



Disc w/e c  
**GETTLER-RYAN INC.**

## TRANSMITTAL

*MAY 23 2001*

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

DATE: May 16, 2001  
PROJ. #: 346338.02  
SUBJECT: Chevron #20-6142  
333 23<sup>rd</sup> Avenue  
Oakland, CA

FROM:  
Stephen J. Carter, R.G. (916)-631-1314  
Senior Geologist  
Gettler-Ryan Inc.  
3140 Gold Camp Drive, Suite 170  
Rancho Cordova, California 95670

*CO 0000369*

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	May 16, 2001	First Quarter 2001 Monitoring and Sampling Report

THESE ARE TRANSMITTED as checked below:

- For review and comment     Approved as submitted     Resubmit \_\_ copies for approval  
 As requested                 Approved as noted             Submit \_\_ copies for distribution  
 For approval                 Return for corrections       Return \_\_ corrected prints  
 For Your Files

COMMENTS:

At your request we have distributed this report as indicated below. Please call us at 916.631.1300 if you have questions.

cc: Mr. Barney Chan, Alameda County Department of Environmental Health, 1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor,  
Alameda, CA 94502



# GETTLER-RYAN INC.

*Co 369*

May 16, 2001

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

**Subject: First Quarter 2001 Monitoring and Sampling Report for Chevron Station #20-6142, 333  
23<sup>rd</sup> Avenue, Oakland, California.**

Mr. Cochran:

This report presents the results of the first quarter 2001 monitoring and sampling event performed at the subject site on March 25, 2001. Copies of the field data sheets, laboratory reports and chain-of-custody documents are attached. Monitoring and analytical data have been summarized in the attached table.

#### **Summary of Site First Quarter 2001 Conditions**

On March 25, 2001, GR monitored and sampled eight wells (MW-1, MW-5, MW-7 through MW-11 and MW-14). Floating product was not identified in any of the wells. Depth-to-water in the wells was measured at 7.21 to 8.64 feet below top of well casing. Based on these data, groundwater flow beneath the site was predominantly to the southwest at a gradient of 0.07 ft/ft (Figure 1). These data are consistent with historical data. GR field data sheets are attached.

Total Petroleum Hydrocarbons as gasoline (TPHg) were detected in wells MW-1 (217 parts per billion, or ppb) and MW-8 (53.7 ppb). The laboratory noted that the compounds quantified as TPHg were unidentified hydrocarbons in the C6-C12 range. Methyl tert-butyl ether (MtBE) by EPA Method 8260 was detected only in well MW-5 (2.77 ppb). Total Petroleum Hydrocarbons as diesel with silica gel cleanup (TPHd) were detected in all wells except MW-5 at concentrations ranging from 69.1 to 4,630 ppb. The laboratory noted that compounds reported as TPHd were unidentified hydrocarbons in the C9-C24 range. Benzene, toluene, ethylbenzene, xylenes, TBA, DIPE, ETBE, TAME, 1,2-DCA or EDB were not detected in any of the wells during this event. Polynuclear aromatic hydrocarbons (PNAs) were not detected in wells MW-1, MW-5 or MW-8. These data are consistent with historical data. TPHg, benzene, MtBE and TPHd concentrations have been plotted on Figure 2. Copies of the laboratory report and chain-of-custody are attached. *-described in PNA's*

#### **Evaluation for Natural Attenuation**

During the first quarter 2001 sampling event, additional analyses were performed to evaluate natural attenuation of the hydrocarbon plume. Natural attenuation appears to be the most likely mechanism to account for the observed decreasing trend in hydrocarbon concentrations at the site. As discussed in GR's

346338.02-3

*First and Third Quarter 2000 Monitoring and Sampling Report* (dated October 5, 2000), the dissolved plume beneath the subject site is stable and dissolved concentrations show a decreasing trend.

During the first quarter 2001, samples from all wells were analyzed for parameters indicative of biologic activity. Results of analyses for dissolved oxygen, oxidation-reduction potential, alkalinity, sulfate, nitrate, conductivity, and ferrous iron are similar to results from the third quarter 2000. These data continue to indicate that natural attenuation of the dissolved plume is acting to control plume configuration and inhibit plume migration.

#### **Response to ACEHS Letter**

In an October 24, 2000, letter to Chevron, Alameda County Environmental Health Services (ACEHS) requested some additional information be submitted prior to considering the site for closure. This information is discussed below in the order presented in the letter. A copy of the letter is attached.

1. *Copies of the well boring logs for all existing and previously installed wells.* Copies of boring logs and well construction details for wells MW-1 through MW-7, MW-9 through MW-14, and RW-2 are attached. Details regarding construction of tank backfill wells A and B are not available. Chevron files inspected by GR did not contain boring logs or well construction details for wells MW-8 or RW-1.
2. *Utility survey for the site.* Subsurface utility data were obtained form the City of Oakland, Pacific Gas and Electric, and RMC Lonestar. This information has been compiled on the Potentiometric and Concentration Maps (Figures 2 and 3). Flow line elevations and flow directions for the sewer and storm drain system are included. Pipe diameter and approximate burial depth, where available, have also been included.
3. *Analysis of wells MW-1, MW-5 and MW-8 for PNAs (polynuclear aromatics).* Wells MW-1, MW-5 and MW-8 were analyzed for PNAs during the first quarter 2001. PNAs were not detected in these wells. This information is included in the attached tables. Copies of the laboratory report are attached.
4. *All wells with oxygen-releasing compound socks in them should have the socks removed, be allowed to equilibrate and purged prior to sampling and chemical analysis.* There has not been any oxygen-releasing compound (ORC) socks in the wells since before the first quarter 2000 sampling event. ~~There has been at least three sampling events (March 2000, July 2000, and May 1, 2001) since the removal of the ORC socks.~~ These wells have had sufficient time to equilibrate since ORC removal, and the wells were purged during each of the sampling events.

#### **Discussion**

Groundwater flow during the first quarter 2001 was to the south-southwest, consistent with historical monitoring data. The dissolved hydrocarbon plume continues to be defined. Benzene was not detected in any of wells, and MTBE was detected only in one well (upgradient well MW-5) at a concentration slightly above the laboratory reporting limit. The higher concentrations of hydrocarbons continue to be detected in the core of the plume, but the plume configuration appears to be stable and the dissolved plume does not

First Quarter 2001 Monitoring and Sampling Report, Chevron #20-6142, Oakland, California.  
May 16, 2001

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appear to be migrating. Natural attenuation appears to be responsible for preventing plume migration to the estuary. Data collected during the first quarter 2001 are consistent with historical monitoring and sampling data for the site.

As indicated on Figures 1 and 2, some of the subsurface utilities in the immediate site vicinity fall within the range of groundwater fluctuation. Reconnaissance of the site vicinity indicates there is a petroleum dispensing facility upgradient of the subject site (Golden Gate Petroleum). Based on the historical monitoring data for the subject site and burial depth data supplied with the subsurface utility maps, it appears unlikely the subsurface utilities in the immediate vicinity of the site are likely to greatly influence the distribution of dissolved hydrocarbons.

#### **Recommendations**

The hydrocarbon plume is delineated and appears stable. Dissolved hydrocarbon concentrations are decreasing. Natural attenuation appears to be responsible for the reduction in dissolved concentrations and for the stability of the dissolved plume. Additional work at this site is not warranted. GR recommends that ACEHS close the site, and that semi-annual monitoring and sampling be suspended pending ACEHS's decision.

If you have questions, please call us in Sacramento at 916.631.1300.

Sincerely,  
Gettler-Ryan Inc.

Stephen J. Carter  
Senior Geologist  
R.G. 5577

Greg A. Gurss  
Senior Project Manager



Attachments: Alameda County Environmental Health Services letter dated October 24, 2000  
Figure 1. Potentiometric Map  
Figure 2. Concentration Map  
Cumulative Table of Well Data and Analytical Results  
GR Field Methods and Procedures  
Field Data Sheets  
Laboratory Report and Chain-of-Custody form  
Boring Logs and Well Construction Details

cc: Mr. Barney Chan, Alameda County Environmental Health Services, 1131 Harbor Bay Parkway, Suite 250,  
Alameda, CA 94503-6577

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



October 24, 2000  
SLIC # 3633

Mr. Bob Cochran  
Chevron Products Co.  
P.O. Box 6004  
San Ramon, CA 94583

RECEIVED

OCT 20 2000

GETTLER-RYAN INC.

GENERAL CONTRACTOR  
Re: Former Chevron Station #20-6142, 333 23rd Ave., Oakland CA 94606  
(Lonestar Facility)

346338.02

Dear Mr. Cochran:

Our office has received and reviewed the September 26, 2000 First and Third Quarters Monitoring reports for the above referenced site prepared by Gettler-Ryan Inc., your consultant. As you are aware, your consultant recommends that the site be considered for closure. Before we can do this please provide the following:

- Copies of the well boring logs for all existing and previously installed wells.
- Utility survey for the site
- The analysis of wells MW-1, MW-5 and MW-8 for PNAs (polynuclear aromatics)
- All wells with oxygen-releasing compound socks in them should have the socks removed, be allowed to equilibrate and purged prior to sampling and chemical analysis.
- Please provide a check for \$1500.00 payable to Alameda County Environmental Health to cover past and future oversight costs. Your current balance is approximately -\$1000.00. Please indicate project # 4520 and the site address on your check. Note, our office did not receive the \$1000.00 from my earlier request (7/11/00).

Our office will be consulting with the SFRWQCB on this site to seek their concurrence in site status.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

*Barney M. Chan*

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, file

Mr. S. Carter, Gettler-Ryan, 6747 Sierra Ct., Suite J, Dublin CA 94568

2-333 23rd Ave.

ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

FIGURE

1

**POTENSIOMETRIC MAP**  
Chevron/RMC Lonestar Facility CPS #20-6142  
333 23rd Avenue  
Oakland, California

REVISED DATE

DATE

March 25, 2001

FILE NAME: P:\ENVIR\CHEVRON\20-6142\400-20-6142.DWG | Layout Tab: Site Summary 5-01

**GETTLER - RYAN INC.**

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

REVIEWED BY

PROJECT NUMBER

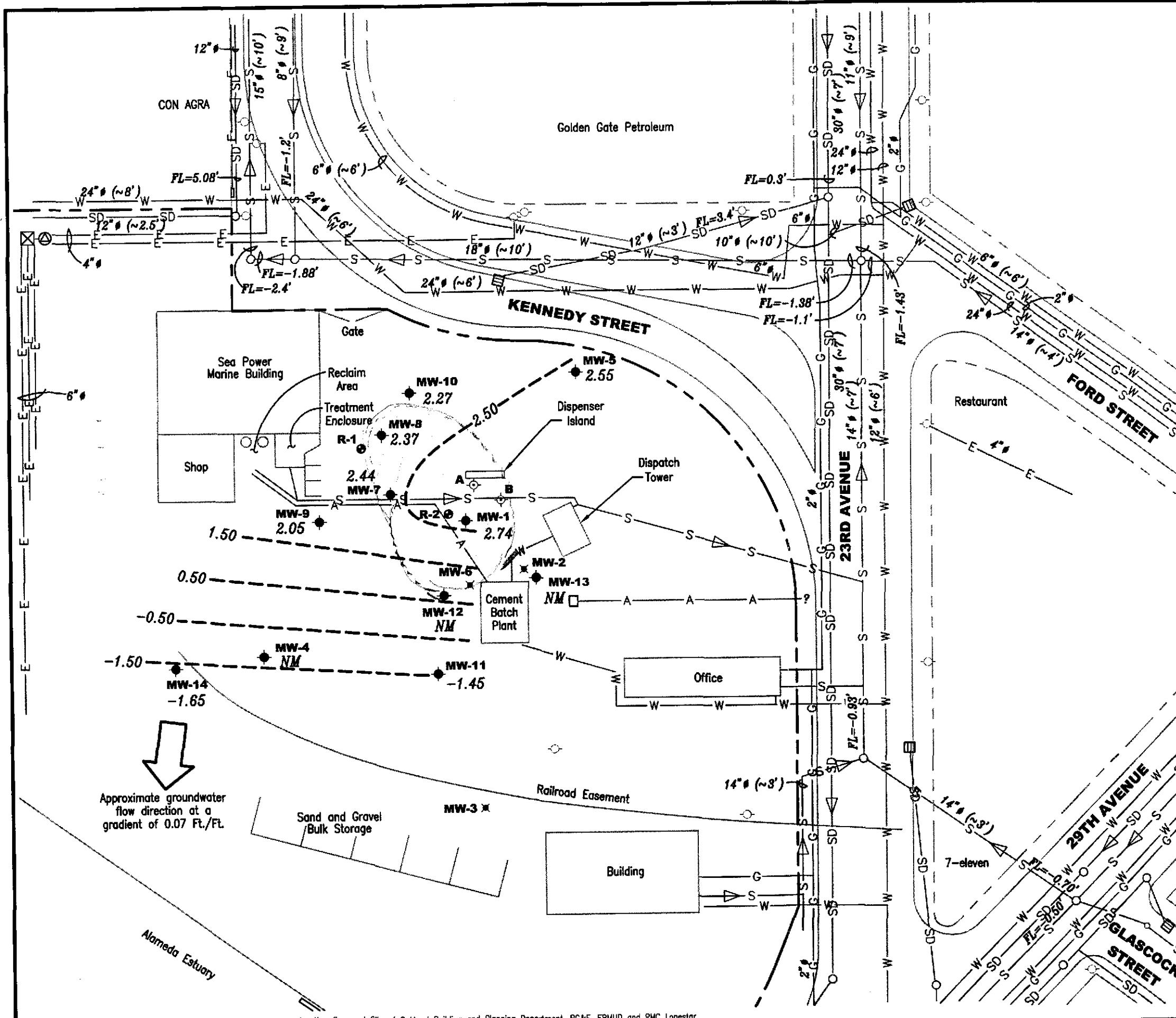
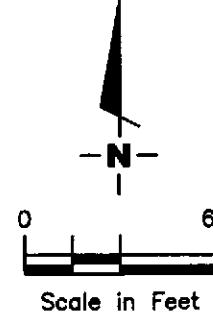
346338

**EXPLANATION**

- Groundwater monitoring well
- Groundwater recovery well
- Tank backfill monitoring well
- ✖ Abandoned well
- Storm drain
- ☒ PG&E vault
- Power pole
- Manhole
- ▽ Flow direction
- 8"
- (~6')
- 99.99
- Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- Groundwater elevation contour, dashed where inferred.
- NM Not Monitored

**UNDERGROUND UTILITIES**

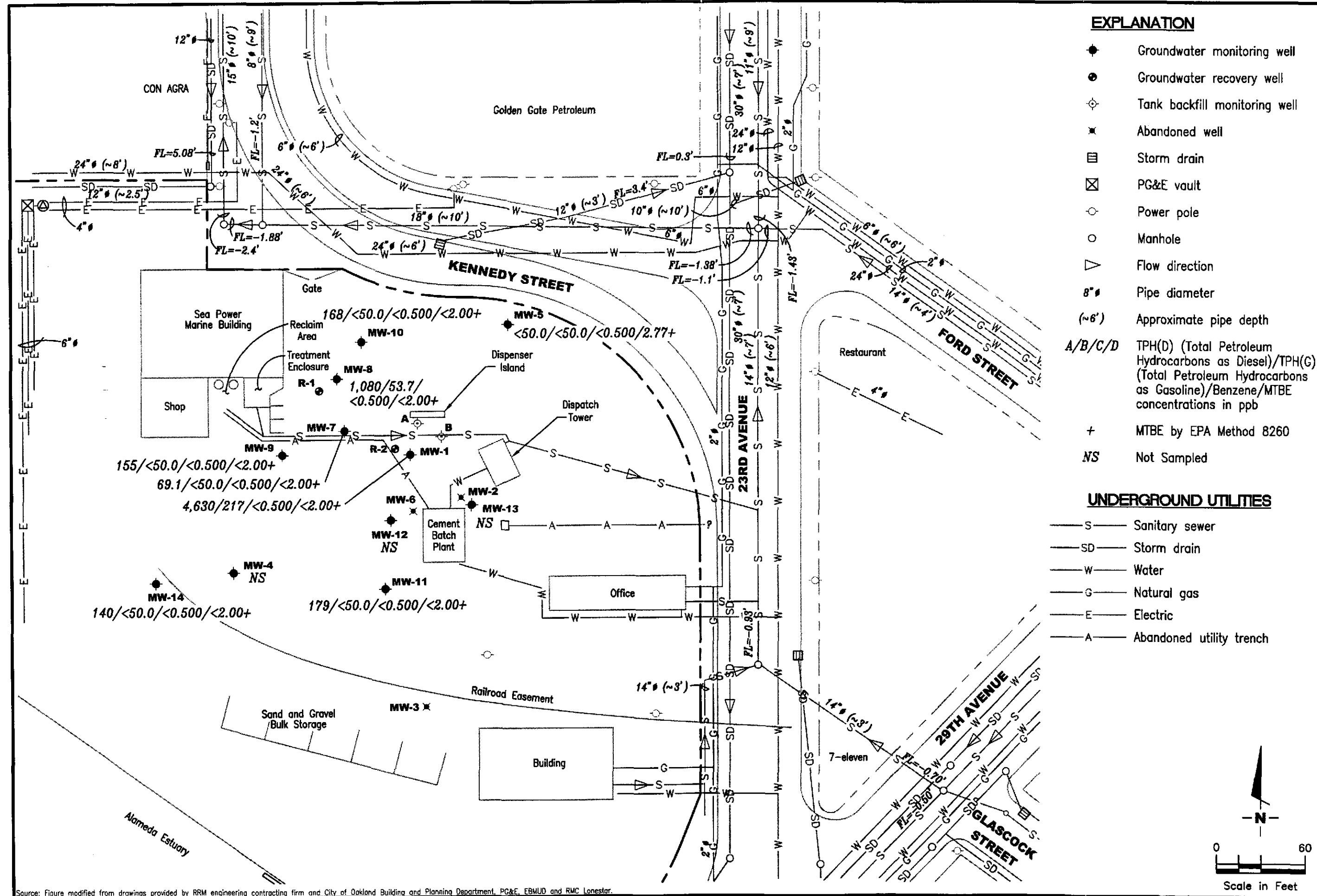
- S Sanitary sewer
- SD Storm drain
- W Water
- G Natural gas
- E Electric
- A Abandoned utility trench



**CONCENTRATION MAP**  
Chevron/RMC Lonestar Facility CPS #20-6142  
333 23rd Avenue  
Oakland, California

DATE March 25, 2001

FIGURE



# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>MW-1</b>											
12/21/1990	4.70	-3.41	9.77	Free Product (2.07')	--	--	--	--	--	--	--
12/18/1993	4.70	-3.73	8.45	Free Product (0.03')	--	--	--	--	--	--	--
3/29/1994	4.70	-3.94	9.00	Free Product (0.45')	--	--	--	--	--	--	--
6/9/1994	4.70	--	--	--	--	--	--	--	--	--	--
10/4/1994	4.70	-3.98	8.71	Free Product (0.04')	--	--	--	--	--	--	--
12/20/1994	4.70	-3.14	8.38	Free Product (0.67')	--	--	--	--	--	--	--
3/28/1995	4.70	-2.69	7.79	Free Product (0.5')	--	--	--	--	--	--	--
6/30/1995	4.70	--	--	--	--	--	--	--	--	--	--
9/24/1995	4.70	-2.69	7.79	Free Product (0.5')	--	--	--	--	--	--	--
12/29/1995	4.70	--	--	Inaccessible	--	--	--	--	--	--	--
3/24/1996	4.70	-2.97	7.68	Free Product (0.01')/ORCs installed	1400*	<0.5	<0.5	<0.5	<0.5	--	59,000
6/16/1996	4.70	-3.16	7.86	--	<500	<5.0	<5.0	<5.0	<5.0	--	99,000
12/8/1996	4.70	-3.68	8.38	--	280*	<0.5	<0.5	<0.5	<0.5	<5.0	6700
12/8/1996	4.70	-3.68	8.38	Silica gel cleanup	--	--	--	--	--	--	5100
6/30/1997	10.16	1.51	8.65	--	200*	<0.5	<0.5	<0.5	<0.5	<2.5	950**
6/30/1997	10.16	1.51	8.65	1st Silica gel/2nd Silica gel cleanup	--	--	--	--	--	--	600**/600**
10/16/1997	10.16	3.80	6.36	ORCs reinstalled	--	--	--	--	--	--	--
12/28/1997	10.16	2.66	7.50	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	4700**
6/21/1998	10.16	2.28	7.88	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	1300**
12/30/1998	10.16	1.63	8.53	Silica gel cleanup	<50	<0.5	0.51	<0.5	<0.5	<2.5	230*
6/24/1999	10.16	0.14	10.02	++	11,400*	<50	<50	<50	<50	<2500	4,950,000**
12/22/1999	10.16	1.61	8.55	++	5130	<10	<10	<10	<10	<50	7490**
3/7/2000	10.16	3.03	7.13	++, silica gel cleanup	772***	<0.500	<0.500	<0.500	<0.500	<2.50/1.16	74,000***
7/11/2000	10.16	1.99	8.17	++, silica gel cleanup	93*	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0	190*
3/25/2001	10.16	2.74	7.42	++, silica gel cleanup	217*	<0.500	<0.500	<0.500	<0.500	<5.00/<2.00	4630*
<i>Range 7-8.5'</i>											
6/15/1989	--	--	--	--	(<200)	<0.5	<0.5	<0.5	<0.5	--	--
12/1/1992	--	--	--	Abandoned	--	--	--	--	--	--	--

\* Chromatogram pattern indicates an unidentified hydrocarbon.

