



June 5, 1995

Chevron U.S.A. Products Company
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 5004
San Ramon, CA 94583-0804

Ms. Juliet Shin
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Site Assessment & Remediation Group
Phone (510) 842-9500

**Re: Former Chevron Service Station #9-1153
3126 Fernside Boulevard, Alameda, CA**

Dear Ms. Shin:

Enclosed is the Second Quarter 1995 Groundwater Monitoring report dated May 22, 1995, prepared by our consultant Blaine Tech Services, Inc. for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. Benzene was detected in monitor wells MW-5, MW-6, and MW-7 at concentrations of 52, 5.5, and 3700 ppb, respectively.

Separate phase hydrocarbons were detected in well C-1 at a measured thickness of 2.2 feet and removed by hand bailing. Depth to ground water was measured at approximately 0.5 feet to 4.4 feet below grade and the direction of flow is to the north.

As requested in your letter of March 2, 1995, we will forward a work plan for delineation of the dissolved hydrocarbon plume down gradient of MW-7 to your office by July 6, 1995. As concentrations in MW-5 and MW-6 are currently decreasing, we believe adequate definition already exists in these directions. The work plan will also address concerns regarding plume containment and whether reactivation of the extraction system or installation of passive skimmers would be appropriate.

I have also enclosed copies of reports containing analytical results for the first four quarters of sampling for monitor wells C-1 through C-3 and the tank removal, per your request. The tank removal report documents sampling performed on soil removed from the former tank area where the current on site residence is located. Typically, 100 to 250 cubic yards of soil is generated during such a tank removal. It is standard practice to collect a four point composite sample per 100 cubic yards of soil for analysis prior to disposal at an off site landfill. The fact that two four point composite samples were collected leads us to believe that at least 100 cubic yards of soil were removed from this area.

*But the
showing was
not built
from top of
former
tanks.*

SD? →

We will continue to monitor and sample all wells at this site on a quarterly basis. If you have any questions or comments, please feel free to contact me at (510) 842-8134.

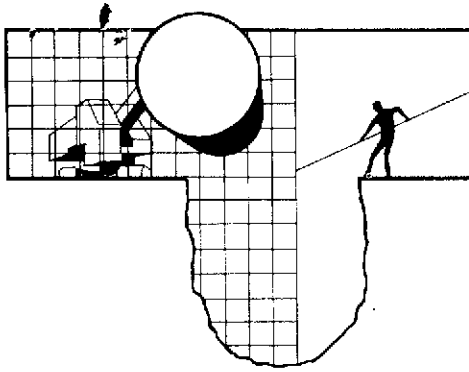
Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

95 JUN -6 AM 11:10

ENVIRONMENTAL
STANDARD



BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

May 22, 1995

Mark Miller
Chevron U.S.A. Products Company
P.O. Box 5004
San Ramon, CA 94583-0804

2nd Quarter 1995 Monitoring at 9-1153

Second Quarter 1995 Groundwater Monitoring at
Chevron Service Station Number 9-1153
3126 Fernside Blvd.
Alameda, CA

Monitoring Performed on April 26, 1995

Groundwater Sampling Report 950426-C-2

This report covers the routine quarterly monitoring of groundwater wells at this Chevron facility. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling in accordance with standard procedures that conform to Regional Water Quality Control Board requirements.

Routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated volume of a three-case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to Chevron's Richmond Refinery for disposal.

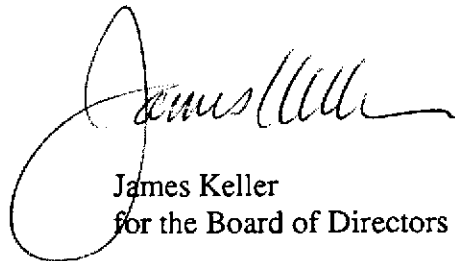
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater elevation calculations taken from the computer plotted gradient map which is located in the **Professional Engineering Appendix**.

