydrocarbon Thickness: 0 ft. Amount Bailed (product/water): 0 gal.
Total Depth: 32.25 ft.
Depth to Water: 4.38 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 |

27.87 xVF 0.17 = 4.74 x3 (case volume) = Estimated Purge Volume: 15 gal.

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

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

Start Time (purge): 1230 Weather Conditions: Overcast
Sample Time/Date: 1305 / 8/2/02 Water Color: Clear Odor: No
Purging Flow Rate: ≈1.5 gpm. Sediment Description:
Did well de-water? No If yes, Time: _____ Volume: _____ gal.

| Time (2400 hr.) | Volume (gal.) | pH | Conductivity (umhos/cm) | Temperature (C/F) | D.O. (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| 1240 | 5 | 7.29 | 453 | 22.7 | | |
| 1245 | 10 | 7.24 | 441 | 22.9 | | |
| 1250 | 15 | 7.21 | 498 | 22.9 | | |

### LABORATORY INFORMATION

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

COMMENTS:

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

RA 8/5

# Chevron California Region Analysis Request/Chain of Custody

**Lancaster Laboratories**
*Where quality is a science.*

080202-012

Acct. #: 10905 | For Lancaster Laboratories use only Sample #: 386068I-84 | SCR#:

Group # 817546

Facility #: 9-8341 Job# 386346 Global ID #T0600101790

Site Address: 3530 MACARTHUR BLVD, OAKLAND, CA

Chevron PM: Karen Streich Lead Consultant: Delta/G-R

Consultant/Office: G-R Inc 6747 Sierra Ct #J Dublin CA 94568

Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)

Consultant Phone #: 925-551-7555 Fax #: 925-551-7899

Sampler: G. [illegible]

Service Order #: _____ ☐ Non SAR: _____

**Analyses Requested**

**Preservation Codes**

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

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

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Matrix: Soil | Matrix: Water (☐ Potable ☐ NPDES) | Matrix: Oil ☐ Air ☐ | Total Number of Containers | BTEX + MTBE 8260 ☐ 8021 | TPH 8015 MOD GRO | TPH 8015 MOD DRO ☐ Silica Gel Cleanup | 8260 full scan | Oxygenates ___ | Lead 7420 ☐ 7421 ☐ | Preservation Codes: H | Preservation Codes: H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QA | 8/2/02 | — | | | | X | | 3 | X | X | | | | | | |
| MW-1 | | 1125 | X | | | X | | 3 | X | X | | | | | | |
| MW-2 | | 1215 | X | | | X | | 3 | X | X | | | | | | |
| MW-3 | ↓ | 1305 | X | | | X | | 3 | X | X | | | | | | |

**Comments / Remarks**

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

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

| | Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|---|
| 1 | [signature] | 8/2/02 | | [signature] | 8/2/02 | 1211 |
| 2 | [signature] | 8/2/02 | | [signature] | 8/2/02 | 1330 |
| 3 | [signature] | 8/2/02 | 1530 | [signature] | 8/2/02 | |
| | Relinquished by Commercial Carrier: UPS FedEx (Other) Digboone | | | Received by: [signature] | 8/3/02 | 0915 |
| | Temperature Upon Receipt 15-3.3 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
*Where quality is a science.*

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

925-842-8582

Prepared by:

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

SAMPLE GROUP

The sample group for this submittal is 817546. Samples arrived at the laboratory on Saturday, August 03, 2002. The PO# for this group is 99011184 and the release number is STREICH.

| Client Description | | | Lancaster Labs Number |
|---|---|---|---|
| QA-T-020802 | NA | Water | 3870681 |
| MW-1-W-020802 | Grab | Water | 3870682 |
| MW-2-W-020802 | Grab | Water | 3870683 |
| MW-3-W-020802 | Grab | Water | 3870684 |

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

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

Respectfully Submitted,

Steven A. Skiles
Sr. Chemist

Lancaster Laboratories
Where quality is a science.