\*\* Chromatogram pattern indicates weathered diesel.

\*\*\* Hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the requested fuel. More closely resembles a heavier fuel.

++ See Table of Additional Analyses.

### Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>MW-4</b>											
5/28/1987	--	--	--	--	--	<0.5	<0.5	<0.5	<0.2	--	<5.0
6/15/1989	--	--	--	--	<100	<0.2	<2.0	<2.0	<2.0	--	<0.2
12/21/1990	--	--	7.31	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/19/1993	--	--	6.64	--	<50	<0.5	<0.5	<0.5	<1.5	--	<50
6/16/1993	--	--	8.01	--	210	32	27	2.8	19	--	<50
12/18/1993	--	--	7.35	--	79	0.5	1.2	0.5	1.1	--	100
3/29/1994	--	--	8.05	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/9/1994	--	--	8.14	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
10/4/1994	--	--	7.31	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
12/20/1994	--	--	7.03	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/28/1995	--	--	6.83	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/30/1995	--	--	7.84	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
9/24/1995	--	--	7.67	--	<50	<0.5	<0.5	<0.5	<0.5	--	110
12/29/1995	--	--	--	Unable to locate	--	--	--	--	--	--	--
3/24/1996	--	--	7.41	--	<50	<0.5	<0.5	<0.5	<0.5	--	95
6/16/1996	--	--	--	Unable to locate	--	--	--	--	--	--	--
12/8/1996	--	--	--	Unable to locate	--	--	--	--	--	--	--
12/30/1998	--	--	--	Inaccessible	--	--	--	--	--	--	--
6/24/1999	--	--	--	Inaccessible	--	--	--	--	--	--	--
12/22/1999	--	--	--	Inaccessible	--	--	--	--	--	--	--
3/7/2000	--	--	--	Inaccessible	--	--	--	--	--	--	--
7/11/2000	--	--	--	Inaccessible	--	--	--	--	--	--	--
3/25/2001	--	--	--	Inaccessible	--	--	--	--	--	--	--

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>MW-5</b>											
5/28/1987	--	--	--	--	--	<0.5	<0.5	<0.5	<2.0	--	<5.0
6/15/1989	--	--	--	--	<100	<0.2	<2.0	<2.0	<2.0	--	--
12/21/1990	5.43	-3.68	9.11	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/16/1993	5.43	-3.69	9.12	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
12/18/1993	5.43	-3.29	8.72	--	<50	<0.5	<0.5	<0.5	<0.5	--	690
3/29/1994	5.43	-3.57	9.00	--	--	--	--	--	--	--	--
6/9/1994	5.43	-3.93	9.36	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
10/4/1994	5.43	--	--	--	--	--	--	--	--	--	--
12/20/1994	5.43	-2.67	8.10	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/28/1995	5.43	-2.78	8.21	--	--	--	--	--	--	--	--
6/30/1995	5.43	-3.35	8.78	--	<50	<0.5	<0.5	<0.5	<0.5	--	900
9/24/1995	5.43	-2.97	8.40	--	--	--	--	--	--	--	--
12/29/1995	5.43	-2.96	8.39	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/24/1996	5.43	--	--	--	--	--	--	--	--	--	--
6/16/1996	5.43	-3.15	8.58	--	<50	<0.5	<0.5	<0.5	<50	--	--
12/8/1996	11.11	--	--	No longer sampled	--	--	--	--	--	--	--
12/28/1997	11.11	2.74	8.37	--	--	--	--	--	--	--	--
6/21/1998	11.11	2.48	8.63	--	--	--	--	--	--	--	--
12/30/1998	11.11	--	--	Inaccessible	--	--	--	--	--	--	--
6/24/1999	11.11	--	--	Inaccessible	--	--	--	--	--	--	--
12/22/1999	11.11	1.99	9.12	++	<50	<0.5	<0.5	<0.5	<0.5	49.8	<50
3/7/2000	11.11	3.02	8.09	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	35.2/43.8	<50.0
7/11/2000	11.11	2.02	9.09	++, silica gel cleanup	<50	<0.50	<0.50	<0.50	<0.50	24/22	7,200
3/25/2001	11.11	2.55	8.56	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00/2.77	<50.0

++ See Table of Additional Analyses.

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	TPH-Diesel
	Head Elev.	Water Elev.	To Water								
<b>MW-7</b>											
6/15/1989	--	--	--	--	<100	<0.2	<2.0	<2.0	<2.0	--	--
12/21/1990	4.51	-3.38	7.90	Free Product (0.01')	--	--	--	--	--	--	--
6/16/1993	4.51	-3.94	8.45	--	<50	<0.5	0.9	<0.5	<0.5	--	<50
12/18/1993	4.51	-3.50	8.01	--	<50	<0.5	<0.5	<0.5	<0.5	--	240
3/29/1994	4.51	-4.09	8.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/9/1994	4.51	-4.10	8.61	--	<50	<0.5	<0.5	<0.5	<0.5	--	130*
10/4/1994	4.51	-3.31	7.82	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
12/20/1994	4.51	-3.19	7.70	--	<50	<0.5	<0.5	<0.5	<0.5	--	140
3/28/1995	4.51	-3.16	7.67	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/30/1995	4.51	-3.82	8.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
9/24/1995	4.51	-3.65	8.16	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
12/29/1995	4.51	-3.00	7.51	--	<50	<0.5	<0.5	<0.5	<0.5	--	230*
3/24/1996	4.51	-3.17	7.69	Free Product (0.01')/ORCs installed	<50	<0.5	<0.5	<0.5	<0.5	--	81
6/16/1996	4.51	-5.86	10.37	--	<50	<0.5	<0.5	<0.5	<0.5	--	190
12/8/1996	10.15	--	--	No longer sampled	--	--	--	--	--	--	--
10/16/1997	10.15	2.16	7.99	ORCs reinstalled	--	--	--	--	--	--	--
12/28/1997	10.15	2.38	7.77	--	--	--	--	--	--	--	--
6/21/1998	10.15	2.18	7.97	--	--	--	--	--	--	--	--
12/30/1998	10.15	1.37	8.78	Silica gel cleanup	<50	<0.5	<0.5	<0.5	<0.5	<2.5	92*
6/24/1999	10.15	1.15	9.00	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	278*
12/22/1999	10.15	0.88	9.27	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	167**
3/7/2000	10.15	2.78	7.37	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50/<0.500	253***
7/11/2000	10.15	1.88	8.27	++, silica gel cleanup	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0	120*
3/25/2001	10.15	2.44	7.71	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00/<2.00	69.1*

\* Chromatogram pattern indicates an unidentified hydrocarbon.

++ See Table of Additional Analyses.

\*\*\* Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>MW-8</b>											
12/21/1990	4.93	-3.59	8.53	Free Product (0.02')	--	--	--	--	--	--	--
12/18/1993	4.93	--	--	--	--	--	--	--	--	--	--
3/29/1994	4.93	-3.46	8.38	--	--	--	--	--	--	--	--
6/9/1994	4.93	--	--	--	--	--	--	--	--	--	--
12/20/1994	4.93	-2.66	7.58	--	<2500	120	100	<25	100	--	50,000
3/28/1995	4.93	-2.16	7.08	--	--	--	--	--	--	--	--
6/30/1995	4.93	-3.17	8.09	--	<50	<0.5	<0.5	<0.5	<0.5	--	14,000
9/24/1995	4.93	-3.53	8.45	--	--	--	--	--	--	--	--
12/29/1995	4.93	-2.55	7.47	--	520	<2.0	<2.0	<2.0	<2.0	--	25,000
3/24/1996	4.93	--	--	--	--	--	--	--	--	--	--
6/16/1996	4.93	-3.07	7.99	--	59*	<0.5	<0.5	<0.5	<0.5	--	9400
12/8/1996	4.93	-2.74	7.67	--	580*	<0.5	<0.5	<0.5	<0.5	<5.0	16,000
12/8/1996	4.93	-2.74	7.67	Silica gel cleanup	--	--	--	--	--	--	9300
6/30/1997	10.09	-1.56	11.65	--	1700*	<5.0	<5.0	<5.0	<5.0	<25	5300**
6/30/1997	10.09	-1.56	11.65	1st Silica gel/2nd Silica gel cleanup	--	--	--	--	--	--	3100**/3000**
10/16/1997	10.09	2.29	7.80	ORCs installed	--	--	--	--	--	--	--
12/28/1997	10.09	2.56	7.53	No Purge Sample	<50	<0.5	<0.5	<0.5	<0.5	<2.5	2700*
6/21/1998	10.09	2.03	8.06	--	57*	<0.5	0.52	<0.5	0.55	<2.5	3500**
12/30/1998	10.09	0.97	9.12	Silica gel cleanup	<50	<0.5	<0.5	<0.5	<0.5	<2.5	900**
6/24/1999	10.09	1.06	9.03	++	2150*	<5.0	<5.0	<5.0	<5.0	<25	35,200**
12/22/1999	10.09	1.04	9.05	++	3490	<2.0	<2.0	<2.0	<2.0	<10	2590**
3/7/2000	10.09	2.38	7.71	++, silica gel cleanup	682***	<0.500	<0.500	<0.500	<0.500	<2.50<0.500	41,800**
7/11/2000	10.09	1.86	8.23	++, silica gel cleanup	490*	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0	4000
3/25/2001	10.09	2.37	7.72	++, silica gel cleanup	53.7*	<0.500	<0.500	<0.500	<0.500	<5.00/<2.00	1080*

\* Chromatogram pattern indicates an unidentified hydrocarbon.

\*\* Chromatogram pattern indicates weathered diesel.

\*\*\* Hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the requested fuel. More closely resembles a heavier fuel.

++ See Table of Additional Analyses.

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>MW-9</b>											
5/28/1987	-	-	--	-	--	<0.5	<0.5	<0.5	<2.0	--	<50
6/15/1989	-	-	--	-	<100	<0.2	<2.0	<2.0	<2.0	--	-
12/21/1990	--	7.86	7.86	Sheen	<50	<0.5	<0.5	<0.5	1.0	--	230
6/16/1993	4.42	-3.92	8.34	-	<50	<0.5	<0.5	<0.5	<1.5	--	<50
12/18/1993	4.42	-3.49	7.91	-	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/29/1994	4.42	-3.43	7.85	--	--	--	--	--	--	--	-
6/9/1994	4.42	-4.27	8.69	-	<50	<0.5	<0.5	<0.5	<0.5	--	<50
10/4/1994	4.42	--	--	--	--	--	--	--	--	--	-
12/20/1994	4.42	-3.18	7.60	-	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/28/1995	4.42	-3.16	7.58	--	--	--	--	--	--	--	-
6/30/1995	4.42	-3.92	8.34	-	<50	<0.5	<0.5	<0.5	<0.5	--	<50
9/24/1995	4.42	-3.79	8.21	--	--	--	--	--	--	--	-
12/29/1995	4.42	-3.06	7.48	--	<50	<0.5	<0.5	<0.5	<0.5	--	600
3/24/1996	4.42	--	--	ORCs installed	--	--	--	--	--	--	-
6/16/1996	4.42	-3.83	8.25	-	<50	<0.5	<0.5	<0.5	<0.5	--	810
12/8/1996	10.13	--	--	No longer sampled	--	--	--	--	--	--	-
10/16/1997	10.13	1.61	8.52	ORCs reinstalled	--	--	--	--	--	--	-
12/28/1997	10.13	2.55	7.58	-	--	--	--	--	--	--	-
6/21/1998	10.13	2.06	8.07	-	--	--	--	--	--	--	-
12/30/1998	10.13	1.85	8.28	Silica gel cleanup	<50	<0.5	<0.5	<0.5	<0.5	<2.5	53*
6/24/1999	10.13	1.14	8.99	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	308*
12/22/1999	10.13	1.54	8.59	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	898*
3/7/2000	10.13	2.83	7.30	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50/<0.500	453**
7/11/2000	10.13	1.70	8.43	++, silica gel cleanup	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0	160*
3/25/2001	10.13	2.05	8.08	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00/<2.00	155*

\* Chromatogram pattern indicates an unidentified hydrocarbon.

\*\* Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

++ See Table of Additional Analyses.

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>MW-10</b>											
6/15/1989	--	--	--	--	<100	<0.2	<2.0	<2.0	<2.0	--	--
12/21/1990	5.24	-3.68	8.92	--	<50	<0.5	<0.5	<0.5	<0.5	--	80
6/16/1993	5.24	-3.73	8.97	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
12/18/1993	5.24	-2.63	7.87	--	51*	<0.5	<0.5	<0.5	<0.5	--	12,000
3/29/1994	5.24	-3.96	9.20	--	--	--	--	--	--	--	--
6/9/1994	5.24	-4.07	9.31	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
10/4/1994	5.24	--	--	--	--	--	--	--	--	--	--
12/20/1994	5.24	-3.06	8.30	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/28/1995	5.24	-3.02	8.26	--	--	--	--	--	--	--	--
6/30/1995	5.24	-3.71	8.95	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
9/24/1995	5.24	-3.63	8.87	--	--	--	--	--	--	--	--
12/29/1995	5.24	-2.79	8.03	--	<50	<0.5	<0.5	<0.5	<0.5	--	1800*
3/24/1996	5.24	--	--	ORCs installed	--	--	--	--	--	--	--
6/16/1996	5.24	-3.53	8.77	--	<50	<0.5	<0.5	<0.5	<0.5	--	300
12/8/1996	10.91	--	--	No longer sampled	--	--	--	--	--	--	--
10/16/1997	10.91	2.31	8.60	ORCs reinstalled	--	--	--	--	--	--	--
12/28/1997	10.91	2.59	8.32	--	--	--	--	--	--	--	--
6/21/1998	10.91	2.18	8.73	--	--	--	--	--	--	--	--
12/30/1998	10.91	2.93	7.98	Silica gel cleanup	<50	<0.5	<0.5	<0.5	<0.5	<2.5	<50
6/24/1999	10.91	1.55	9.36	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	163*
12/22/1999	10.91	1.47	9.44	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	250*
3/7/2000	10.91	2.84	8.07	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50/<0.500	<50.0
7/11/2000	10.91	1.89	9.02	++, silica gel cleanup	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0	110*
3/25/2001	10.91	2.27	8.64	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00/<2.00	168*

\* Chromatogram pattern indicates an unidentified hydrocarbon.

++ See Table of Additional Analyses.

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

### Cumulative Table of Well Data and Analytical Results

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>MW-11</b>											
8/21/1987	-	--	--	--	--	<0.5	<0.5	<0.5	<2.0	--	<0.1
6/21/1989	-	--	--	--	<100	<0.2	<2.0	<2.0	<2.0	--	--
12/21/1990	-	--	8.59	Sheen	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/19/1993	4.37	-3.20	7.57	--	<50	<0.5	<0.5	<0.5	<1.5	--	<50
6/16/1993	4.37	-4.47	8.84	--	<50	<0.5	<0.5	<0.5	<1.5	--	<50
12/18/1993	4.37	-3.89	8.26	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/29/1994	4.37	-4.70	9.07	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/9/1994	4.37	-4.77	9.14	--	<50	<0.5	<0.5	<0.5	<0.5	--	150*
10/4/1994	4.37	-3.57	7.94	--	<50	<0.5	1.0	<0.5	<0.5	--	<50
12/20/1994	4.37	-3.31	7.68	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/28/1995	4.37	-2.53	6.90	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/30/1995	4.37	-4.44	8.81	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
9/24/1995	4.37	-4.43	8.80	--	<50	<0.5	<0.5	<0.5	<0.5	--	110
12/29/1995	4.37	-3.85	8.22	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/24/1996	4.37	-4.09	8.46	--	<50	<0.5	<0.5	<0.5	<0.5	--	80
6/16/1996	4.37	-4.37	8.74	--	<50	<0.5	<0.5	<0.5	<0.5	--	868
12/8/1996	4.37	-3.38	7.75	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<50
6/30/1997	6.71	-1.92	8.63	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	71**
6/30/1997	6.71	-1.92	8.63	Silica gel cleanup	--	--	--	--	--	--	<50
10/16/1997	6.71	--	Inaccessible	--	--	--	--	--	--	--	--
12/28/1997	6.71	-0.94	7.65	ORCs installed	<50	<0.5	<0.5	<0.5	<0.5	<2.5	82**
6/21/1998	6.71	-1.41	8.12	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	89*
12/30/1998	6.71	-2.54	9.25	Silica gel cleanup	<50	<0.5	<0.5	<0.5	<0.5	<2.5	<50
6/24/1999	6.71	-1.32	8.03	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	69*
12/22/1999	6.71	-2.42	9.13	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	72*
3/7/2000	6.71	-0.69	7.40	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50/<0.500	307***
7/11/2000	6.71	-1.91	8.62	++, silica gel cleanup	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0	100*
3/25/2001	6.71	-1.45	8.16	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00/<2.00	179*

\* Chromatogram pattern indicates an unidentified hydrocarbon.

\*\* Chromatogram pattern indicates weathered diesel.

\*\*\* Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

++ See Table of Additional Analyses.