At a minimum, Blaine Tech Services, Inc. field personnel are certified upon completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

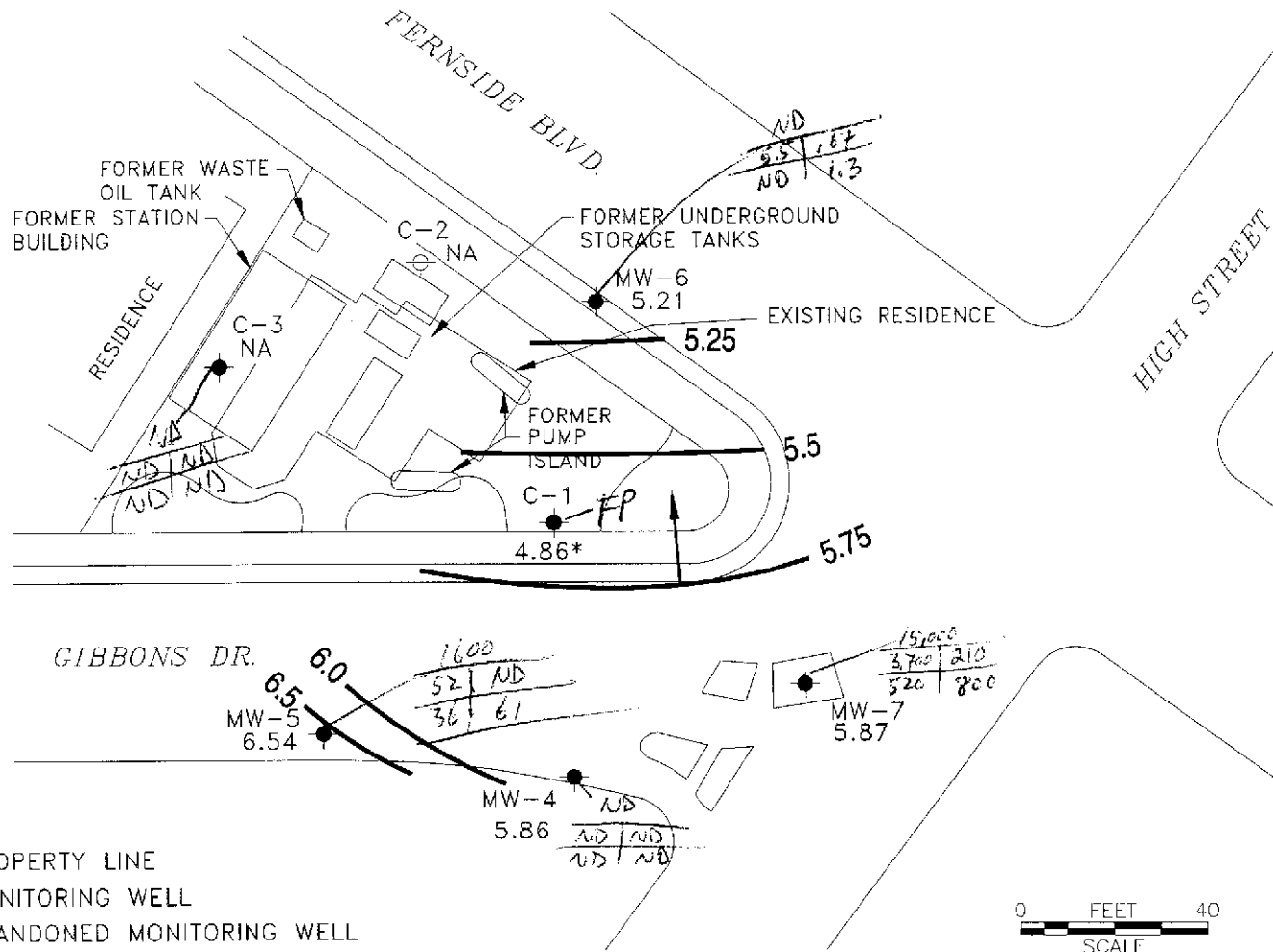
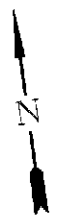


James Keller
for the Board of Directors

JPK/dk

attachments: Professional Engineering Appendix
Cumulative Table of Well Data and Analytical Results
Analytical Appendix
Field Data Sheets

Professional Engineering Appendix



LEGEND

- PROPERTY LINE
- MONITORING WELL
- ABANDONED MONITORING WELL
- NA NOT AVAILABLE
- X.XX POTENTIOMETRIC SURFACE ELEVATION (FT)
- * NOT CONTOURED
- POTENTIOMETRIC SURFACE CONTOUR
- GROUND WATER FLOW DIRECTION

NOTE:
 1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.



Base map from Groundwater Technology, Inc.

CAMBRIA
 Environmental Technology, Inc.