**Lancaster Laboratories Sample No. WW 3870681**

Collected:08/02/2002 00:00

Account Number: 10905

Submitted: 08/03/2002 09:15
Reported: 08/14/2002 at 14:29
Discard: 09/14/2002
QA-T-020802 NA Water
Facility# 98341 Job# 386346 GRD
3530 Macarthur-Oakland T0600101790 QA

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 01729 | TPH-GRO - Waters | | | | | |
| 01730 | TPH-GRO - Waters | n.a. | N.D. | 50. | ug/l | 1 |
| | The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. | | | | | |
| 08214 | BTEX, MTBE (8021) | | | | | |
| 00776 | Benzene | 71-43-2 | N.D. | 0.50 | ug/l | 1 |
| 00777 | Toluene | 108-88-3 | N.D. | 0.50 | ug/l | 1 |
| 00778 | Ethylbenzene | 100-41-4 | N.D. | 0.50 | ug/l | 1 |
| 00779 | Total Xylenes | 1330-20-7 | N.D. | 1.5 | ug/l | 1 |
| 00780 | Methyl tert-Butyl Ether | 1634-04-4 | N.D. | 2.5 | ug/l | 1 |
| | A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. | | | | | |

State of California Lab Certification No. 2116

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 01729 | TPH-GRO - Waters | N. CA LUFT Gasoline Method | 1 | 08/05/2002 18:13 | Matthew E Barton | 1 |
| 08214 | BTEX, MTBE (8021) | SW-846 8021B | 1 | 08/05/2002 18:13 | Matthew E Barton | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 08/05/2002 18:13 | Matthew E Barton | n.a. |

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

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Where quality is a science.



**Lancaster Laboratories Sample No. WW 3870682**

Collected:08/02/2002 11:25 by GR

Account Number: 10905

Submitted: 08/03/2002 09:15
Reported: 08/14/2002 at 14:29
Discard: 09/14/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-1-W-020802 Grab Water
Facility# 98341 Job# 386346 GRD
3530 Macarthur-Oakland T0600101790 MW-1

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 01729 | TPH-GRO - Waters | | | | | |
| 01730 | TPH-GRO - Waters | n.a. | N.D. | 50. | ug/l | 1 |
| | The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. | | | | | |
| 08214 | BTEX, MTBE (8021) | | | | | |
| 00776 | Benzene | 71-43-2 | N.D. | 0.50 | ug/l | 1 |
| 00777 | Toluene | 108-88-3 | N.D. | 0.50 | ug/l | 1 |
| 00778 | Ethylbenzene | 100-41-4 | N.D. | 0.50 | ug/l | 1 |
| 00779 | Total Xylenes | 1330-20-7 | N.D. | 1.5 | ug/l | 1 |
| 00780 | Methyl tert-Butyl Ether | 1634-04-4 | N.D. | 2.5 | ug/l | 1 |
| | A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. | | | | | |

State of California Lab Certification No. 2116

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 01729 | TPH-GRO - Waters | N. CA LUFT Gasoline Method | 1 | 08/05/2002 20:56 | Matthew E Barton | 1 |
| 08214 | BTEX, MTBE (8021) | SW-846 8021B | 1 | 08/05/2002 20:56 | Matthew E Barton | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 08/05/2002 20:56 | Matthew E Barton | n.a. |

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

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

# Analysis Report

Lancaster Laboratories
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**Lancaster Laboratories Sample No. WW 3870683**

Collected:08/02/2002 12:15 by GR

Account Number: 10905

Submitted: 08/03/2002 09:15
Reported: 08/14/2002 at 14:29
Discard: 09/14/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-2-W-020802 Grab Water
Facility# 98341 Job# 386346 GRD
3530 Macarthur-Oakland T0600101790 MW-2

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 01729 | TPH-GRO - Waters | | | | | |
| 01730 | TPH-GRO - Waters | n.a. | N.D. | 50. | ug/l | 1 |
| | The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. | | | | | |
| 08214 | BTEX, MTBE (8021) | | | | | |
| 00776 | Benzene | 71-43-2 | N.D. | 0.50 | ug/l | 1 |
| 00777 | Toluene | 108-88-3 | N.D. | 0.50 | ug/l | 1 |
| 00778 | Ethylbenzene | 100-41-4 | N.D. | 0.50 | ug/l | 1 |
| 00779 | Total Xylenes | 1330-20-7 | N.D. | 1.5 | ug/l | 1 |
| 00780 | Methyl tert-Butyl Ether | 1634-04-4 | 490. | 2.5 | ug/l | 1 |
| | A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. | | | | | |