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	TPH-Diesel
<b>MW-12</b>											
8/21/1987	--	--	--	--	--	<0.5	<0.5	<0.5	<2.0	--	<0.1
12/18/1993	--	--	--	--	--	--	--	--	--	--	--
3/29/1994	--	--	--	--	--	--	--	--	--	--	--
6/9/1994	--	--	--	Inaccessible	--	--	--	--	--	--	--
NO LONGER MONITORED OR SAMPLED											
<b>MW-13</b>											
8/21/1987	--	--	--	--	--	<0.5	<0.5	<0.5	<2.0	--	<0.1
6/15/1989	--	--	--	--	<100	<0.2	<2.0	<2.0	<2.0	--	--
3/19/1993	4.73	-2.89	7.62	--	<50	<0.5	<0.5	<0.5	<1.5	--	<50
6/16/1993	4.73	-3.83	8.56	--	<50	<0.5	<0.5	<0.5	<1.5	--	<50
12/18/1993	4.73	-3.38	8.11	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/29/1994	4.73	-3.92	8.65	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/9/1994	4.73	-3.87	8.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
10/4/1994	4.73	-3.58	8.31	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
12/20/1994	4.73	-3.19	7.92	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/28/1995	4.73	-3.05	7.78	--	<50	<0.5	<0.5	<0.5	<0.5	--	<50
6/30/1995	4.73	--	--	--	--	--	--	--	--	--	--
9/24/1995	4.73	-3.61	8.34	--	<50	<0.5	<0.5	<0.5	<0.5	--	180
12/29/1995	4.73	--	Unable to locate	--	--	--	--	--	--	--	--
3/24/1996	4.73	-3.01	7.74	**	<50	<0.5	<0.5	<0.5	<0.5	--	<50
3/24/1996	4.73	-3.34	8.07	--	<50	<0.5	<0.5	<0.5	<0.5	--	57*

NO LONGER MONITORED OR SAMPLED

\* Chromatogram pattern indicates an unidentified hydrocarbon.

\*\* Total Dissolved Solids by EPA 160.1 detected at 1600 ppb.

### Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>MW-14</b>											
6/30/1997	5.56	-1.92	7.48	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	86**
6/30/1997	5.56	-1.92	7.48	--	--	--	--	--	--	--	<50
10/16/1997	5.56	-1.86	7.42	--	--	--	--	--	--	--	--
12/28/1997	5.56	-1.46	7.02	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	97**
6/21/1998	5.56	-1.47	7.03	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	65**
12/30/1998	5.56	--	--	Inaccessible	--	--	--	--	--	--	--
6/24/1999	5.56	--	--	Inaccessible	--	--	--	--	--	--	--
12/22/1999	5.56	-1.99	7.55	++	<50	<0.5	<0.5	<0.5	<0.5	<2.5	101**
3/7/2000	5.56	-0.91	6.47	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50/<0.500	254***
7/11/2000	5.56	-1.99	7.55	++, silica gel cleanup	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0	110*
3/25/2001	5.56	-1.65	7.21	++, silica gel cleanup	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00/<2.00	140*

\* Chromatogram pattern indicates weathered diesel.

\*\* Chromatogram pattern indicates an unidentified hydrocarbon.

\*\*\* Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

++ See Table of Additional Analyses.

### Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE (8020/8260)	TPH-Diesel
<b>TRIP BLANK</b>											
3/19/1993	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
6/16/1993	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
12/18/1993	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
3/29/1994	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
6/9/1994	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/20/1994	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
3/28/1995	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
6/30/1995	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
9/24/1995	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/29/1995	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
3/24/1996	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
6/16/1996	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/8/1996	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
6/30/1997	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
12/28/1997	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
6/21/1998	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
12/30/1998	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
3/7/2000	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--
7/11/2000	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
3/25/2001	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--

# Cumulative Table of Well Data and Analytical Results

## TABLE OF ADDITIONAL ANALYSES

Analytical results are in parts per million (ppm) unless otherwise noted.

DATE	ORP (mV)	DO (mg/L)	Nitrate (NO <sub>3</sub> )	Notes	Sulfate (SO <sub>4</sub> )	Ferrous Iron	Phosphate	Ammonia	Alkalinity	PAH
<b>MW-1</b>										
11/9/1995	--	0.90	--	--	--	--	--	--	--	--
6/16/1996	--	1.34	>5.0	ORCs Installed	--	--	2.0	>10	--	--
12/8/1996	--	1.39	13.00	--	14	2.6	--	--	--	--
6/30/1997	-16.5	1.00	<1.0	--	10	5.6	--	--	--	--
10/16/1997	--	0.51	--	ORCs Reinstalled	--	--	--	--	--	--
12/28/1997	22.9	2.30	7.60	No Purge Sampling	7.3	1.7	--	--	--	--
6/21/1998	102	1.60	<1.0	--	7.1	0.35	--	--	570	--
6/24/1999	35	1.20	<1.0	--	3.64	9.2	--	--	560	--
12/22/1999	99	1.00	1.37	--	9.87	0.4	--	--	677	--
3/7/2000	67	4.04	<0.20	--	7.63	0.735	--	--	661	--
7/11/2000	84	3.93	<1.0	--	11	0.12	--	--	590	--
3/25/2001	101	3.85	<1.00	--	<5.00	0.137	--	--	194	ND*
<b>MW-4</b>										
11/9/1995	--	0.37	0.20	--	--	--	0	0.01	--	--
<b>MW-5</b>										
11/9/1995	--	0.85	0.10	--	--	--	1.5	0.1	--	--
6/16/1996	--	0.78	--	--	--	--	--	--	--	--
12/28/1997	--	5.24	--	--	--	--	--	--	--	--
6/21/1998	--	2.30	--	--	--	--	--	--	--	--
12/30/1998	--	--	--	Inaccessible	--	--	--	--	--	--
6/24/1999	--	--	--	Inaccessible	--	--	--	--	--	--
12/22/1999	116	1.60	7.65	--	294	<0.01	--	--	341	--
3/7/2000	193	3.42	7.38	--	263	<0.10	--	--	325	--
7/11/2000	214	3.76	41	--	250	0.063	--	--	370	--
3/25/2001	221	3.27	27.0	--	197	0.0155	--	--	468	ND*

\* Laboratory report indicates none of the analytes detected by EPA Method 8100.

## Cumulative Table of Well Data and Analytical Results

### TABLE OF ADDITIONAL ANALYSES

Analytical results are in parts per million (ppm) unless otherwise noted.

DATE	ORP (mV)	DO (mg/L)	Nitrate (NO <sub>3</sub> )	Notes	Sulfate (SO <sub>4</sub> )	Ferrous Iron	Phosphate	Ammonia	Alkalinity	PAH
<b>MW-7</b>										
11/9/1995	--	0.42	--	--	--	--	--	--	--	--
6/16/1996	--	OR	>5.0	ORCs Installed	--	--	4.0	>10	--	--
10/16/1997	--	0.73	--	ORCs Reinstalled	--	--	--	--	--	--
12/28/1997	--	1.10	--	--	--	--	--	--	--	--
6/21/1998	--	0.58	--	--	--	--	--	--	--	--
12/30/1998	96	2.10	71	--	56	0.36	--	--	590	--
6/24/1999	30	1.10	220	--	56	<0.01	--	--	420	--
12/22/1999	107	0.80	46.8	--	53	<0.01	--	--	325	--
3/7/2000	144	6.61	20.7	--	63.4	0.143	--	--	490	--
7/11/2000	164	5.76	27	--	73	0.054	--	--	400	--
3/25/2001	183	4.97	17.5	--	84.6	<0.0100	--	--	488	--
<b>MW-8</b>										
11/9/1995	--	0.95	--	--	--	--	--	--	--	--
6/16/1996	--	0.29	0.00	--	--	--	0.6	0.6	--	--
12/8/1996	-35	0.51	<0.10	--	3.0	6.1	--	--	--	--
6/30/1997	-50.2	9.50	<1.0	--	17	0.22	--	--	--	--
10/16/1997	--	1.84	--	ORCs Installed	--	--	--	--	--	--
12/28/1997	41.6	3.08	<5.0	No Purge Sampling	5.3	0.25	--	--	--	--
6/21/1998	--	2.80	<1.0	--	11	0.66	--	--	--	--
12/30/1998	87	2.00	<1.0	--	7.7	0.27	--	--	980	--
6/24/1999	29	1.40	<1.0	--	18	13	--	--	650	--
12/22/1999	56	1.50	1.07	--	11.5	3.0	--	--	1980	--
3/7/2000	162	5.28	<0.40	--	3.92	0.712	--	--	664	--
7/11/2000	177	4.25	<1.0	--	<1.0	0.23	--	--	650	--
3/25/2001	120	3.18	<1.00	--	<5.00	0.278	--	--	426	ND*

\* Laboratory report indicates none of the analytes detected by EPA Method 8100.

## Cumulative Table of Well Data and Analytical Results

### TABLE OF ADDITIONAL ANALYSES

Analytical results are in parts per million (ppm) unless otherwise noted.

DATE	ORP (mV)	DO (mg/L)	Nitrate (NO <sub>3</sub> )	Notes	Sulfate (SO <sub>4</sub> )	Ferrous Iron	Phosphate	Ammonia	Alkalinity	PAH
<b>MW-9</b>										
11/9/1995	--	0.58	--	--	--	--	--	--	--	--
6/16/1996	--	14.66	>5.0	ORCs Installed	--	--	>10	1.0	--	--
10/16/1997	--	3.49	--	ORCs Reinstalled	--	--	--	--	--	--
12/28/1997	--	6.95	--	--	--	--	--	--	--	--
6/21/1998	--	1.67	--	--	--	--	--	--	--	--
12/30/1998	121	1.40	8.40	--	16	0.14	--	--	560	--
6/24/1999	29	1.20	5.76	--	25	<0.01	--	--	510	--
12/22/1999	50	1.30	1.02	--	7.9	0.22	--	--	582	--
3/7/2000	194	5.34	<0.40	--	3.32	0.103	--	--	562	--
7/11/2000	246	5.59	<1.0	--	2.5	0.14	--	--	600	--
3/25/2001	212	5.18	<1.00	--	6.70	0.0239	--	--	335	--
<b>MW-10</b>										
11/9/1995	--	1.49	--	--	--	--	--	--	--	--
6/16/1996	--	3.30	1.00	ORCs Installed	--	--	6.0	>10	--	--
10/16/1997	--	8.06	--	ORCs Reinstalled	--	--	--	--	--	--
12/28/1997	--	>19.99	--	--	--	--	--	--	--	--
6/21/1998	--	18.57	--	--	--	--	--	--	--	--
12/30/1998	131	1.00	8.8	--	110	0.13	--	--	320	--
6/24/1999	11	1.20	9.16	--	110	<0.01	--	--	370	--
12/22/1999	133	1.20	3.13	--	123	0.086	--	--	947	--
3/7/2000	192	5.16	2.15	--	90	0.135	--	--	389	--
7/11/2000	268	5.72	4.0	--	45	0.06	--	--	190	--
3/25/2001	197	4.86	1.83	--	28.5	0.0163	--	--	277	--

## Cumulative Table of Well Data and Analytical Results

### TABLE OF ADDITIONAL ANALYSES

Analytical results are in parts per million (ppm) unless otherwise noted.

DATE	ORP (mV)	DO (mg/L)	Nitrate (NO <sub>3</sub> )	Notes	Sulfate (SO <sub>4</sub> )	Ferrous Iron	Phosphate	Ammonia	Alkalinity	PAH
<b>MW-11</b>										
11/9/1995	--	0.52	0.20	--		--	--	5.0	0.1	--
6/16/1996	--	0.25	--	--		--	--	--	--	--
12/8/1996	165	0.31	340	--		99	<0.010	--	--	--
6/30/1997	-25	2.99	350	--		140	0.015	--	--	--
10/16/1997	--	--	--	Inaccessible		--	--	--	--	--
12/28/1997	21.5	2.00	240	ORCs Installed		130	0.93	--	--	--
6/21/1998	--	0.50	190	--		190	0.022	--	--	--
12/30/1998	136	1.20	220	--		140	0.041	--	290	--
6/24/1999	31	1.40	180	--		140	<0.01	--	290	--
12/22/1999	128	1.20	77.3	--		124	0.35	--	343	--
3/7/2000	213	5.44	67.8	--		167	0.759	--	334	--
7/11/2000	235	5.93	300	--		160	0.090	--	310	--
3/25/2001	248	5.42	<1.00			30.1	0.0493	--	297	--
<b>MW-13</b>										
11/9/1995	--	--	--	Unable to locate		--	--	--	--	--
6/16/1996	--	0.52	0.10	--		--	--	0.4	0.2	--
<b>MW-14</b>										
6/30/1997	-31.2	4.56	<1.0	--		41	0.29	--	--	--
10/16/1997	--	0.85	--	--		--	--	--	--	--
12/28/1997	133	2.75	10	--		35	0.028	--	--	--
6/21/1998	--	1.00	28	--		44	0.15	--	--	--
6/24/1999	--	--	--	Inaccessible		--	--	--	--	--
12/22/1999	104	1.70	2.95	--		44.5	1.2	--	491	--
3/7/2000	199	5.92	3.18	--		40.2	0.127	--	172	--
7/11/2000	249	4.04	19	--		58	0.16	--	300	--
3/25/2001	228	5.05	<1.00			35.1	0.0196	--	303	--

## Cumulative Table of Well Data and Analytical Results

### TABLE OF ADDITIONAL ANALYSES

Analytical results are in parts per million (ppm) unless otherwise noted.

DATE	ORP (mV)	DO (mg/L)	Nitrate (NO <sub>3</sub> )	Notes	Sulfate (SO <sub>4</sub> )	Ferrous Iron	Phosphate	Ammonia	Alkalinity	PAH
<b>R-2</b>										
11/9/1995	--	0.44	0.60	--	--	--	0	0	--	
<b>A</b>										
11/9/1995	--	0.42	1.00	--	--	--	0	4.0	--	

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on December 30, 1998.

Earlier field data and analytical results were provided by Gettler-Ryan.

Elevations surveyed on 09/26/93 by Field Designs relative to City of Oakland Benchmark #3457 and corrected to Mean Sea Level (msl).

(Benchmark datum is 2.998 feet off of msl.)

Site surveyed by Virgil Chavez Land Surveying on 07/03/97. Top of casing elevation measured using the top of curb on the northerly side of 23rd Avenue, using the northeasterly top of rail (of railroad tracks running through site) as reference line. (Benchmark Elevation = 17.91 feet, msl).

#### ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl t-Butyl Ether

ORP = Oxidation Reduction Potential

DO = Dissolved Oxygen

mV = Millivolts

OR = Over-range of instrument

# Cumulative Table of Well Data and Analytical Results

## TABLE OF ADDITIONAL ANALYSES

Analytical results are in parts per billion (ppm)

DATE	TBA	MTBE	DIPE	Notes	ETBE	TAME	1,2-DCA	EDB	Ethanol
<b>MW-1</b>									
3/7/2000	<20.0	1.16	<1.00		<1.00	<1.00	<0.500	<0.500	<100
7/11/2000	<100	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
3/25/2001	<100	<2.00	<2.00		<2.00	<2.00	<2.00	<2.00	--
<b>MW-5</b>									
3/7/2000	<20.0	43.8	<1.00		<1.00	<1.00	<0.500	<0.500	<100
7/11/2000	<100	22	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
3/25/2001	<100	2.77	<2.00		<2.00	<2.00	<2.00	<2.00	--
<b>MW-7</b>									
3/7/2000	<20.0	<0.500	<1.00		<1.00	<1.00	<0.500	<0.500	<100
7/11/2000	<100	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
3/25/2001	<100	<2.00	<2.00		<2.00	<2.00	<2.00	<2.00	--
<b>MW-8</b>									
3/7/2000	<20.0	<0.500	<1.00		<1.00	<1.00	<0.500	<0.500	<100
7/11/2000	<100	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
3/25/2001	<100	<2.00	<2.00		<2.00	<2.00	<2.00	<2.00	--
<b>MW-9</b>									
3/7/2000	<20.0	<0.500	<1.00		<1.00	<1.00	<0.500	<0.500	<100
7/11/2000	<100	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
3/25/2001	<100	<2.00	<2.00		<2.00	<2.00	<2.00	<2.00	--
<b>MW-10</b>									
3/7/2000	<20.0	<0.500	<1.00		<1.00	<1.00	<0.500	<0.500	<100
7/11/2000	<100	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
3/25/2001	<100	<2.00	<2.00		<2.00	<2.00	<2.00	<2.00	--
<b>MW-11</b>									
3/7/2000	<20.0	<0.500	<1.00		<1.00	<1.00	<0.500	<0.500	<100
7/11/2000	<100	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
3/25/2001	<100	<2.00	<2.00		<2.00	<2.00	<2.00	<2.00	--
<b>MW-14</b>									
3/7/2000	<20.0	<0.500	<1.00		<1.00	<1.00	<0.500	<0.500	<100
7/11/2000	<100	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
3/25/2001	<100	<2.00	<2.00		<2.00	<2.00	<2.00	<2.00	--

## Cumulative Table of Well Data and Analytical Results

### TABLE OF ADDITIONAL ANALYSES

Analytical results are in parts per billion (ppm)

DATE	TBA	MTBE	DIPE	Notes	ETBE	TAME	1,2-DCA	EDB	Ethanol
------	-----	------	------	-------	------	------	---------	-----	---------

#### ABBREVIATIONS:

TBA = tert-butyl alcohol

MTBE = methyl t-butyl ether

DIPE = di-diisopropyl ether

ETBE = ethyl tert-butyl ether

TAME = tert-amyl methyl ether

1,2-DCA = 1,2-dichloroethane

EDB = ethylene dibromide

ppb = parts per billion

## 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.

## **WELL MONITORING/SAMPLING FIELD DATA SHEET**

Client/ Chevron  
Facility # 206142  
Address: 333 23rd Ave.  
City: Oakland, CA.