Former Chevron Station 9-1153
 3126 Fernside Boulevard
 Alameda, California

VCHEVRON9-1153\1153-QM.DWG

Ground Water Elevation
 April 26, 1995

FIGURE
1

Table of Well Data and Analytical Results

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	Other
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed							
C-1													
08/18/86	--	--	4.10	--	--	--	--	--	--	--	--	--	--
✓09/04/86	--	--	--	--	--	--	--	15,000	760	820	1500	--	--
✓07/22/87	--	--	--	--	--	--	--	1100	250	7.0	40	--	--
✓05/03/89	--	--	4.46	--	--	--	--	6900	3800	190	229	--	--
✓12/04/89	--	--	4.16	--	--	--	--	17,000	8000	490	470	--	--
02/14/90	--	--	3.64	--	--	--	--	19,000	12,000	990	1050	--	--
03/07/90	--	--	3.36	--	--	--	--	--	4260	261	430	--	--
09/06/91	--	--	4.43	--	--	--	--	21,000	10,000	100	240	560	--
12/15/91	--	--	4.78	--	--	--	--	20,000	4900	43	110	330	--
03/03/92	--	--	2.39	--	--	--	--	13,000	5800	730	340	1200	--
06/04/92	4.08	0.00	4.08	--	--	--	--	34,000	9400	350	290	1200	--
10/13/92	4.08	-0.67	4.75	--	--	--	--	24,000	11,000	98	280	530	--
01/11/93	4.08	1.82	2.26	Sheen	--	--	--	7100	1500	130	150	700	--
04/14/93	4.08	1.18	2.90	Sheen	--	--	--	29,000	7300	4000	640	2300	--
07/13/93	4.08	0.11	3.97	Sheen	--	--	--	650,000	27,000	18,000	6300	29,000	--
10/19/93	4.08	-0.42	4.50	--	--	--	--	40,000	12,000	730	1100	3600	--
11/30/93	7.50	3.23	4.27	--	--	--	--	--	--	--	--	--	--
01/27/94	7.50	4.15	3.35	--	--	--	--	36,000	8600	220	670	1900	--
04/07/94	7.50	4.08	3.42	--	--	--	--	53,000	12,000	3500	480	3300	--
07/01/94	7.50	3.54	3.96	--	--	--	--	65,000	19,000	5900	1000	9000	--
10/05/94	7.50	3.11	4.39	--	--	--	--	160,000	23,000	12,000	2200	11,000	--
01/12/95	7.50	6.38	1.52	0.50	0.26	0.26	--	--	--	--	--	--	--
04/26/95	7.50	4.86	4.40	2.20	1.32	1.58	--	--	--	--	--	--	--
C-2													
08/18/86	--	--	--	--	--	--	--	--	--	--	--	--	--
09/04/86	--	--	--	--	--	--	--	1100	49	18	84	--	--
07/22/87	--	--	--	--	--	--	--	<50	1.8	<1.0	<4.0	--	--
05/03/89	--	--	--	--	--	--	Abandoned	--	--	--	--	--	--