State of California Lab Certification No. 2116

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilutic Factor |
|---|---|---|---|---|---|---|
| 01729 | TPH-GRO - Waters | N. CA LUFT Gasoline Method | 1 | 08/05/2002 21:29 | Matthew E Barton | 1 |
| 08214 | BTEX, MTBE (8021) | SW-846 8021B | 1 | 08/05/2002 21:29 | Matthew E Barton | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 08/05/2002 21:29 | Matthew E Barton | n.a. |

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

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Lancaster, PA 17605-2425
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**Lancaster Laboratories Sample No. WW 3870684**

Collected:08/02/2002 13:05 by GR

Account Number: 10905

Submitted: 08/03/2002 09:15
Reported: 08/14/2002 at 14:29
Discard: 09/14/2002

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MW-3-W-020802 Grab Water
Facility# 98341 Job# 386346 GRD
3530 Macarthur-Oakland T0600101790 MW-3

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 01729 | TPH-GRO - Waters | | | | | |
| 01730 | TPH-GRO - Waters | n.a. | N.D. | 50. | ug/l | 1 |
| | The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. | | | | | |
| 08214 | BTEX, MTBE (8021) | | | | | |
| 00776 | Benzene | 71-43-2 | N.D. | 0.50 | ug/l | 1 |
| 00777 | Toluene | 108-88-3 | N.D. | 0.50 | ug/l | 1 |
| 00778 | Ethylbenzene | 100-41-4 | N.D. | 0.50 | ug/l | 1 |
| 00779 | Total Xylenes | 1330-20-7 | N.D. | 1.5 | ug/l | 1 |
| 00780 | Methyl tert-Butyl Ether | 1634-04-4 | N.D. | 2.5 | ug/l | 1 |
| | A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. | | | | | |

State of California Lab Certification No. 2116

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilutic Factor |
|---|---|---|---|---|---|---|
| 01729 | TPH-GRO - Waters | N. CA LUFT Gasoline Method | 1 | 08/05/2002 22:02 | Anastasia Papadoplos | 1 |
| 08214 | BTEX, MTBE (8021) | SW-846 8021B | 1 | 08/05/2002 22:02 | Anastasia Papadoplos | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 08/05/2002 22:02 | Anastasia Papadoplos | n.a. |

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

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
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# Quality Control Summary

Client Name: ChevronTexaco
Group Number: 817546
Reported: 08/14/02 at 02:29 PM

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 02217A51A | Sample number(s): 3870681-3870684 | | | | | | | |
| Benzene | N.D. | 0.5 | ug/l | 107 | 105 | 80-118 | 3 | 30 |
| Toluene | N.D. | 0.5 | ug/l | 106 | 104 | 82-119 | 2 | 30 |
| Ethylbenzene | N.D. | 0.5 | ug/l | 101 | 98 | 81-119 | 3 | 30 |
| Total Xylenes | N.D. | 1.5 | ug/l | 106 | 101 | 82-120 | 4 | 30 |
| Methyl tert-Butyl Ether | N.D. | 2.5 | ug/l | 106 | 110 | 79-127 | 3 | 30 |
| TPH-GRO - Waters | N.D. | 50. | ug/l | 99 | 102 | 74-116 | 4 | 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: 02217A51A | Sample number(s): 3870681-3870684 | | | | | | | | |
| Benzene | 100 | | 83-130 | | | | | | |
| Toluene | 98 | | 87-129 | | | | | | |
| Ethylbenzene | 95 | | 86-133 | | | | | | |
| Total Xylenes | 96 | | 86-132 | | | | | | |
| Methyl tert-Butyl Ether | 95 | | 66-140 | | | | | | |
| TPH-GRO - Waters | 112 | | 74-132 | | | | | | |

## Surrogate Quality Control

Analysis Name: TPH-GRO - Waters
Batch number: 02217A51A

| | Trifluorotoluene-F | Trifluorotoluene-P |
|---|---|---|
| 3870681 | 94 | 96 |
| 3870682 | 95 | 96 |
| 3870683 | 93 | 98 |
| 3870684 | 90 | 97 |
| Blank | 94 | 95 |
| LCS | 108 | 96 |
| LCSD | 108 | 96 |
| MS | 117 | 96 |
| Limits: | 57-146 | 71-130 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
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2425 New Holland Pike
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Lancaster, PA 17605-2425
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