Job#: 386338  
Date: 3-25-01  
Sampler: Tec

Well ID	<u>MW-1</u>	Well Condition:	<u>O.K.</u>		
Well Diameter	<u>4 in.</u>	Hydrocarbon Thickness:	<u> </u> in.		
Total Depth	<u>19.00</u> ft	Amount Bailed (product/water):	<u> </u> (gal.)		
Depth to Water	<u>7.42</u> ft	Volume Factor (VT)	$2'' = 0.17$	$3'' = 0.38$	$4'' = 0.66$
			$6'' = 1.50$	$12'' = 5.80$	

$$11.58 \times \text{VF} = 0.66 = 7.64 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } 23 \text{ (gal.)}$$

Purge Equipment:	Disposable Bailer Bailer Stack <u>Suction</u> Grundfos Other: _____	Sampling Equipment:	<u>Disposable Bailer</u> Bailer Pressure Bailer Grab Sample Other: _____
---------------------	--	------------------------	--

Starting Time: 3:12 Weather Conditions: Cloudy  
Sampling Time: 3:50 p.m. Water Color: Clear Odor: water/mud yes  
Purging Flow Rate: 2.5 gpm Sediment Description:  
Did well de-water? Yes If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity μmhos/cm X	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
3:25	7.5	7.66	12.88	69.6	3.85	101	
3:28	15	7.51	12.90	70.1			
3:32	23	7.42	12.91	69.9			

#### **LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 vols	Y	HCL	Seq.	TPHG, BTEX, MTBE
	2 vols A	"	"	"	(S)Oxy's, 1,2DCA/EDB 478260
	1 Amb	"	-	"	TPHD - W /Silica Gel
	1 plastic	"	-	"	Ferrous Iron, Nitrate, Sulfate,
	1 Amb.	"	-	"	PNAS' (alkalinity)

COMMENTS: Well has slow recovery.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ Chevron  
 Facility # 206142  
 Address: 333 23rd Ave.  
 City: Oakland, CA

Job#: 386338  
 Date: 3-25-01  
 Sampler: JOC

Well ID	<u>MW-5</u>	Well Condition:	<u>O.K.</u>
Well Diameter	<u>4 in</u>	Hydrocarbon Thickness:	<u>  in</u>
Total Depth	<u>19.80 ft</u>	Volume Factor (VF)	<u>2" = 0.17      3" = 0.38      4" = 0.66</u>
Depth to Water	<u>8.56 ft</u>	6" = 1.50	<u>12" = 5.80</u>

$$11.24 \times VF \ 0.66 = 7.42 \times 3 \ (\text{case volume}) = \text{Estimated Purge Volume: } \underline{\underline{22}} \ (\text{gal.})$$

Purge Equipment:	Disposable Bailer Bailer Stack <u>Suction</u> Grundfos Other: _____	Sampling Equipment:  <u>Disposable Bailer</u> Bailer Pressure Bailer Grab Sample Other: _____
------------------	--	---

Starting Time:	<u>1:43</u>	Weather Conditions:	<u>Cloudy</u>
Sampling Time:	<u>2:16 P.M.</u>	Water Color:	<u>clear</u>
Purging Flow Rate:	<u>2 gpm</u>	Sediment Description:	_____
Did well de-water?	_____	If yes; Time:	_____
		Volume:	<u>(gal.)</u>

Time	Volume (gal.)	pH	Conductivity μmhos/cm	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1:51</u>	<u>7.5</u>	<u>7.15</u>	<u>6.96</u>	<u>71.2</u>	<u>3.27</u>	<u>221</u>	_____
<u>2:00</u>	<u>15</u>	<u>7.18</u>	<u>6.70</u>	<u>70.2</u>	_____	_____	_____
<u>2:03</u>	<u>22</u>	<u>7.21</u>	<u>6.67</u>	<u>70.1</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>3yoA</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
	<u>2yoA</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>(S)Oxy's, 1,2 DCA/EDB</u>
	<u>1 Amb</u>	<u>"</u>	<u>--</u>	<u>"</u>	<u>TPHD - w/Silica Gel</u>
	<u>1 plastic</u>	<u>"</u>	<u>--</u>	<u>"</u>	<u>Ferrous Iron, Nitrate, Sulfate, Alkalinity</u>
	<u>1 Amb</u>	<u>"</u>	<u>--</u>	<u>"</u>	<u>PNA's</u>

COMMENTS: \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ Chevron  
 Facility # 206142  
 Address: 333 23rd Ave  
 City: Oakland, CA

Job#: 386338  
 Date: 3-25-01  
 Sampler: Tec

Well ID	<u>MW-7</u>	Well Condition:	<u>O.K.</u>		
Well Diameter	<u>4 in</u>	Hydrocarbon Thickness:	<u>0</u> in	Amount Bailed (product/water):	<u>0</u> (gal)
Total Depth	<u>18.80 ft</u>	Volume Factor (VF)	<u>2" = 0.17</u>	<u>3" = 0.38</u>	<u>4" = 0.66</u>
Depth to Water	<u>7.71 ft</u>		<u>6" = 1.50</u>	<u>12" = 5.80</u>	

$$11.09 \times VF \underline{0.66} = 7.32 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } \underline{22 \text{ (gal)}}$$

Purge Equipment:	Disposable Bailer Bailer Stack <u>Suction</u> <u>Grundfos</u> Other: _____	Sampling Equipment:	<u>Disposable Bailer</u> Bailer Pressure Bailer Grab Sample Other: _____
------------------	---	---------------------	--

Starting Time:	<u>12:00</u>	Weather Conditions:	<u>cloudy</u>		
Sampling Time:	<u>12:36 P.M.</u>	Water Color:	<u>clear</u>	Odor:	<u>none</u>
Purging Flow Rate:	<u>2 gpm</u>	Sediment Description:			
Did well de-water?		If yes; Time:		Volume:	(gal)

Time	Volume (gal.)	pH	Conductivity $\mu\text{hos/cm}^2$	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:12</u>	<u>7</u>	<u>7.57</u>	<u>12.95</u>	<u>69.8</u>	<u>4.97</u>	<u>183</u>	
<u>12:15</u>	<u>14</u>	<u>7.50</u>	<u>12.96</u>	<u>70.4</u>			
<u>12:18</u>	<u>22</u>	<u>7.48</u>	<u>12.97</u>	<u>70.6</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>3yoA</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
	<u>2yoA</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>(S)oxy's, 1,2OCA/EDB</u>
	<u>1 Amb</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>TPHD - w /Silica Gel</u>
	<u>1 plastic</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>Ferrous Iron, Nitrate, Sulfate, alkalinity</u>

COMMENTS: \_\_\_\_\_

## **WELL MONITORING/SAMPLING FIELD DATA SHEET**

Client/ Facility # Chevron 206142  
Address: 333 23rd Ave.  
City: Oakland CA.

Job#: 386338  
Date: 3-25-01  
Sampler: 50c

Well ID	<u>MW-8</u>	Well Condition:	<u>O.K.</u>
Well Diameter	<u>4</u> in	Hydrocarbon Thickness:	<u> </u> in
Total Depth	<u>15.70</u> ft	Amount Bailed (product/water):	<u> </u> (gal)
Depth to Water	<u>7.72</u> ft	Volume Factor (VF)	$2'' = 0.17$
			$3'' = 0.38$
			$6'' = 1.50$
			$12'' = 5.80$

$$7.98 \times \text{VF } 0.66 = 5.27 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } 16 \text{ (gal.)}$$

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

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

Starting Time: 2:30 Weather Conditions: cloudy  
Sampling Time: 2:58 P.M. Water Color: clear Odor: yes  
Purging Flow Rate: (1) gpm. Sediment Description: \_\_\_\_\_  
Did well de-water? \_\_\_\_\_ If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity μmhos/cm <sup>2</sup>	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
2:40	5.5	7.68	12.96	70.2	3.18	120	
2:43	11	7.70	12.58	70.4			
2:45	16	7.69	12.55	70.5			

## **LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES	
MW-8	3yoA	Y	HCL	Seq.	TPHG, BTEX, MTBE	
	2yoA	"	"	"	(S)oxy's 1,2 DCA / EPB by 8260	
	1 Amb	"	-	"	TPHD - w / Silica Gel	
	1 plastic	"	-	"	Ferrous Iron, Nitrate, Sulfate,	
	1 Amb	"	-	"	PNA's	alkalinity.

**COMMENTS:** \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ Chevron  
 Facility # 206142  
 Address: 333 23<sup>rd</sup> Ave.  
 City: Oakland, CA

Job#: 386338  
 Date: 3-25-01  
 Sampler: Toc

Well ID	<u>MW-9</u>	Well Condition:	<u>O.K.</u>
Well Diameter	<u>4 in</u>	Hydrocarbon Thickness:	<u>0 in</u>
Total Depth	<u>19.70 ft</u>	Amount Bailed (product/water):	<u>0 gal</u>
Depth to Water	<u>8.08 ft</u>	Volume Factor (VF)	<u>2" = 0.17      3" = 0.38      4" = 0.66 6" = 1.50      12" = 5.80</u>

$$11.62 \times VF \times 0.66 = 7.61 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } 23 \text{ (gal)}$$

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

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

Starting Time: 12:50 Weather Conditions: Cloudy  
 Sampling Time: 1:33 P.M. Water Color: Clear Odor: none  
 Purging Flow Rate: 2.5 gpm Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal)

Time	Volume (gal.)	pH	Conductivity (µmhos/cm X)	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1:05</u>	<u>7</u>	<u>7.77</u>	<u>12.63</u>	<u>70.2</u>	<u>5.18</u>	<u>212</u>	
<u>1:08</u>	<u>16</u>	<u>7.63</u>	<u>12.65</u>	<u>69.9</u>			
<u>1:12</u>	<u>73</u>	<u>7.58</u>	<u>12.62</u>	<u>70.4</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>MW-9</u>	<u>3 vol A</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>	
	<u>2 vol A</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>(S)oxy's, 1,2 DCA/EDB</u>	<u>b78260</u>
	<u>1 Amb</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>TPHD - w/ Silica Gel</u>	
	<u>1 plastic</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>Ferrous Iron, Nitrate, Sulfate,</u>	<u>alkalinity.</u>

COMMENTS: \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ Chevron  
 Facility # 206142  
 Address: 333 23rd Ave.  
 City: Oakland, CA

Job#: 386338  
 Date: 3-25-01  
 Sampler: Toc

Well ID	<u>MW-10</u>	Well Condition:	<u>OK</u>		
Well Diameter	<u>4 in</u>	Hydrocarbon Thickness:	<u> </u> in	Amount Bailed (product/water):	<u> </u> (gal)
Total Depth	<u>18.50 ft</u>	Volume Factor (VF)	<u>2" = 0.17</u> <u>6" = 1.50</u>	<u>3" = 0.38</u> <u>12" = 5.80</u>	<u>4" = 0.66</u>
Depth to Water	<u>8.62 ft</u>				

$$9.86 \times VF \underline{0.66} = \underline{6.51} \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } \underline{20 \text{ (gal)}}$$

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

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

Starting Time: 11:16 Weather Conditions: cloudy  
 Sampling Time: 11:50 A.M. Water Color: clear Odor: none  
 Purging Flow Rate: 1.5 gpm Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal)

Time	Volume (gal)	pH	Conductivity $\mu\text{mhos/cm}^{\circ}$	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:30	6.5	7.36	12.32	69.9	4.86	197	
11:33	14	7.46	12.18	70.5			
11:36	20	7.51	12.12	70.8			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
MW-10	3 vol	Y	HCL	Seq.	TPHG, BTEX, MTBE	
	2 vol A	"	"	"	(S) Oxy's, 1,2 DCA / EDB	8260
	1 Amb	"	—	"	TPHD - W / Silica Gel	
	1 plastic	"	—	"	Ferrous Iron, Nitrate, Sulfates, Alkalinity	

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ Chevron  
 Facility # 206142  
 Address: 333 23rd Ave.  
 City: Oakland, CA.

Job#: 386338  
 Date: 3-25-01  
 Sampler: Tec

Well ID	<u>MW-11</u>	Well Condition:	<u>O.K.</u>
Well Diameter	<u>2 in</u>	Hydrocarbon Thickness:	<u>0 in</u>
Total Depth	<u>20.50 ft</u>	Amount Bailed (product/water): <u>0 gal</u>	
Depth to Water	<u>8.16 ft</u>	Volume Factor (VF)	2" = 0.17      3" = 0.38      4" = 0.66 6" = 1.50      12" = 5.80

$$12.34 \times VF \underline{0.17} = 2.10 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } \underline{6.3} \text{ (gal)}$$

Purge Equipment:	Disposable Bailer Bailer Stack <u>Suction</u> Grundfos Other: _____	Sampling Equipment:	<u>Disposable Bailer</u> Bailer Pressure Bailer Grab Sample
------------------	--	---------------------	--

Starting Time:	<u>10:30</u>	Weather Conditions:	<u>Cloudy</u>
Sampling Time:	<u>11:00 A.M.</u>	Water Color:	<u>Clear</u>
Purging Flow Rate:	<u>1 gpm</u>	Sediment Description:	_____
Did well de-water?	_____	If yes; Time:	_____
		Volume:	<u>6.3 gal</u>

Time	Volume (gal)	pH	Conductivity $\mu\text{mhos/cm}^{\circ}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:40</u>	<u>2</u>	<u>8.02</u>	<u>12.73</u>	<u>70.3</u>	<u>5.42</u>	<u>248</u>	_____
<u>10:41</u>	<u>4</u>	<u>7.75</u>	<u>12.67</u>	<u>71.0</u>	_____	_____	_____
<u>10:42</u>	<u>6.3</u>	<u>7.66</u>	<u>12.69</u>	<u>71.4</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>MW-11</u>	<u>3 vol A</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>	<u>(S) Oxy's, 1,2 DCA/EDB by 8260</u>
	<u>2 vol A</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>TPHD - w / Silica Gel</u>	
	<u>1 Amb</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>Ferrous Iron, Nitrate, Sulfate, alkalinity</u>	
	<u>1 plastic</u>	<u>"</u>	<u>-</u>	<u>"</u>		

COMMENTS: \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ Chevron  
 Facility # 206142  
 Address: 333 23rd Ave.  
 City: Oakland, CA

Job#: 386338  
 Date: 3-25-01  
 Sampler: Toc

Well ID	<u>MW-14</u>	Well Condition:	<u>0.k.</u>
Well Diameter	<u>2 in.</u>	Hydrocarbon Thickness:	<u>0 in.</u>
Total Depth	<u>20.00 ft.</u>	Amount Bailed (product/water):	<u>0 gal.</u>
Depth to Water	<u>7.21 ft.</u>	Volume Factor (VF)	<u>2" = 0.17      3" = 0.38      4" = 0.66 6" = 1.50      12" = 5.80</u>

$$12.79 \times VF \underline{0.17} = 2.17 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } \underline{7} \text{ (gal.)}$$

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

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

Starting Time: 9:45 Weather Conditions: cloudy  
 Sampling Time: 10:15A.m Water Color: clear Odor: none  
 Purging Flow Rate: 1 gpm Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:55	2.5	8.08	13.12	72.2	5.05	228	_____
9:56	5	7.86	13.14	73.0	_____	_____	_____
9:58	7	7.80	13.21	72.7	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
MW-14	3 vol	Y	HCL	Seq.	TPHG, BTEX, MTBE	
	2 vol A	"	"	"	(S)Oxy's, 1,2 DCA/EDB	4,8260
	1 Amb	"	—	"	TPHD - W /Silica Gel	
	1 plastic	"	—	"	Ferrous Iron, Nitrate, Sulfate, Alkalinity	

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

~~Fax~~ copy of Lab Report and COC to Chevron Contact:  No

## Chain-of-Custody-Record

**Chevron Products Co.  
P.O. BOX 6004  
San Ramon, CA 94583  
FAX (925)842-8370**

Chevron Facility Number #206142  
Facility Address 333 23RD AVE., OAKLAND, CA.  
Consultant Project Number 386338  
Consultant Name GETTLER-RYAN INC.  
Address 6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568  
Project Contact (Name) DEANNA L. HARDING  
(Phone) 925-551-7555 (Fax Number) 925-551-7899

Chevron Contact (Name) MR. BOB COCHRAN  
(Phone) (925) 842-9655  
Laboratory Name SEQUOIA  
Laboratory Service Order \_\_\_\_\_  
Laboratory Service Code \_\_\_\_\_  
Samples Collected by (Name) JOE AJEMIAN  
Signature S. Ajemian



Sequoia  
Analytical

1551 Industrial Road  
San Carlos, CA 94070-4111  
(650) 232-9600  
FAX (650) 232-9612  
[www.sequoiolabs.com](http://www.sequoiolabs.com)

April 11 , 2001

Deanna Harding  
Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin, CA 94568  
RE: Chevron(1) / L103153

Enclosed are the results of analyses for samples received by the laboratory on 03/26/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt  
Project Manager

CA ELAP Certificate Number 2360



Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L103153-01	Water	03/25/01 00:00	03/26/01 07:15
MW-1	L103153-02	Water	03/26/01 15:50	03/26/01 07:15
MW-5	L103153-03	Water	03/26/01 14:16	03/26/01 07:15
MW-7	L103153-04	Water	03/26/01 12:36	03/26/01 07:15
MW-8	L103153-05	Water	03/26/01 14:58	03/26/01 07:15
MW-9	L103153-06	Water	03/26/01 13:33	03/26/01 07:15
MW-10	L103153-07	Water	03/26/01 11:50	03/26/01 07:15
MW-11	L103153-08	Water	03/26/01 11:00	03/26/01 07:15
MW-14	L103153-09	Water	03/26/01 10:15	03/26/01 07:15

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TB-LB (L103153-01) Water Sampled: 03/25/01 00:00 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040014	04/04/01	04/04/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		91.5 %		70-130	"	"	"	"	
<b>MW-1 (L103153-02) Water Sampled: 03/26/01 15:50 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	217	50.0	ug/l	1	1040019	04/05/01	04/05/01	DHS LUFT	P-03
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		114 %		70-130	"	"	"	"	
<b>MW-5 (L103153-03) Water Sampled: 03/26/01 14:16 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040014	04/04/01	04/05/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		92.5 %		70-130	"	"	"	"	

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-7 (L103153-04) Water Sampled: 03/26/01 12:36 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040014	04/04/01	04/05/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		91.7 %		70-130		"	"	"	
<b>MW-8 (L103153-05) Water Sampled: 03/26/01 14:58 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	53.7	50.0	ug/l	1	1040018	04/05/01	04/05/01	DHS LUFT	P-03
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		90.3 %		70-130		"	"	"	
<b>MW-9 (L103153-06) Water Sampled: 03/26/01 13:33 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040014	04/04/01	04/05/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		91.4 %		70-130		"	"	"	

Gettler-Ryan/Geostrategies(1)  
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Project: Chevron(1)  
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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-10 (L103153-07) Water Sampled: 03/26/01 11:50 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040018	04/05/01	04/05/01	DHS LUFT	"
Benzene	ND	0.500	"	"	"	"	"	"	"
Toluene	ND	0.500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.500	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		85.4 %		70-130	"	"	"	"	"
<b>MW-11 (L103153-08) Water Sampled: 03/26/01 11:00 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040014	04/04/01	04/05/01	DHS LUFT	"
Benzene	ND	0.500	"	"	"	"	"	"	"
Toluene	ND	0.500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.500	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		91.9 %		70-130	"	"	"	"	"
<b>MW-14 (L103153-09) Water Sampled: 03/26/01 10:15 Received: 03/26/01 07:15</b>									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040018	04/05/01	04/05/01	DHS LUFT	"
Benzene	ND	0.500	"	"	"	"	"	"	"
Toluene	ND	0.500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.500	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		84.1 %		70-130	"	"	"	"	"

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Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Volatile Organic 8 Oxyinated Compounds by EPA Method 8260B**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (L103153-02) Water Sampled: 03/26/01 15:50 Received: 03/26/01 07:15</b>									
1,2-Dibromoethane	ND	2.00	ug/l	1	1030091	03/27/01	03/27/01	EPA 8260B	"
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	"
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	76-114		"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		104 %	88-110		"	"	"	"	"
<b>MW-5 (L103153-03) Water Sampled: 03/26/01 14:16 Received: 03/26/01 07:15</b>									
1,2-Dibromoethane	ND	2.00	ug/l	1	1030093	03/28/01	03/28/01	EPA 8260B	"
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	"
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	2.77	2.00	"	"	"	"	"	"	"
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	76-114		"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		103 %	88-110		"	"	"	"	"
<b>MW-7 (L103153-04) Water Sampled: 03/26/01 12:36 Received: 03/26/01 07:15</b>									
1,2-Dibromoethane	ND	2.00	ug/l	1	1030091	03/27/01	03/27/01	EPA 8260B	"
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	"
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %	76-114		"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		105 %	88-110		"	"	"	"	"

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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-8 (L103153-05) Water Sampled: 03/26/01 14:58 Received: 03/26/01 07:15</b>									
1,2-Dibromoethane	ND	2.00	ug/l	1	1030091	03/27/01	03/27/01	EPA 8260B	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	"
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %	76-114	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		104 %	88-110	"	"	"	"	"	"
<b>MW-9 (L103153-06) Water Sampled: 03/26/01 13:33 Received: 03/26/01 07:15</b>									
1,2-Dibromoethane	ND	2.00	ug/l	1	1030091	03/27/01	03/27/01	EPA 8260B	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	"
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		78.2 %	76-114	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		106 %	88-110	"	"	"	"	"	"
<b>MW-10 (L103153-07) Water Sampled: 03/26/01 11:50 Received: 03/26/01 07:15</b>									
1,2-Dibromoethane	ND	2.00	ug/l	1	1030093	03/28/01	03/28/01	EPA 8260B	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	"
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %	76-114	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		102 %	88-110	"	"	"	"	"	"

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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-11 (L103153-08) Water    Sampled: 03/26/01 11:00    Received: 03/26/01 07:15</b>									
1,2-Dibromoethane	ND	2.00	ug/l	1	1030091	03/27/01	03/27/01	EPA 8260B	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	"
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	76-114		"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		102 %	88-110		"	"	"	"	"
<b>MW-14 (L103153-09) Water    Sampled: 03/26/01 10:15    Received: 03/26/01 07:15</b>									
1,2-Dibromoethane	ND	2.00	ug/l	1	1030107	03/30/01	03/30/01	EPA 8260B	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	"
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.4 %	76-114		"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		101 %	88-110		"	"	"	"	"

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Reported:  
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**Total Metals by 200.7 ICP**

**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (L103153-02) Water Sampled: 03/26/01 15:50 Received: 03/26/01 07:15</b>									
Ferrous Iron	0.137	0.0100	mg/l	1	1D06021	04/06/01	04/06/01	EPA 200.7	
<b>MW-5 (L103153-03) Water Sampled: 03/26/01 14:16 Received: 03/26/01 07:15</b>									
Ferrous Iron	0.0155	0.0100	mg/l	1	1D06021	04/06/01	04/06/01	EPA 200.7	
<b>MW-7 (L103153-04) Water Sampled: 03/26/01 12:36 Received: 03/26/01 07:15</b>									
Ferrous Iron	ND	0.0100	mg/l	1	1D06021	04/06/01	04/06/01	EPA 200.7	
<b>MW-8 (L103153-05) Water Sampled: 03/26/01 14:58 Received: 03/26/01 07:15</b>									
Ferrous Iron	0.278	0.0100	mg/l	1	1D06021	04/06/01	04/06/01	EPA 200.7	
<b>MW-9 (L103153-06) Water Sampled: 03/26/01 13:33 Received: 03/26/01 07:15</b>									
Ferrous Iron	0.0239	0.0100	mg/l	1	1D06021	04/06/01	04/06/01	EPA 200.7	
<b>MW-10 (L103153-07) Water Sampled: 03/26/01 11:50 Received: 03/26/01 07:15</b>									
Ferrous Iron	0.0163	0.0100	mg/l	1	1D06021	04/06/01	04/06/01	EPA 200.7	
<b>MW-11 (L103153-08) Water Sampled: 03/26/01 11:00 Received: 03/26/01 07:15</b>									
Ferrous Iron	0.0493	0.0100	mg/l	1	1D06021	04/06/01	04/06/01	EPA 200.7	
<b>MW-14 (L103153-09) Water Sampled: 03/26/01 10:15 Received: 03/26/01 07:15</b>									
Ferrous Iron	0.0196	0.0100	mg/l	1	1D06021	04/06/01	04/06/01	EPA 200.7	

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Reported:  
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**Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (L103153-02) Water Sampled: 03/26/01 15:50 Received: 03/26/01 07:15</b>									
Diesel Range Hydrocarbons	4630	100	ug/l	2	ID04030	04/04/01	04/06/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		103 %	40-140	"	"	"	"	"	"
<b>MW-5 (L103153-03) Water Sampled: 03/26/01 14:16 Received: 03/26/01 07:15</b>									
Diesel Range Hydrocarbons	ND	50.0	ug/l	1	ID04030	04/04/01	04/06/01	DHS LUFT	
Surrogate: n-Pentacosane		92.2 %	40-140	"	"	"	"	"	"
<b>MW-7 (L103153-04) Water Sampled: 03/26/01 12:36 Received: 03/26/01 07:15</b>									
Diesel Range Hydrocarbons	69.1	50.0	ug/l	1	ID06013	04/06/01	04/10/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		81.0 %	40-140	"	"	"	"	"	"
<b>MW-8 (L103153-05) Water Sampled: 03/26/01 14:58 Received: 03/26/01 07:15</b>									
Diesel Range Hydrocarbons	1080	50.0	ug/l	1	ID06013	04/06/01	04/10/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		83.0 %	40-140	"	"	"	"	"	"
<b>MW-9 (L103153-06) Water Sampled: 03/26/01 13:33 Received: 03/26/01 07:15</b>									
Diesel Range Hydrocarbons	155	50.0	ug/l	1	ID06013	04/06/01	04/10/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		80.1 %	40-140	"	"	"	"	"	"
<b>MW-10 (L103153-07) Water Sampled: 03/26/01 11:50 Received: 03/26/01 07:15</b>									
Diesel Range Hydrocarbons	168	50.0	ug/l	1	ID06013	04/06/01	04/10/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		80.4 %	40-140	"	"	"	"	"	"
<b>MW-11 (L103153-08) Water Sampled: 03/26/01 11:00 Received: 03/26/01 07:15</b>									
Diesel Range Hydrocarbons	179	50.0	ug/l	1	ID06013	04/06/01	04/10/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		82.4 %	40-140	"	"	"	"	"	"

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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT**

**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-14 (L103153-09) Water Sampled: 03/26/01 10:15 Received: 03/26/01 07:15</b>									
Diesel Range Hydrocarbons	140	50.0	ug/l	1	ID06013	04/06/01	04/10/01	DHS LUFT	D-15
Surrogate: n-Pentacosane		84.1 %		40-140	"	"	"	"	

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Project Manager: Deanna Harding

Reported:  
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### Polynuclear Aromatic Hydrocarbons by EPA method 8100

#### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (L103153-02) Water Sampled: 03/26/01 15:50 Received: 03/26/01 07:15</b>									
Acenaphthene	ND	5.00	ug/l	1	1C30014	03/30/01	04/03/01	EPA 8100	
Acenaphthylene	ND	5.00	"	"	"	"	"	"	
Anthracene	ND	5.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	5.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.00	"	"	"	"	"	"	
Chrysene	ND	5.00	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.00	"	"	"	"	"	"	
Fluoranthene	ND	5.00	"	"	"	"	"	"	
Fluorene	ND	5.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	10.0	"	"	"	"	"	"	R-01
Phenanthrene	ND	5.00	"	"	"	"	"	"	
Pyrene	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>		113 %	50-150	"	"	"	"	"	
<b>MW-5 (L103153-03) Water Sampled: 03/26/01 14:16 Received: 03/26/01 07:15</b>									
Acenaphthene	ND	5.00	ug/l	1	1C30014	03/30/01	04/03/01	EPA 8100	
Acenaphthylene	ND	5.00	"	"	"	"	"	"	
Anthracene	ND	5.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	5.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.00	"	"	"	"	"	"	
Chrysene	ND	5.00	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.00	"	"	"	"	"	"	
Fluoranthene	ND	5.00	"	"	"	"	"	"	
Fluorene	ND	5.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
Phenanthrene	ND	5.00	"	"	"	"	"	"	
Pyrene	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>		79.6 %	50-150	"	"	"	"	"	

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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Polynuclear Aromatic Hydrocarbons by EPA method 8100**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-8 (L103153-05) Water Sampled: 03/26/01 14:58 Received: 03/26/01 07:15</b>									
Acenaphthene	ND	5.00	ug/l	1	1C30014	03/30/01	04/03/01	EPA 8100	
Acenaphthylene	ND	5.00	"	"	"	"	"	"	"
Anthracene	ND	5.00	"	"	"	"	"	"	"
Benzo (a) anthracene	ND	5.00	"	"	"	"	"	"	"
Benzo (a) pyrene	ND	5.00	"	"	"	"	"	"	"
Benzo (b) fluoranthene	ND	5.00	"	"	"	"	"	"	"
Benzo (ghi) perylene	ND	5.00	"	"	"	"	"	"	"
Benzo (k) fluoranthene	ND	5.00	"	"	"	"	"	"	"
Chrysene	ND	5.00	"	"	"	"	"	"	"
Dibenz (a,h) anthracene	ND	5.00	"	"	"	"	"	"	"
Fluoranthene	ND	5.00	"	"	"	"	"	"	"
Fluorene	ND	5.00	"	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	ND	5.00	"	"	"	"	"	"	"
Naphthalene	ND	5.00	"	"	"	"	"	"	"
Phenanthrene	ND	5.00	"	"	"	"	"	"	"
Pyrene	ND	5.00	"	"	"	"	"	"	"
Surrogate: 2-Fluorobiphenyl		103 %	50-150		"	"	"	"	"

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

Conventional Chemistry Parameters by APHA/EPA Methods  
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (L103153-02) Water Sampled: 03/26/01 15:50 Received: 03/26/01 07:15									
Total Alkalinity	194	5.00	mg/l	1	1D06007	04/06/01	04/06/01	SM 2320B	
MW-5 (L103153-03) Water Sampled: 03/26/01 14:16 Received: 03/26/01 07:15									
Total Alkalinity	468	5.00	mg/l	1	1D06007	04/06/01	04/06/01	SM 2320B	
MW-7 (L103153-04) Water Sampled: 03/26/01 12:36 Received: 03/26/01 07:15									
Total Alkalinity	488	5.00	mg/l	1	1D06007	04/06/01	04/06/01	SM 2320B	
MW-8 (L103153-05) Water Sampled: 03/26/01 14:58 Received: 03/26/01 07:15									
Total Alkalinity	426	5.00	mg/l	1	1D06007	04/06/01	04/06/01	SM 2320B	
MW-9 (L103153-06) Water Sampled: 03/26/01 13:33 Received: 03/26/01 07:15									
Total Alkalinity	335	5.00	mg/l	1	1D06007	04/06/01	04/06/01	SM 2320B	
MW-10 (L103153-07) Water Sampled: 03/26/01 11:50 Received: 03/26/01 07:15									
Total Alkalinity	277	5.00	mg/l	1	1D06007	04/06/01	04/06/01	SM 2320B	
MW-11 (L103153-08) Water Sampled: 03/26/01 11:00 Received: 03/26/01 07:15									
Total Alkalinity	297	5.00	mg/l	1	1D06007	04/06/01	04/06/01	SM 2320B	
MW-14 (L103153-09) Water Sampled: 03/26/01 10:15 Received: 03/26/01 07:15									
Total Alkalinity	303	5.00	mg/l	1	1D06007	04/06/01	04/06/01	SM 2320B	

Gentler-Ryan/Geostrategies(1)  
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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Anions by EPA Method 300.0**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (L103153-02) Water Sampled: 03/26/01 15:50 Received: 03/26/01 07:15</b>									
Nitrate as NO3	ND	1.00	mg/l	10	IC26027	03/26/01	03/26/01	EPA 300.0	"
Sulfate as SO4	ND	5.00	"	"	"	"	"	"	"
<b>MW-5 (L103153-03) Water Sampled: 03/26/01 14:16 Received: 03/26/01 07:15</b>									
Nitrate as NO3	27.0	1.00	mg/l	10	ID05031	03/27/01	03/27/01	EPA 300.0	"
Sulfate as SO4	197	5.00	"	"	"	"	"	"	"
<b>MW-7 (L103153-04) Water Sampled: 03/26/01 12:36 Received: 03/26/01 07:15</b>									
Nitrate as NO3	17.5	1.00	mg/l	10	ID05031	03/27/01	03/27/01	EPA 300.0	"
Sulfate as SO4	84.6	5.00	"	"	"	"	"	"	"
<b>MW-8 (L103153-05) Water Sampled: 03/26/01 14:58 Received: 03/26/01 07:15</b>									
Nitrate as NO3	ND	1.00	mg/l	10	ID05031	03/27/01	03/27/01	EPA 300.0	"
Sulfate as SO4	ND	5.00	"	"	"	"	"	"	"
<b>MW-9 (L103153-06) Water Sampled: 03/26/01 13:33 Received: 03/26/01 07:15</b>									
Nitrate as NO3	ND	1.00	mg/l	10	ID05031	03/27/01	03/27/01	EPA 300.0	"
Sulfate as SO4	6.70	5.00	"	"	"	"	"	"	"
<b>MW-10 (L103153-07) Water Sampled: 03/26/01 11:50 Received: 03/26/01 07:15</b>									
Nitrate as NO3	1.83	1.00	mg/l	10	ID05031	03/27/01	03/27/01	EPA 300.0	"
Sulfate as SO4	28.5	5.00	"	"	"	"	"	"	"
<b>MW-11 (L103153-08) Water Sampled: 03/26/01 11:00 Received: 03/26/01 07:15</b>									
Nitrate as NO3	ND	1.00	mg/l	10	ID05031	03/27/01	03/27/01	EPA 300.0	"
Sulfate as SO4	30.1	5.00	"	"	"	"	"	"	"

Gettler-Ryan/Geostrategies(1)  
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Project: Chevron(1)  
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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Anions by EPA Method 300.0**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-14 (L103153-09) Water Sampled: 03/26/01 10:15 Received: 03/26/01 07:15</b>									
Nitrate as NO <sub>3</sub>	ND	1.00	mg/l	10	1D05031	03/27/01	03/27/01	EPA 300.0	"
Sulfate as SO <sub>4</sub>	35.1	5.00	"	"	"	"	"	"	"

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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch 1040014 - EPA 5030B (P/T)</b>										
<b>Blank (1040014-BLK1)</b>										
Prepared & Analyzed: 04/04/01										
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	5.00	"							
Surrogate: a,a,a-Trifluorotoluene	8.00		"	10.0		80.0	70-130			
<b>LCS (1040014-BS1)</b>										
Prepared & Analyzed: 04/04/01										
Benzene	8.71	0.500	ug/l	10.0		87.1	70-130			
Toluene	8.69	0.500	"	10.0		86.9	70-130			
Ethylbenzene	8.69	0.500	"	10.0		86.9	70-130			
Xylenes (total)	26.4	0.500	"	30.0		88.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.09		"	10.0		90.9	70-130			
<b>LCS (1040014-BS2)</b>										
Prepared & Analyzed: 04/04/01										
Purgeable Hydrocarbons as Gasoline	279	50.0	ug/l	250		112	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.31		"	10.0		93.1	70-130			
<b>Matrix Spike (1040014-MS1)</b>										
Source: L103159-05 Prepared & Analyzed: 04/04/01										
Purgeable Hydrocarbons as Gasoline	261	50.0	ug/l	250	ND	104	60-140			
Surrogate: a,a,a-Trifluorotoluene	9.64		"	10.0		96.4	70-130			
<b>Matrix Spike Dup (1040014-MSD1)</b>										
Source: L103159-05 Prepared & Analyzed: 04/04/01										
Purgeable Hydrocarbons as Gasoline	279	50.0	ug/l	250	ND	112	60-140	6.67	25	
Surrogate: a,a,a-Trifluorotoluene	8.97		"	10.0		89.7	70-130			

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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch 1040018 - EPA 5030B (P/T)</b>										
<b>Blank (1040018-BLK1)</b>										
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	5.00	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	7.88		"	10.0		78.8	70-130			
<b>LCS (1040018-BS1)</b>										
Benzene	7.86	0.500	ug/l	10.0		78.6	70-130			
Toluene	8.01	0.500	"	10.0		80.1	70-130			
Ethylbenzene	7.81	0.500	"	10.0		78.1	70-130			
Xylenes (total)	23.9	0.500	"	30.0		79.7	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.36		"	10.0		83.6	70-130			
<b>LCS (1040018-BS2)</b>										
Purgeable Hydrocarbons as Gasoline	289	50.0	ug/l	250		116	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.17		"	10.0		91.7	70-130			
<b>Matrix Spike (1040018-MS1)</b>										
		Source: L103165-02				Prepared & Analyzed: 04/05/01				
Benzene	8.28	0.500	ug/l	10.0	ND	82.8	60-140			
Toluene	8.39	0.500	"	10.0	ND	83.9	60-140			
Ethylbenzene	8.24	0.500	"	10.0	ND	82.4	60-140			
Xylenes (total)	25.1	0.500	"	30.0	ND	83.7	60-140			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.68		"	10.0		86.8	70-130			
<b>Matrix Spike Dup (1040018-MSD1)</b>										
		Source: L103165-02				Prepared & Analyzed: 04/05/01				
Benzene	8.75	0.500	ug/l	10.0	ND	87.5	60-140	5.52	25	
Toluene	8.77	0.500	"	10.0	ND	87.7	60-140	4.43	25	
Ethylbenzene	8.66	0.500	"	10.0	ND	86.6	60-140	4.97	25	
Xylenes (total)	26.6	0.500	"	30.0	ND	88.7	60-140	5.80	25	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.53		"	10.0		85.3	70-130			

Gettler-Ryan/Geostrategies(1)  
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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1040019 - EPA 5030B (P/T)**

<b>Blank (1040019-BLK1)</b>	Prepared & Analyzed: 04/05/01							
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l					
Benzene	ND	0.500	"					
Toluene	ND	0.500	"					
Ethylbenzene	ND	0.500	"					
Xylenes (total)	ND	0.500	"					
Methyl tert-butyl ether	ND	5.00	"					
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.7	"		10.0		107	70-130	
<b>LCS (1040019-BS1)</b>	Prepared & Analyzed: 04/05/01							
Benzene	8.92	0.500	ug/l	10.0		89.2	70-130	
Toluene	8.81	0.500	"	10.0		88.1	70-130	
Ethylbenzene	8.88	0.500	"	10.0		88.8	70-130	
Xylenes (total)	26.9	0.500	"	30.0		89.7	70-130	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.7	"		10.0		107	70-130	
<b>LCS (1040019-BS2)</b>	Prepared & Analyzed: 04/05/01							
Purgeable Hydrocarbons as Gasoline	225	50.0	ug/l	250		90.0	70-130	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.2	"		10.0		102	70-130	
<b>Matrix Spike (1040019-MS1)</b>	<b>Source: L103165-08</b>			Prepared & Analyzed: 04/05/01				
Benzene	10.2	0.500	ug/l	10.0	ND	102	60-140	
Toluene	10.1	0.500	"	10.0	ND	101	60-140	
Ethylbenzene	10.4	0.500	"	10.0	ND	104	60-140	
Xylenes (total)	30.6	0.500	"	30.0	ND	102	60-140	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	11.1	"		10.0		111	70-130	
<b>Matrix Spike Dup (1040019-MSD1)</b>	<b>Source: L103165-08</b>			Prepared: 04/05/01		Analyzed: 04/06/01		
Benzene	9.20	0.500	ug/l	10.0	ND	92.0	60-140	10.3
Toluene	9.21	0.500	"	10.0	ND	92.1	60-140	9.22
Ethylbenzene	9.42	0.500	"	10.0	ND	94.2	60-140	9.89
Xylenes (total)	27.8	0.500	"	30.0	ND	92.7	60-140	9.59
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.4	"		10.0		104	70-130	25

Gettler-Ryan/Geostrategies(1)  
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Project: Chevron(1)  
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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1030091 - EPA 5030B (P/T)**

Blank (1030091-BLK1)	Prepared & Analyzed: 03/27/01					
Ethanol	ND	1000	ug/l			
1,2-Dibromoethane	ND	2.00	"			
1,2-Dichloroethane	ND	2.00	"			
Di-isopropyl ether	ND	2.00	"			
Ethyl tert-butyl ether	ND	2.00	"			
Methyl tert-butyl ether	ND	2.00	"			
Tert-amyl methyl ether	ND	2.00	"			
Tert-butyl alcohol	ND	100	"			
Surrogate: 1,2-Dichloroethane-d4	53.2		"	50.0	106	76-114
Surrogate: Toluene-d8	52.2		"	50.0	104	88-110

Blank (1030091-BLK2)	Prepared & Analyzed: 03/27/01					
Ethanol	ND	1000	ug/l			
1,2-Dibromoethane	ND	2.00	"			
1,2-Dichloroethane	ND	2.00	"			
Di-isopropyl ether	ND	2.00	"			
Ethyl tert-butyl ether	ND	2.00	"			
Methyl tert-butyl ether	ND	2.00	"			
Tert-amyl methyl ether	ND	2.00	"			
Tert-butyl alcohol	ND	100	"			
Surrogate: 1,2-Dichloroethane-d4	54.5		"	50.0	109	76-114
Surrogate: Toluene-d8	53.7		"	50.0	107	88-110

LCS (1030091-BS1)	Prepared & Analyzed: 03/27/01					
Methyl tert-butyl ether	55.5	2.00	ug/l	50.0	111	70-130
Surrogate: 1,2-Dichloroethane-d4	54.4		"	50.0	109	76-114
Surrogate: Toluene-d8	51.8		"	50.0	104	88-110

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Reported:  
04/11/01 15:03

**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1030091 - EPA 5030B [P/T]**

**LCS (1030091-BS2)**

	Prepared & Analyzed: 03/27/01					
Methyl tert-butyl ether	52.3	2.00	ug/l	50.0	105	70-130
Surrogate: 1,2-Dichloroethane-d4	55.6	"	"	50.0	111	76-114
Surrogate: Toluene-d8	52.8	"	"	50.0	106	88-110

**Matrix Spike (1030091-MS1)**

	Source: L103153-02	Prepared & Analyzed: 03/27/01					
Methyl tert-butyl ether	50.1	2.00	ug/l	50.0	ND	100	60-140
Surrogate: 1,2-Dichloroethane-d4	53.7	"	"	50.0	107	76-114	
Surrogate: Toluene-d8	51.8	"	"	50.0	104	88-110	

**Matrix Spike Dup (1030091-MSD1)**

	Source: L103153-02	Prepared & Analyzed: 03/27/01					
Methyl tert-butyl ether	58.7	2.00	ug/l	50.0	ND	117	60-140
Surrogate: 1,2-Dichloroethane-d4	57.3	"	"	50.0	115	76-114	
Surrogate: Toluene-d8	52.5	"	"	50.0	105	88-110	

**Batch 1030093 - EPA 5030B [P/T]**

**Blank (1030093-BLK2)**

	Prepared & Analyzed: 03/28/01					
Methyl tert-butyl ether	ND	2.00	ug/l			
Surrogate: 1,2-Dichloroethane-d4	53.4	"	"	50.0	107	76-114
Surrogate: Toluene-d8	52.4	"	"	50.0	105	88-110

**Blank (1030093-BLK3)**

	Prepared & Analyzed: 03/30/01					
Ethanol	ND	1000	ug/l			
1,2-Dibromoethane	ND	2.00	"			
1,2-Dichloroethane	ND	2.00	"			
Di-isopropyl ether	ND	2.00	"			
Ethyl tert-butyl ether	ND	2.00	"			
Methyl tert-butyl ether	ND	2.00	"			
Tert-amyl methyl ether	ND	2.00	"			
Tert-butyl alcohol	ND	100	"			
Surrogate: 1,2-Dichloroethane-d4	49.4	"	"	50.0	98.8	76-114
Surrogate: Toluene-d8	51.3	"	"	50.0	103	88-110

Gettler-Ryan/Geostrategies(1)  
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Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1030093 - EPA 5030B [P/T]**

<b>LCS (1030093-BS2)</b>	Prepared & Analyzed: 03/28/01						
Ethanol	4220	1000	ug/l	5000	84.4	0-200	
1,2-Dibromoethane	50.6	2.00	"	50.0	101	0-200	
1,2-Dichloroethane	47.8	2.00	"	50.0	95.6	0-200	
Di-isopropyl ether	52.0	2.00	"	50.0	104	0-200	
Ethyl tert-butyl ether	53.2	2.00	"	50.0	106	70-130	
Methyl tert-butyl ether	52.8	2.00	"	50.0	108	0-200	
Tert-amyl methyl ether	53.8	2.00	"	50.0	102	0-200	
Tert-butyl alcohol	511	100	"	500			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	53.7		"	50.0	107	76-114	
<i>Surrogate: Toluene-d8</i>	53.2		"	50.0	106	88-110	

<b>LCS (1030093-BS3)</b>	Prepared & Analyzed: 03/30/01						
Methyl tert-butyl ether	53.3	2.00	ug/l	50.0	107	70-130	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0		"	50.0	100	76-114	
<i>Surrogate: Toluene-d8</i>	50.9		"	50.0	102	88-110	

<b>Matrix Spike (1030093-MS1)</b>	Source: L103153-07	Prepared & Analyzed: 03/28/01						
Methyl tert-butyl ether	51.2	2.00	ug/l	50.0	ND	102	60-140	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	55.6		"	50.0		111	76-114	
<i>Surrogate: Toluene-d8</i>	52.8		"	50.0		106	88-110	

<b>Matrix Spike Dup (1030093-MSD1)</b>	Source: L103153-07	Prepared & Analyzed: 03/28/01						
Methyl tert-butyl ether	57.4	2.00	ug/l	50.0	ND	115	60-140	11.4
<i>Surrogate: 1,2-Dichloroethane-d4</i>	54.8		"	50.0		110	76-114	
<i>Surrogate: Toluene-d8</i>	51.2		"	50.0		102	88-110	

**Batch 1030107 - EPA 5030B [P/T]**

<b>Blank (1030107-BLK1)</b>	Prepared & Analyzed: 03/30/01						
Ethanol	ND	1000	ug/l				
1,2-Dibromoethane	ND	2.00	"				
1,2-Dichloroethane	ND	2.00	"				
Di-isopropyl ether	ND	2.00	"				
Ethyl tert-butyl ether	ND	2.00	"				
Methyl tert-butyl ether	ND	2.00	"				
Tert-amyl methyl ether	ND	2.00	"				
Tert-butyl alcohol	ND	100	"				

Sequoia Analytical - San Carlos

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Volatile Organic 8 Oxygated Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1030107 - EPA 5030B [P/T]**

<b>Blank (1030107-BLK1)</b>							Prepared & Analyzed: 03/30/01			
Surrogate: 1,2-Dichloroethane-d4	49.4		ug/l	50.0		98.8	76-114			
Surrogate: Toluene-d8	51.3		"	50.0		103	88-110			
<b>Blank (1030107-BLK2)</b>							Prepared & Analyzed: 04/03/01			
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	51.9		"	50.0		104	76-114			
Surrogate: Toluene-d8	50.3		"	50.0		101	88-110			
<b>LCS (1030107-BS1)</b>							Prepared & Analyzed: 03/30/01			
Methyl tert-butyl ether	53.3	2.00	ug/l	50.0		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	50.0		"	50.0		100	76-114			
Surrogate: Toluene-d8	50.9		"	50.0		102	88-110			
<b>LCS (1030107-BS2)</b>							Prepared & Analyzed: 04/03/01			
Methyl tert-butyl ether	56.3	2.00	ug/l	50.0		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	54.2		"	50.0		108	76-114			
Surrogate: Toluene-d8	53.3		"	50.0		107	88-110			
<b>Matrix Spike (1030107-MS1)</b>							Prepared & Analyzed: 03/30/01			
Methyl tert-butyl ether	55.3	2.00	ug/l	50.0	ND	111	60-140			
Surrogate: 1,2-Dichloroethane-d4	50.0		"	50.0		100	76-114			
Surrogate: Toluene-d8	51.4		"	50.0		103	88-110			

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1030107 - EPA 5030B [P/T]**

Matrix Spike Dup (1030107-MSDI)	Source: L103153-09			Prepared & Analyzed: 03/30/01						
Methyl tert-butyl ether	59.6	2.00	ug/l	50.0	ND	119	60-140	7.48	25	
Surrogate: 1,2-Dichloroethane-d4	52.8	"		50.0		106	76-114			
Surrogate: Toluene-d8	51.1	"		50.0		102	88-110			

Gettier-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

Total Metals by 200.7 ICP - Quality Control  
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1D06021 - 200.7/ No Digest</b>										
Blank (1D06021-BLK1)					Prepared & Analyzed: 04/06/01					O-04
Ferrous Iron	ND	0.0100	mg/l							
LCS (1D06021-BS1)					Prepared & Analyzed: 04/06/01					O-04
Ferrous Iron	0.992	0.0100	mg/l	1.00		99.2	80-120			
Matrix Spike (1D06021-MS1)		Source: L103153-02			Prepared & Analyzed: 04/06/01					O-04
Ferrous Iron	1.14	0.0100	mg/l	1.00	0.137	100	80-120			
Matrix Spike Dup (1D06021-MSD1)		Source: L103153-02			Prepared & Analyzed: 04/06/01					O-04
Ferrous Iron	1.13	0.0100	mg/l	1.00	0.137	99.3	80-120	0.881	20	

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1D04030 - EPA 3510B**

<b>Blank (1D04030-BLK1)</b>					Prepared: 04/04/01	Analyzed: 04/06/01				
Diesel Range Hydrocarbons	ND	50.0	ug/l							
Surrogate: n-Pentacosane	103	"		100		103	40-140			
<b>LCS (1D04030-BS1)</b>					Prepared: 04/04/01	Analyzed: 04/06/01				
Diesel Range Hydrocarbons	781	50.0	ug/l	1000		78.1	40-140			
Surrogate: n-Pentacosane	101	-	"	100		101	40-140			
<b>LCS Dup (1D04030-BSD1)</b>					Prepared: 04/04/01	Analyzed: 04/06/01				
Diesel Range Hydrocarbons	692	50.0	ug/l	1000		69.2	40-140	12.1	50	
Surrogate: n-Pentacosane	98.5	-	"	100		98.5	40-140			

**Batch 1D06013 - EPA 3510B**

<b>Blank (1D06013-BLK1)</b>					Prepared: 04/06/01	Analyzed: 04/10/01				
Diesel Range Hydrocarbons	ND	50.0	ug/l							
Surrogate: n-Pentacosane	63.0	"		100		63.0	40-140			S-08
<b>LCS (1D06013-BS1)</b>					Prepared: 04/06/01	Analyzed: 04/10/01				
Diesel Range Hydrocarbons	779	50.0	ug/l	1000		77.9	40-140			
Surrogate: n-Pentacosane	78.3	"		100		78.3	40-140			S-08
<b>Matrix Spike (1D06013-MS1)</b>				Source: MKC0608-01	Prepared: 04/06/01	Analyzed: 04/10/01				
Diesel Range Hydrocarbons	1570	50.0	ug/l	1000	614	95.6	40-140			
Surrogate: n-Pentacosane	83.2	"		100		83.2	40-140			S-08
<b>Matrix Spike Dup (1D06013-MSD1)</b>				Source: MKC0608-01	Prepared: 04/06/01	Analyzed: 04/10/01				
Diesel Range Hydrocarbons	1400	50.0	ug/l	1000	614	78.6	40-140	11.4	50	
Surrogate: n-Pentacosane	159	"		100		159	40-140			S-02,S-08

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Polynuclear Aromatic Hydrocarbons by EPA method 8100 - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch 1C30014 - EPA 3510B</b>										
<b>Blank (1C30014-BLK1)</b>										
Prepared: 03/30/01 Analyzed: 04/03/01										
Acenaphthene	ND	5.00	ug/l							
Acenaphthylene	ND	5.00	"							
Anthracene	ND	5.00	"							
Benzo (a) anthracene	ND	5.00	"							
Benzo (a) pyrene	ND	5.00	"							
Benzo (b) fluoranthene	ND	5.00	"							
Benzo (ghi) perylene	ND	5.00	"							
Benzo (k) fluoranthene	ND	5.00	"							
Chrysene	ND	5.00	"							
Dibenz (a,h) anthracene	ND	5.00	"							
Fluoranthene	ND	5.00	"							
Fluorene	ND	5.00	"							
Indeno (1,2,3-cd) pyrene	ND	5.00	"							
Naphthalene	ND	5.00	"							
Phenanthrene	ND	5.00	"							
Pyrene	ND	5.00	"							
<i>Surrogate: 2-Fluorobiphenyl</i>	78.6		"	100		78.6	50-150			
<b>LCS (1C30014-BS1)</b>										
Prepared: 03/30/01 Analyzed: 04/03/01										
Acenaphthene	95.1	5.00	ug/l	100		95.1	60-140			
Naphthalene	88.4	5.00	"	100		88.4	60-140			
Pyrene	103	5.00	"	100		103	60-140			
<i>Surrogate: 2-Fluorobiphenyl</i>	92.8		"	100		92.8	50-150			
<b>LCS Dup (1C30014-BSD1)</b>										
Prepared: 03/30/01 Analyzed: 04/03/01										
Acenaphthene	99.5	5.00	ug/l	100		99.5	60-140	4.52	40	
Naphthalene	91.2	5.00	"	100		91.2	60-140	3.12	40	
Pyrene	106	5.00	"	100		106	60-140	2.87	40	
<i>Surrogate: 2-Fluorobiphenyl</i>	95.3		"	100		95.3	50-150			

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA. 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
<b>Batch 1D06007 - General Preparation</b>											
<b>Blank (1D06007-BLK1)</b>	Prepared & Analyzed: 04/06/01										
Total Alkalinity	ND	5.00	mg/l								
<b>LCS (1D06007-BS1)</b>	Prepared & Analyzed: 04/06/01										
Total Alkalinity	91.2	5.00	mg/l	100	91.2	80-120					
<b>Matrix Spike (1D06007-MS1)</b>	Source: MKC0675-01			Prepared & Analyzed: 04/06/01							
Total Alkalinity	119	5.00	mg/l	100	19.8	99.2	75-125				
<b>Matrix Spike Dup (1D06007-MSD1)</b>	Source: MKC0675-01			Prepared & Analyzed: 04/06/01							
Total Alkalinity	117	5.00	mg/l	100	19.8	97.2	75-125	1.69	20		

Sequoia Analytical - San Carlos

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Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Anions by EPA Method 300.0 - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1C26027 - General Preparation**

<b>Blank (1C26027-BLK1)</b>	Prepared & Analyzed: 03/26/01							
Nitrate as NO <sub>3</sub>	ND	0.100	mg/l					
Sulfate as SO <sub>4</sub>	ND	0.500	"					
<b>Blank (1C26027-BLK2)</b>	Prepared & Analyzed: 03/26/01							
Nitrate as NO <sub>3</sub>	ND	0.100	mg/l					
Sulfate as SO <sub>4</sub>	ND	0.500	"					
<b>LCS (1C26027-BS1)</b>	Prepared & Analyzed: 03/26/01							
Nitrate as NO <sub>3</sub>	9.67	0.100	mg/l	10.0		96.7	90-110	
Sulfate as SO <sub>4</sub>	10.0	0.500	"	10.0		100	90-110	
<b>LCS (1C26027-BS2)</b>	Prepared & Analyzed: 03/26/01							
Nitrate as NO <sub>3</sub>	9.33	0.100	mg/l	10.0		93.3	90-110	
Sulfate as SO <sub>4</sub>	9.83	0.500	"	10.0		98.3	90-110	
<b>Matrix Spike (1C26027-MS1)</b>	Source: MKC0597-01	Prepared & Analyzed: 03/26/01						
Nitrate as NO <sub>3</sub>	97.5	1.00	mg/l	100	2.44	95.1	80-120	
Sulfate as SO <sub>4</sub>	146	5.00	"	100	42.4	104	80-120	
<b>Matrix Spike (1C26027-MS2)</b>	Source: L103153-02	Prepared & Analyzed: 03/26/01						
Nitrate as NO <sub>3</sub>	94.6	1.00	mg/l	100	ND	94.6	80-120	
Sulfate as SO <sub>4</sub>	97.3	5.00	"	100	ND	94.4	80-120	
<b>Matrix Spike Dup (1C26027-MSD1)</b>	Source: MKC0597-01	Prepared & Analyzed: 03/26/01						
Nitrate as NO <sub>3</sub>	95.3	1.00	mg/l	100	2.44	92.9	80-120	2.28
Sulfate as SO <sub>4</sub>	146	5.00	"	100	42.4	104	80-120	0
<b>Matrix Spike Dup (1C26027-MSD2)</b>	Source: L103153-02	Prepared & Analyzed: 03/26/01						
Nitrate as NO <sub>3</sub>	94.2	1.00	mg/l	100	ND	94.2	80-120	0.424
Sulfate as SO <sub>4</sub>	97.0	5.00	"	100	ND	94.1	80-120	0.309

Gettier-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

**Anions by EPA Method 300.0 - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1D05031 - General Preparation**

**Blank (1D05031-BLK1)** Prepared & Analyzed: 03/27/01

Nitrate as NO <sub>3</sub>	ND	0.100	mg/l
Sulfate as SO <sub>4</sub>	ND	0.500	"

**LCS (1D05031-BS1)** Prepared & Analyzed: 03/27/01

Nitrate as NO <sub>3</sub>	9.44	0.100	mg/l	10.0	94.4	90-110
Sulfate as SO <sub>4</sub>	9.57	0.500	"	10.0	95.7	90-110

**Matrix Spike (1D05031-MS1)** Source: MKC0609-03 Prepared & Analyzed: 03/27/01

Nitrate as NO <sub>3</sub>	99.8	1.00	mg/l	100	2.64	97.2	80-120
Sulfate as SO <sub>4</sub>	139	5.00	"	100	32.7	106	80-120

**Matrix Spike Dup (1D05031-MSD1)** Source: MKC0609-03 Prepared & Analyzed: 03/27/01

Nitrate as NO <sub>3</sub>	95.2	1.00	mg/l	100	2.64	92.6	80-120	4.72	20
Sulfate as SO <sub>4</sub>	134	5.00	"	100	32.7	101	80-120	3.66	20

Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Chevron(1)  
Project Number: Chevron #206142/333 23RD AVE., OAKLA  
Project Manager: Deanna Harding

Reported:  
04/11/01 15:03

#### Notes and Definitions

- D-15 Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
- O-04 This sample was analyzed outside the EPA recommended holding time.
- P-03 Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
- R-01 The reporting limit for this analyte has been raised to account for matrix interference.
- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
- S-08 The opening calibration surrogate recovery was outside acceptable limit of 15% by 10%. Review of associated QC indicates the recovery for this surrogate does not represent an out-of-control condition.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



# GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

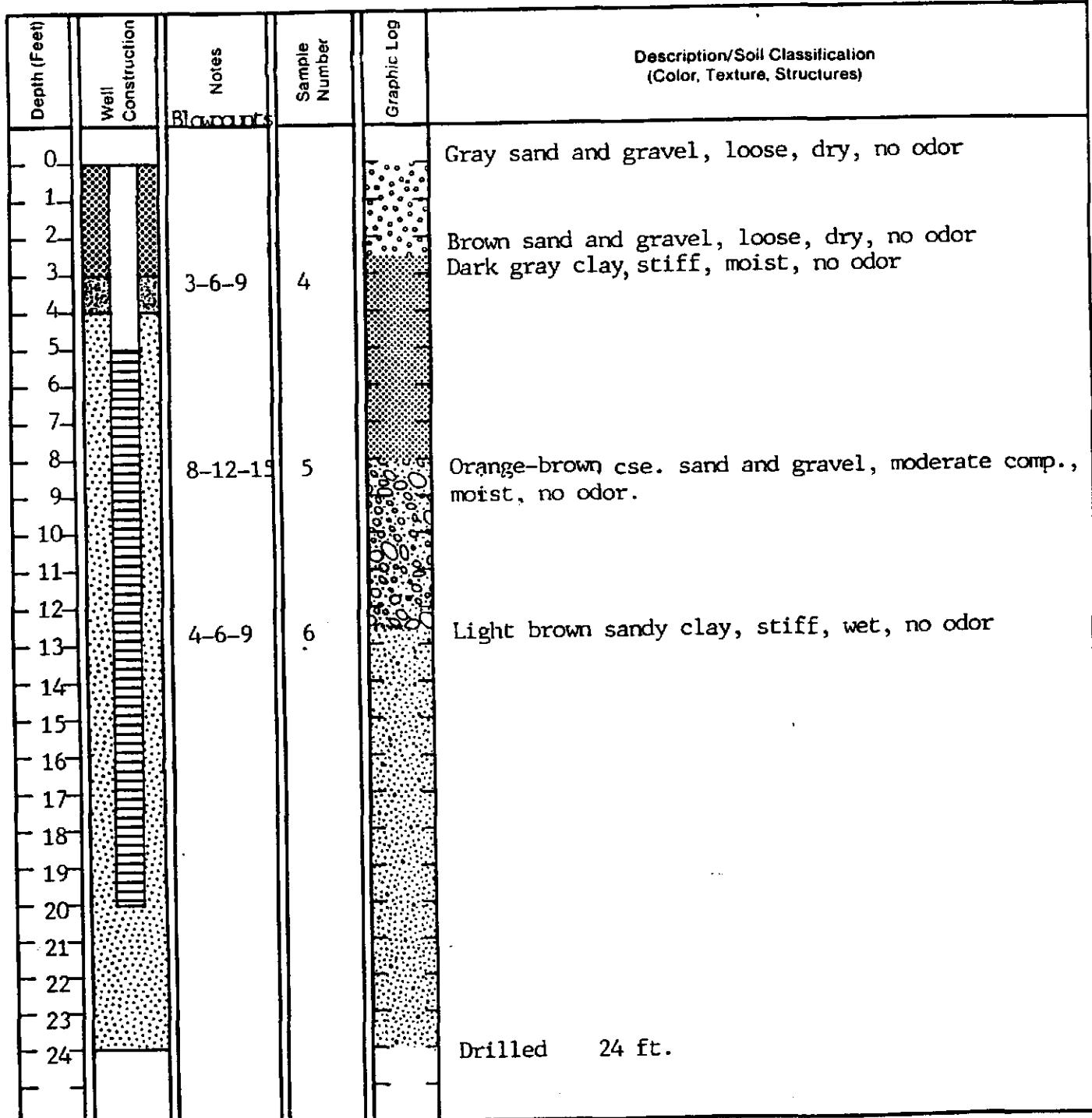
## Drilling Log

Well Number 2

Project Rhodes-Jamieson Owner Chevron  
Location 333 23rd Ave. Oakland Project Number 20-3235  
Date Drilled 9/5/85 Total Depth of Hole 24 ft. Diameter 7.5 in.  
Surface Elevation 18 1/48 f Water Level, Initial 11 ft. 24-hrs 8.11 ft.  
Screen Dia. 4 in. Length 15 ft. Slot Size .020 in.  
Casing Dia. 4 in. Length 5 ft. Type PVC  
Drilling Company All Terrain Drilling Method H.S. Auger  
Driller Wes Rigsby Log by Cori Condon

### Sketch Map

Notes Drilled 24 ft. sand pack to 4 ft. bentonite to 3 ft. cement seal and steel manhole to surface





# GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

Well Number 3

## Drilling Log

Project Rhodes-Jamieson Owner Chevron  
 Location 333 23rd Ave. Oakland Project Number 20-3235  
 Date Drilled 9/5/85 Total Depth of Hole 24 ft. Diameter 7.5 in.  
 Surface Elevation 19.29 ft Water Level, Initial 11 ft. 24-hrs. 7.40 ft.  
 Screen: Dia. 4 in. Length 15 ft. Slot Size .020 in.  
 Casing: Dia. 4 in. Length 5 ft. Type PVC  
 Drilling Company All Terrain Drilling Method H.S. Auger  
 Driller Wes Rigsby Log by Cori Condon

### Sketch Map

Notes Drilled 24 ft. sand pack to 4 ft. bentonite to 2.5 ft. cement and steel manhole to surface

Depth (Feet)	Well Construction	Notes	Blowcounts	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0						Gray fine sand, loose, dry, no odor.
1						
2						Brown cse sand, wood frags, and occassional cobble, moderate comp., dry, no odor
3						Dark organic rich sandy clay, damp, no odor
4						
5						
6						
7						
8						Brown sandy clay with occassional gravel, moderate comp., moist, no odor
9						
10						
11						Gray clayey sand, dense, wet, no odor
12						
13						Sticky brown sandy clay, wet, no odor
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						Drilled 24 ft.



# GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

Well Number 4

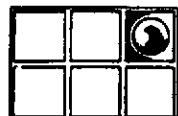
## Drilling Log

Project Rhodes-Jamieson Owner Chevron  
Location 333 23rd Ave. Oakland Project Number 20-3235  
Date Drilled 17.57 ft. Total Depth of Hole 24 ft. Diameter 7.5 in.  
Surface Elevation Water Level, Initial 11 ft. 24-hrs. 7.29 ft.  
Screen Dia. 4 in. Length 15 ft. Slot Size .020 in.  
Casing Dia. 4 in. Length 5 ft. Type PVC  
Drilling Company All Terrain Drilling Method H.S. Auger  
Driller Wes Rigsby Log by Cori Condon

### Sketch Map

Notes Drilled 24 ft. sand pack to 4 ft. bentonite to 2 ft. cement and steel manhole to surface

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0					Gray sand and gravel, loose, dry, no odor
1					
2					
3					
4					Gray-brown cse. sand and angular gravels, moderate comp., moist, no odor
5					
6					
7					Black organic rich sandy clay, wood frags., stiff, moist, no odor
8					Brown sandy clay with multi-colored angular gravels ~80%, wet, no odor
9					
10			10		
11					
12					
13					Brown sandy clay, moderate comp., wet, no odor
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					Drilled 24 ft.



# GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

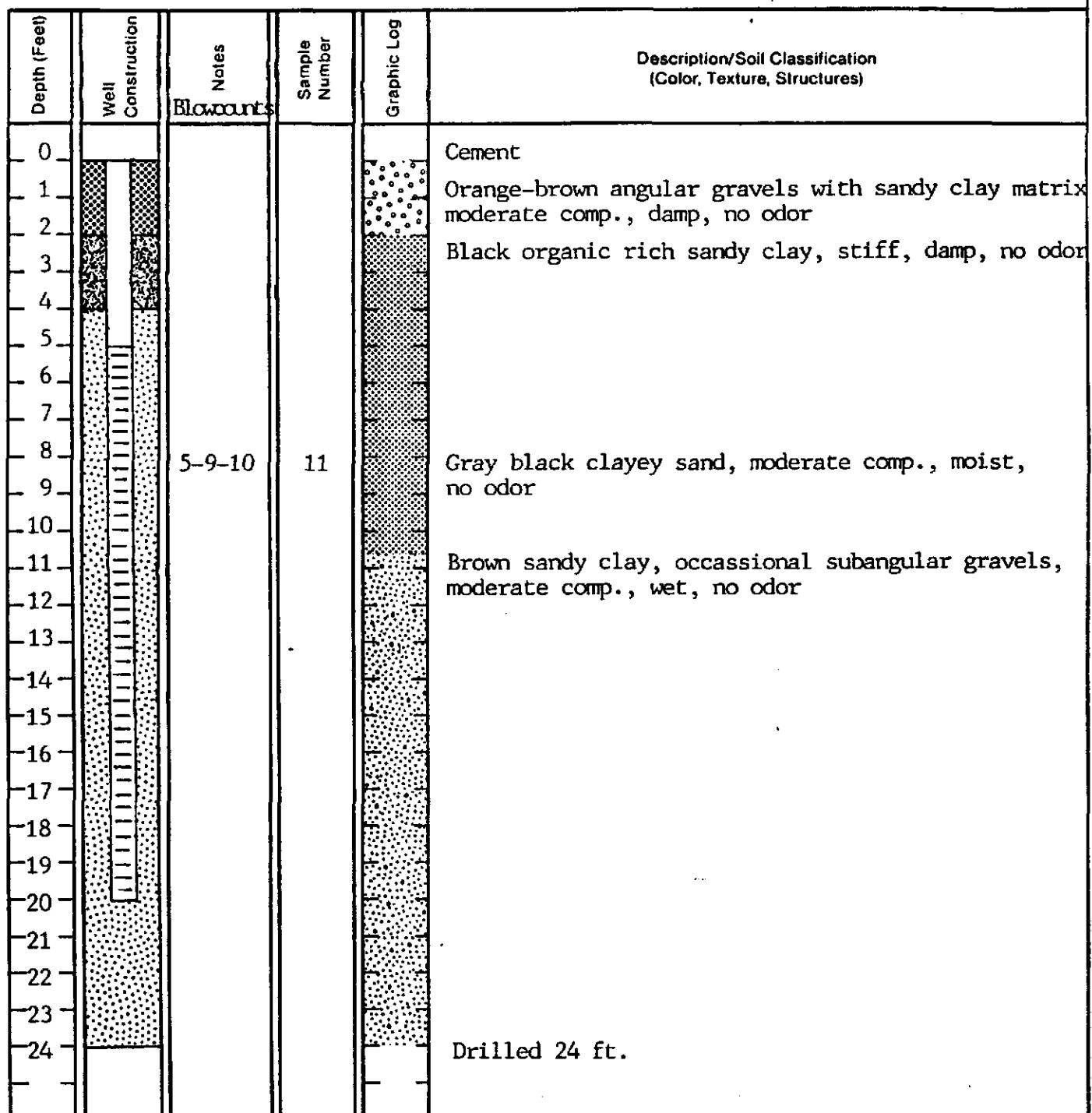
Well Number 5

## Drilling Log

Project Rhodes-Jamieson Owner Chevron  
Location 333 23rd Ave. Oakland Project Number 20-3235  
Date Drilled 9/5/85 Total Depth of Hole 24 ft. Diameter 7.5 in.  
Surface Elevation 19.14 ft Water Level, Initial 11 ft. 24-hrs. 8.02 ft.  
Screen: Dia. 4 in. Length 15 ft. Slot Size .020 in.  
Casing: Dia. 4 in. Length 5 ft. Type PVC  
Drilling Company All Terrain Drilling Method H.S. Auger  
Driller Wes Rigsby Log by Cori Condon

### Sketch Map

Notes Drilled 24 ft. sand pack to 4 ft. bentonite to 2 ft. cement and steel marhole at surface





# GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

## Drilling Log

Well Number 6

Project Chevron/Rhodes-Jamieson Owner Chevron U.S.A., Inc.

Location 333 23rd Ave. Oakland Project Number 20-3235

Date Drilled 9/19/85 Total Depth of Hole 24 ft. Diameter 7.5 in.

Surface Elevation 19.04 ft Water Level, Initial 8.5ft 24-hrs. 8.88 ft.

Screen Dia. 3 in. Length 15 ft. Slot Size .020 in.

Casing Dia. 3 in. Length 5 ft. Type PVC

Drilling Company Sierra Pacific Drilling Method H.S. Auger

Driller Lynn Pera Log by Cori Condon

Sketch Map

Notes Drilled 24ft., sand pack to 3.5 ft bentonite and cement to surface, finish with locking cap placed inside chest box

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0					Cement
1					Dark sand and gravel, well comp., wet, no odor
2					
3					
4					Black organic rich clay, mod. comp., moist, sulfur odor
5					Blue gray sandy clay, occassional angular gravel, well comp., moist, no odor
6					
7					
8					Brown sand and gravel, clay matrix, moderately comp. wet, no odor
9					
10					Light brown sandy clay, stiff, wet, no odor
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					Brown cse to med. sand, loose, wet, no odor
21					
22					
23					
24					Gray med.-cse sand, mod. comp., wet, no odor.



# GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

## Drilling Log

Well Number 7

Project Rhodes Jamieson Owner Chevron U.S.A., Inc.

Location 333 23rd Ave. Oakland Project Number 20-3264

Date Drilled 10/26/85 Total Depth of Hole 24 ft. Diameter 7.5 in.

Surface Elevation 18.15 ft Water Level, initial 11.5 ft. 24 hrs. 8.26 ft.

Screen: Dia. 4 in. Length 15 ft. Slot Size .020 in.

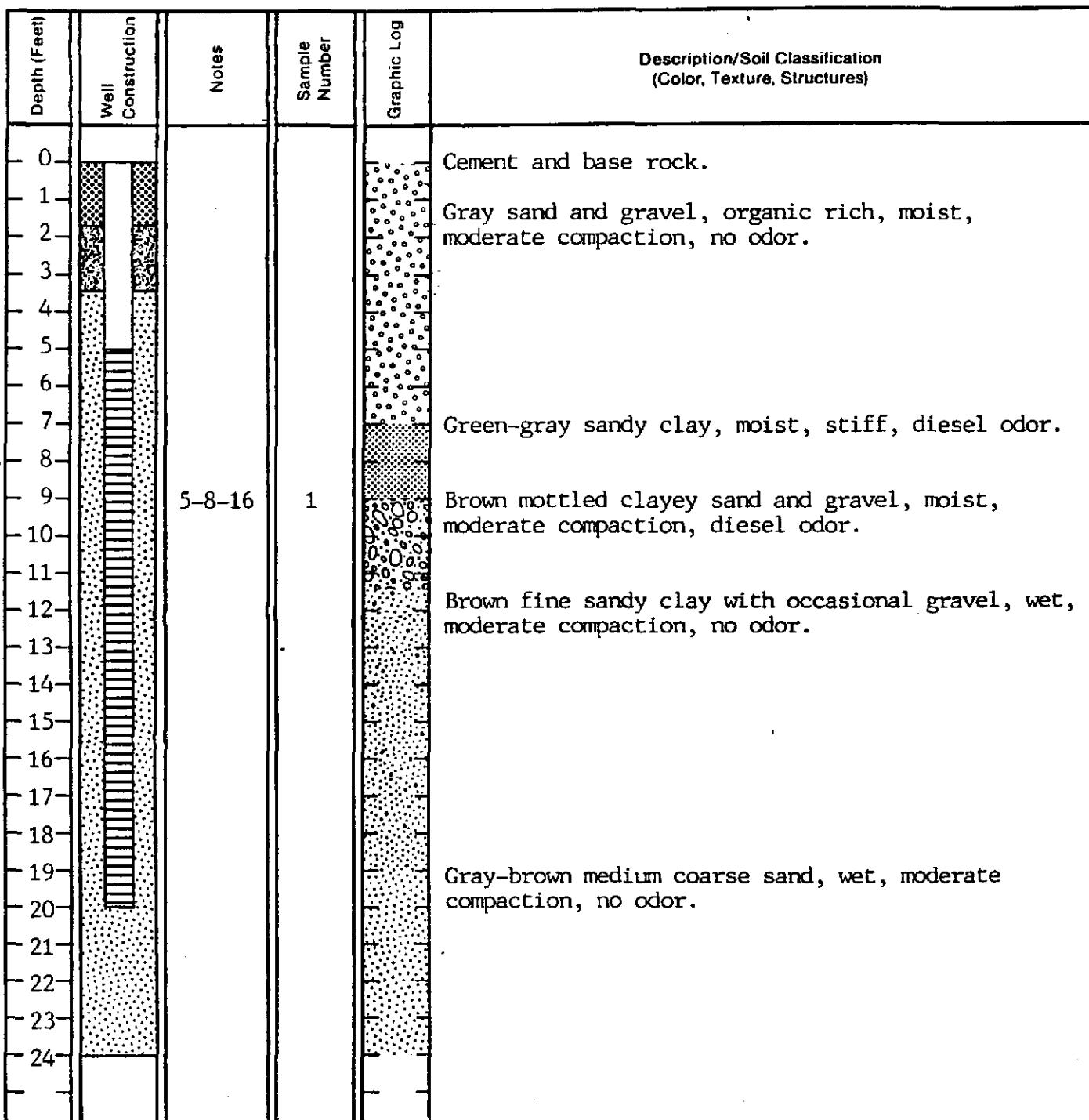
Casing: Dia. 4 in. Length 5 ft. Type PVC

Drilling Company Sierra Pacific Drilling Method h.s. auger

Driller Lynn Pera Log by Cori Condon

### Sketch Map

Notes Sand Pack to 3.5 ft.,  
Bentonite & Cement to Surface.





# GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

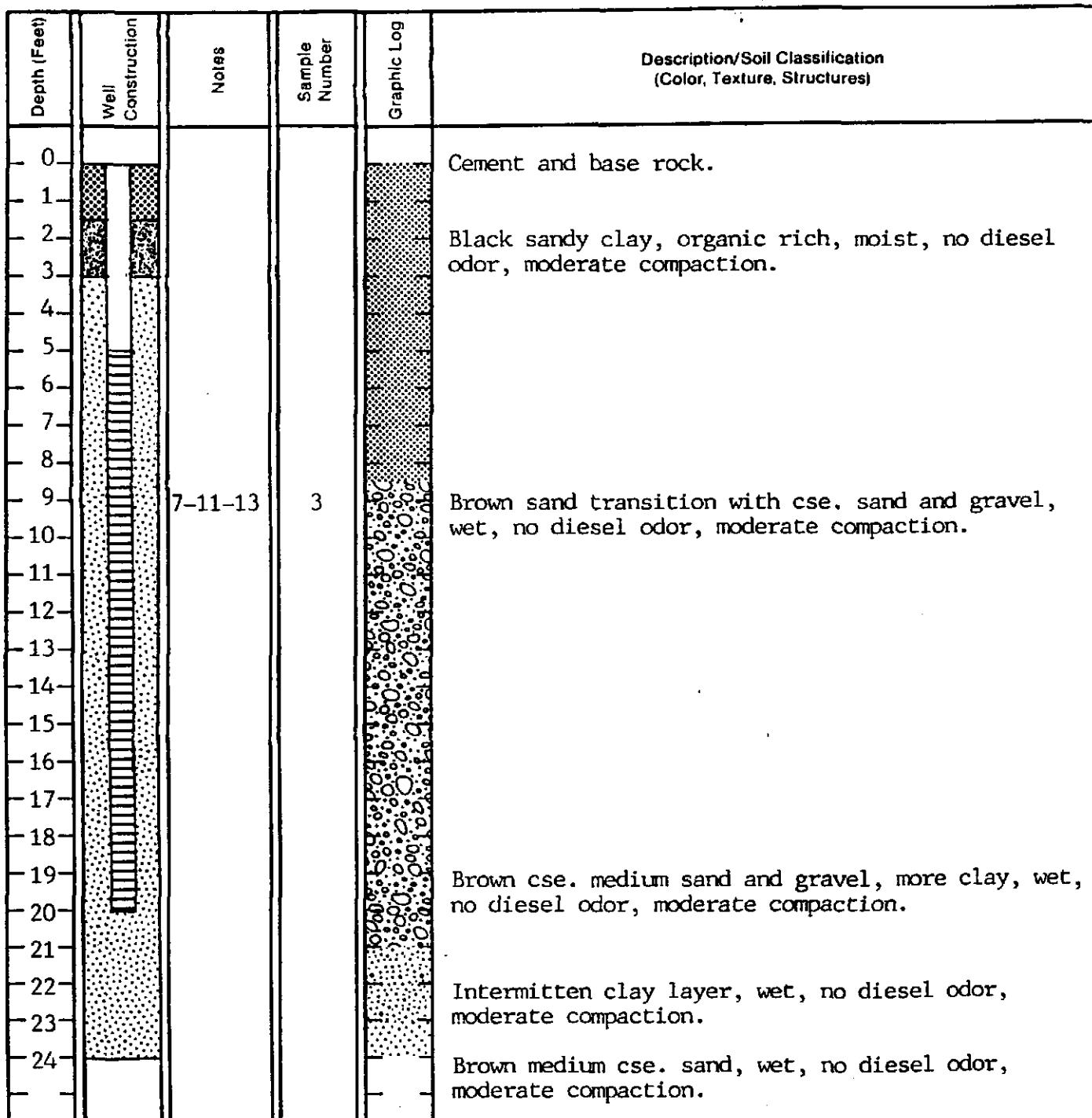
## Drilling Log

Well Number 9

Project Rhodes Jamieson Owner Chevron U.S.A., Inc.  
Location 333-23rd Ave., Oakland Project Number 20-3264  
Date Drilled 10/26/85 Total Depth of Hole 24 ft. Diameter 7.5 in.  
Surface Elevation 18.14 ft Water Level, Initial 9 ft. 24-hrs. 7.92 ft.  
Screen: Dia. 4 in. Length 15 ft. Slot Size .020 in.  
Casing: Dia. 4 in. Length 5 ft. Type PVC  
Drilling Company Sierra Pacific Drilling Method h.s. auger  
Driller Lynn Pera Log by Cori Condon

### Sketch Map

Notes Sand pack to 3 ft.  
Bentonite & Cement to Surface.





# GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

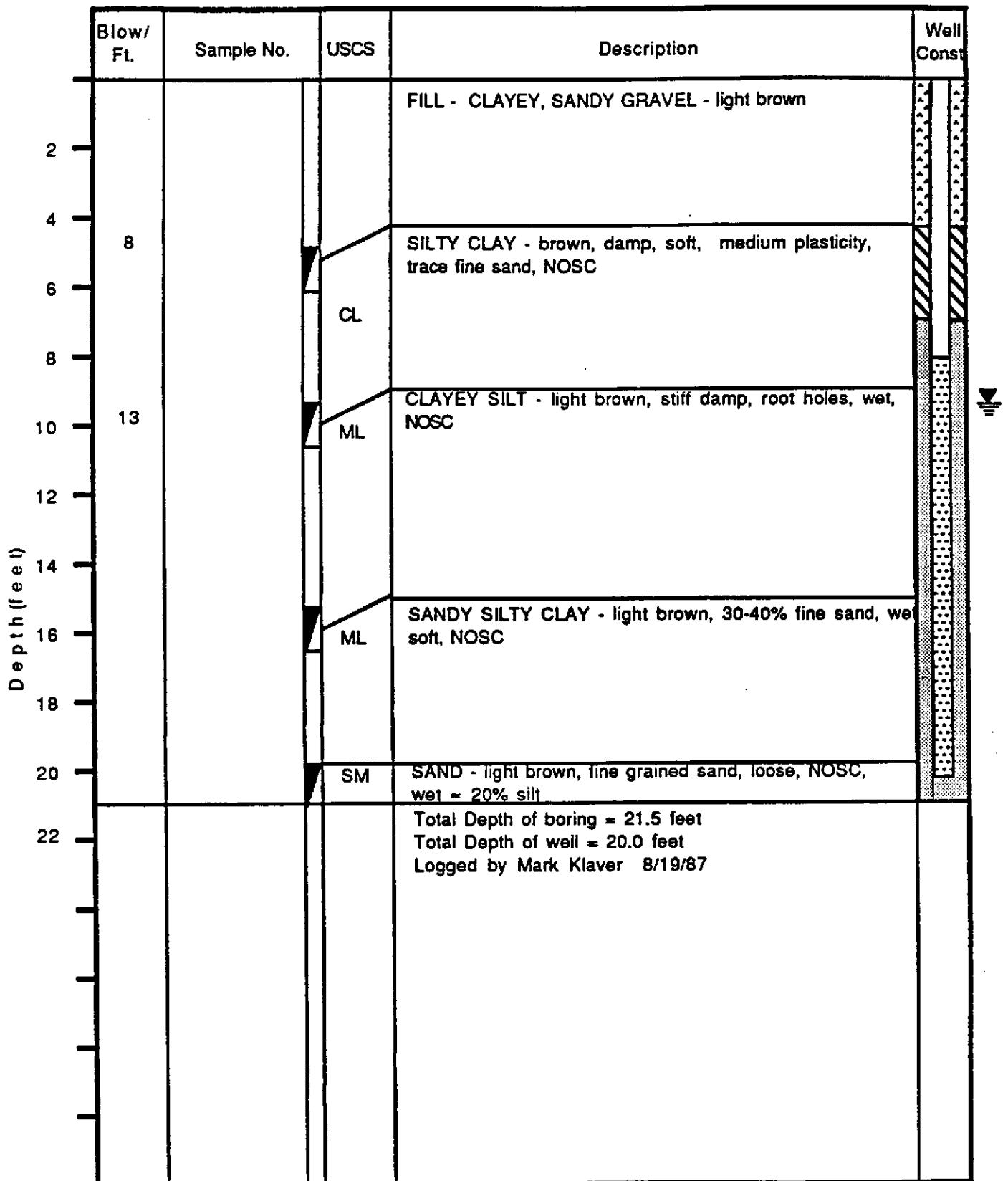
Well Number 10  
 Project RHODES/JAMIESON Owner CHEVRON  
 Location 333-23rd. Ave. Oakland Project Number 20-3264  
 Date Drilled 11/14/85 Total Depth of Hole 24 ft Diameter 7.5 in.  
 Surface Elevation 18.93 ft Water Level, Initial 10 ft 24-hrs 8.30 ft.  
 Screen Dia. 4 in. Length 15 ft. Slot Size .020 in.  
 Casing Dia. 4 in. Length 3.5 ft. Type PVC  
 Drilling Company Sierra Pacific Drilling Method h.s. Auger  
 Driller D. Earley Log by Cori Condon

## Drilling Log

Sketch Map

Notes Sand pack to 2.5ft.  
Bentonite & cement to surface.

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0					Cement
1					Black/green sandy clay, organic rich, moist, no odor.
2					
3					
4					
5					
6					
7					
8					
9					
10					Brown sandy clay occassional gravel, moist, no odor.
11					Brown sandy clay, more gravels, moist, no odor.
12					
13					
14					
15					Orange/brown sand and gravel, wet.
16					
17					
18					
19					
20					Gray clayey sand, wet, no odor.
21					
22					
23					
24					Gray clean sand, wet, no odor.



KLEINFELDER

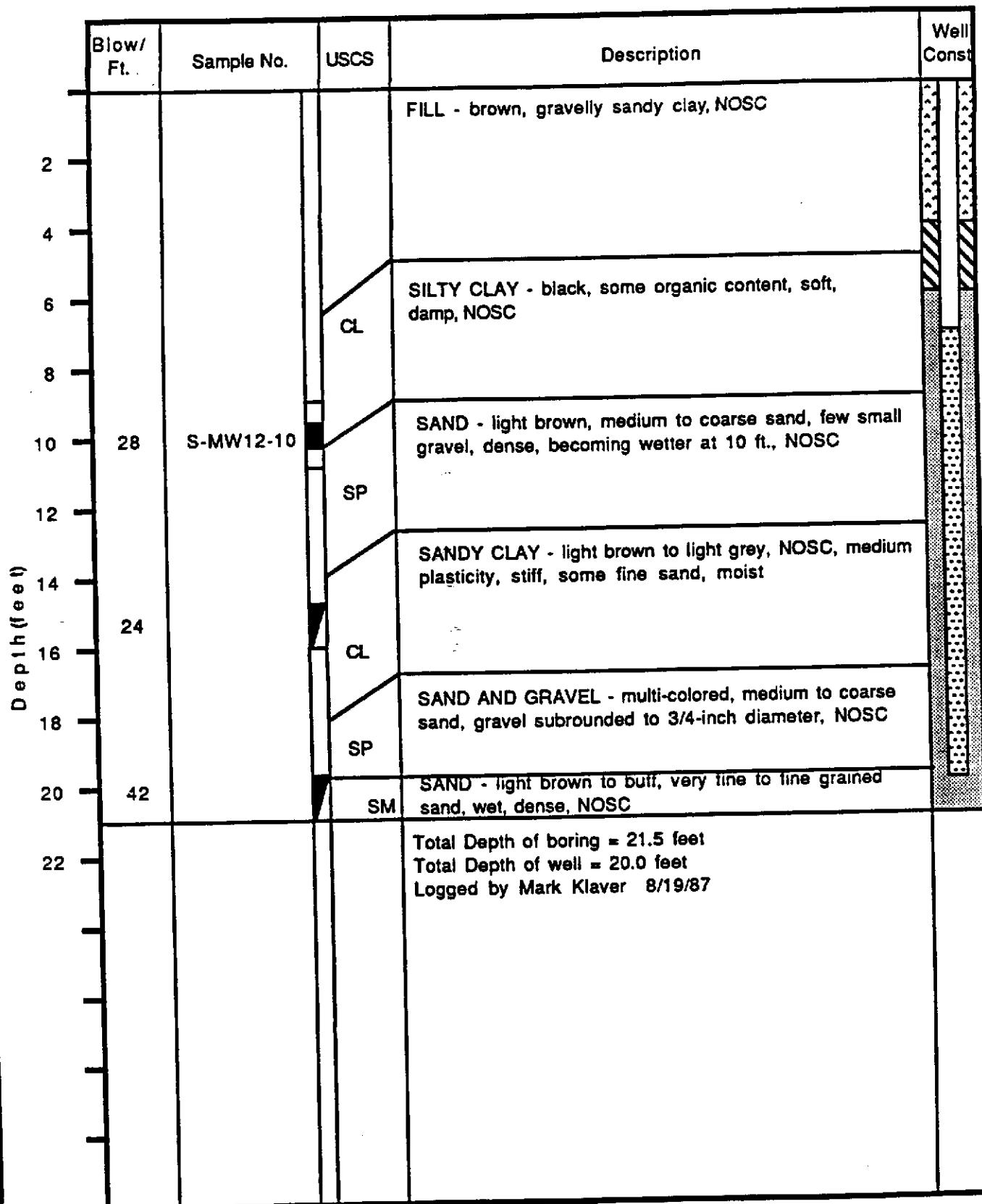
PROJECT NO. 10-1709-02

CHEVRON/LONESTAR  
333 23rd AVENUE OAKLAND, CALIFORNIA

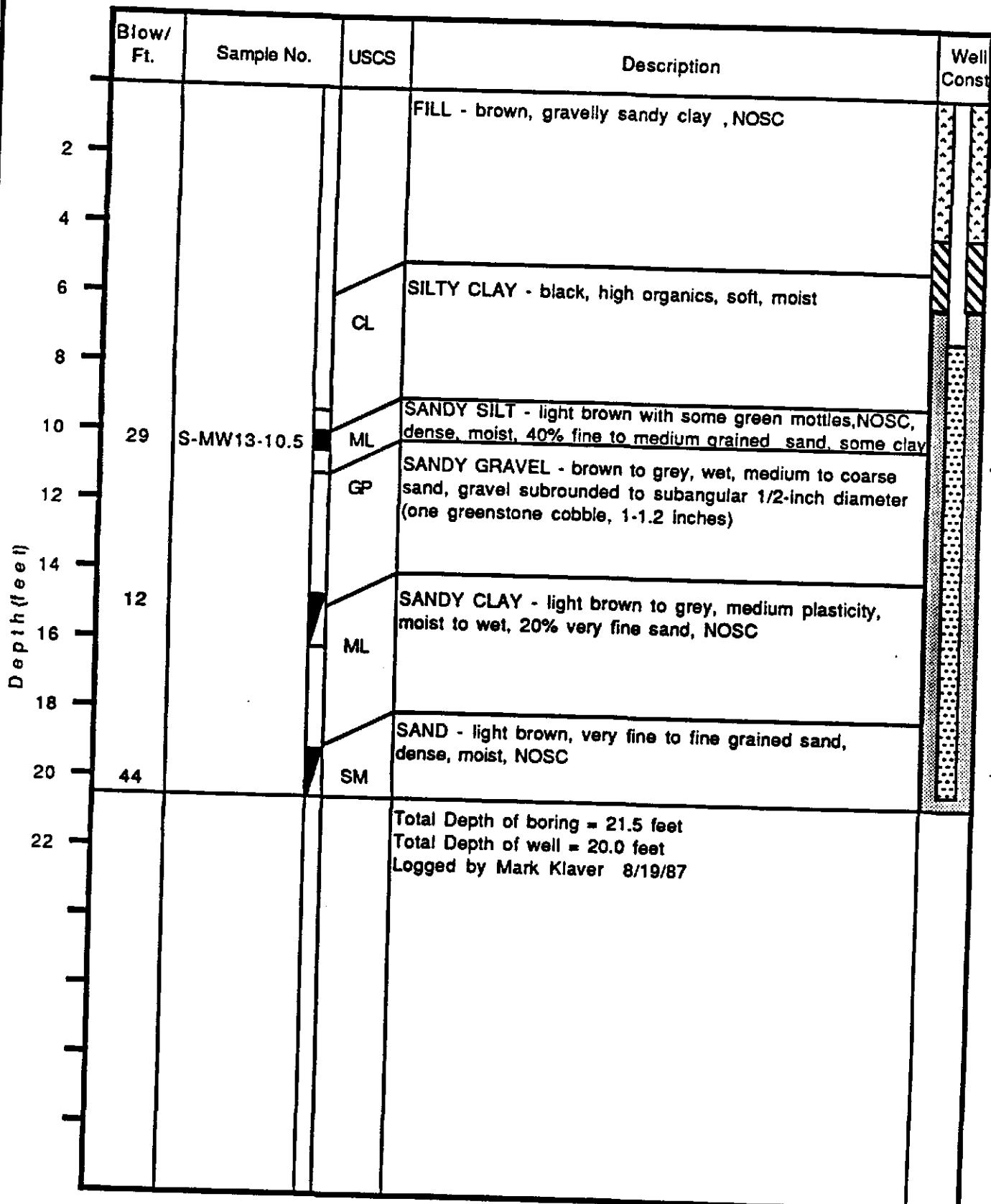
**BORING LOG NO. MW-11**

PLATE

4



 <b>KLEINFELDER</b> PROJECT NO. 10-1709-02	CHEVRON/LONESTAR 333 23rd AVENUE OAKLAND, CALIFORNIA <b>BORING LOG NO. MW-12</b>	PLATE
		<b>6</b>



KLEINFELDER

PROJECT NO. 10-1709-02

CHEVRON/LONESTAR  
333 23rd AVENUE OAKLAND, CALIFORNIA

**BORING LOG NO. MW-13**

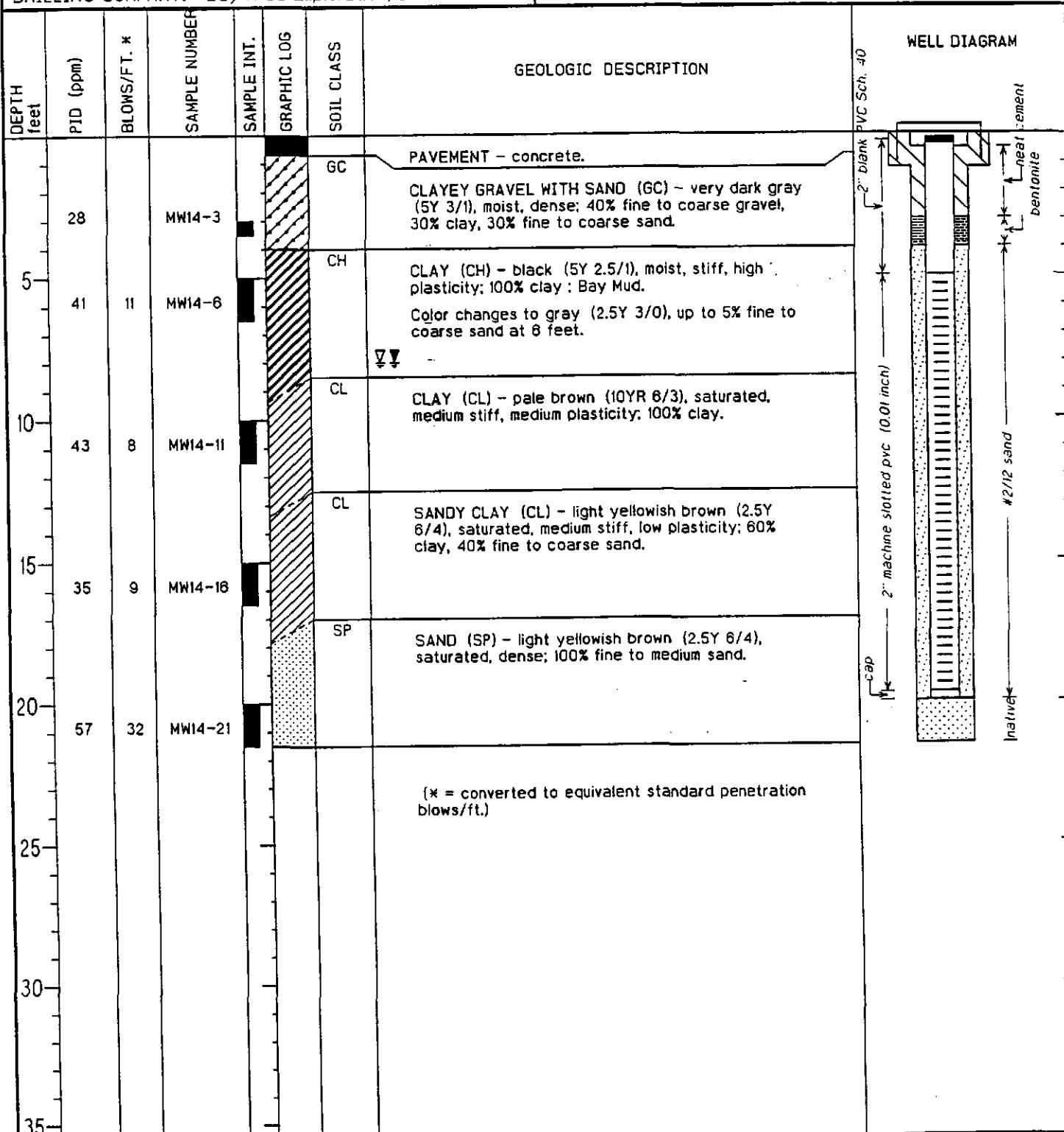
**PLATE**

5

## Gettler-Ryan, Inc.

## Log of Boring MW-14

PROJECT: Chevron/RMC Lonestar Facility CPS #206142	LOCATION: 333 23rd Avenue, Oakland, CA
G-R PROJECT NO.: 6338.01	SURFACE ELEVATION: 5.56 feet MSL
DATE STARTED: 06/20/97	WL (ft. bgs): 8.0 DATE: 06/20/97 TIME: 15:00
DATE FINISHED: 06/20/97	WL (ft. bgs): 8.0 DATE: 06/20/97 TIME: 16:20
DRILLING METHOD: 8 in. Hollow Stem Auger	TOTAL DEPTH: 21.5 Feet
DRILLING COMPANY: Bay Area Exploration, Inc.	GEOLOGIST: Barbara Sieminski



Blow/ Ft.	Sample No.	USCS	Description	Well Const
0		GM	SILTY GRAVEL - yellowish brown	
2		ML	CLAYEY SILT - bluish gray, moist, low plasticity, some fine sand	
4		CL	SILTY CLAY - grayish black, dry, medium to high plasticity, stiff	
6	14			
8				
10	14	GM	SILTY GRAVEL - varicolored, wet, medium dense, firm, subangular gravel to 1/2-inch, some fine to coarse grained angular sand	
12		ML	CLAYEY SILT - light yellowish brown, dry, nonplastic, soft	
14				
16	5			
18				
20		SP	SAND - yellowish brown, wet, dense, fine grained	
22			some clay at approximately 23 feet	
24		CL	SILTY CLAY - pale brown, dry, low plasticity, hard, trace fine sand	
26	32			
28			Total Depth = 28.5 feet Logged By: K.R. Reynolds Drilling Date(s): 4-4-88	
30				



KLEINFELDER

PROJECT NO. 10-1800-014

BORING LOG - RECOVERY WELL R2

CHEVRON/LONESTAR

PLATE

3