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	Other
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed							
C-3													
08/18/86	--	--	4.00	--	--	--	--	--	--	--	--	--	--
09/04/86	--	--	--	--	--	--	--	50	3.2	5.4	5.8	--	--
07/22/87	--	--	--	--	--	--	--	<50	<0.5	<1.0	<4.0	--	--
05/03/89	--	--	4.15	--	--	--	--	<50	<0.5	<1.0	<2.0	--	--
12/04/89	--	--	4.24	--	--	--	--	<250	<0.5	<0.5	<0.5	--	--
02/14/90	--	--	3.57	--	--	--	--	<50	<0.5	<0.5	<0.5	--	--
03/07/90	--	--	3.31	--	--	--	--	--	<5.0	<5.0	<5.0	--	--
09/06/91	--	--	4.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/15/91	--	--	4.84	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/03/92	--	--	2.17	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/04/92	4.41	0.40	4.01	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/13/92	4.41	-0.38	4.79	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/11/93	4.41	2.40	2.01	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/14/93	4.41	1.65	2.76	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/13/93	4.41	0.45	3.96	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
10/19/93	4.41	-0.12	4.53	--	--	--	--	66	12	1.4	1.0	8.4	--
11/30/93	7.83	3.79	4.04	--	--	--	--	--	--	--	--	--	--
01/27/94	7.83	4.66	3.17	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/07/94	7.83	4.63	3.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/01/94	7.83	3.84	3.99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/05/94	7.83	3.29	4.54	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/12/95	7.83	7.03	0.80	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
05/02/95	7.83	5.68	2.15	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	SPH Thickness	SPH Removed	Total SPH Removed	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Other
MW-4													
06/04/92	3.58	-0.05	3.63	--	--	--	--	<50	0.8	<0.5	<0.5	<0.5	--
10/13/92	3.58	--	--	--	--	--	--	--	--	--	--	--	--
01/11/93	3.58	1.69	1.89	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/14/93	3.58	1.38	2.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
07/13/93	3.58	0.07	3.51	--	--	--	--	54	2.6	1.6	<0.5	<1.5	--
10/19/93	3.58	-0.64	4.22	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
11/30/93	7.01	3.00	4.01	--	--	--	--	--	--	--	--	--	--
01/27/94	7.01	4.12	2.89	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/07/94	7.01	3.95	3.06	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/01/94	7.01	3.42	3.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/05/94	7.01	2.68	4.33	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/12/95	7.01	5.81	1.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/26/95	7.01	5.86	1.15	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.			Volumetric Measurements are in gallons.				Analytical results are in parts per billion (ppb)						
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	SPH Thickness	SPH Removed	Total SPH Removed	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Other
MW-5													
06/04/92	3.61	0.36	3.25	--	--	--	--	560	110	0.5	37	2.2	--
10/13/92	3.61	-0.59	4.20	--	--	--	--	1200	150	<2.5	84	8.6	--
01/11/93	3.61	2.31	1.30	--	--	--	--	1300	48	1.0	83	33	--
04/14/93	3.61	2.41	1.20	--	--	--	--	2600	240	6.1	250	170	--
07/13/93	3.61	0.46	3.15	--	--	--	--	1700	260	7.8	160	100	--
10/19/93	3.61	-0.21	3.82	--	--	--	--	1900	190	3.3	200	93	--
11/30/93	7.04	3.48	3.56	--	--	--	--	--	--	--	--	--	--
01/27/94	7.04	4.62	2.42	--	--	--	--	4000	100	12	210	110	--
04/07/94	7.04	4.71	2.33	--	--	--	--	2600	170	10	150	88	--
07/01/94	7.04	3.86	3.18	--	--	--	--	2300	350	9.1	110	76	--
10/05/94	7.04	3.06	3.98	--	--	--	--	11,000	840	150	130	340	--
01/12/95	7.04	6.64	0.40	--	--	--	--	2300	82	<2.5	54	20	--
04/26/95	7.04	6.54	0.50	--	--	--	--	1600	52	<5.0	36	61	--
MW-6													
06/04/92	3.85	-0.04	3.89	--	--	--	--	210	54	<0.5	1.9	2.4	--
10/13/92	3.85	-0.71	4.56	--	--	--	--	10,000	5300	<10	70	<10	--
01/11/93	3.85	1.49	2.36	--	--	--	--	100	50	<0.5	<0.5	<0.5	--
04/14/93	3.85	0.70	3.15	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/13/93	3.85	-0.09	3.94	--	--	--	--	<50	1.8	<0.5	<0.5	<1.5	--
10/19/93	3.85	-0.55	4.40	--	--	--	--	320	150	<0.5	0.8	<0.5	--
11/30/93	7.27	3.11	4.16	--	--	--	--	--	--	--	--	--	--
01/27/94	7.27	3.94	3.33	--	--	--	--	120	45	<0.5	<0.5	<0.5	--
04/07/94	7.27	3.84	3.43	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/01/94	7.27	3.33	3.94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/05/94	7.27	2.89	4.38	--	--	--	--	8300	2400	160	42	190	--
01/12/95	7.27	4.84	2.43	--	--	--	--	<50	12	<0.5	<0.5	<0.5	ND *
04/26/95	7.27	5.21	2.06	--	--	--	--	<50	5.5	0.67	<0.5	1.3	--

* EPA 8010

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Volumetric Measurements			Notes	Analytical results					
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	Total SPH Removed		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Other
MW-7													
11/30/93	8.22	2.89	5.33	--	--	--	--	480	110	41	4.4	38	--
01/27/94	8.22	3.72	4.50	--	--	--	--	120	21	1.1	2.2	4.8	--
04/07/94	8.22	3.60	4.62	--	--	--	--	2600	630	39	56	94	--
07/01/94	8.22	3.09	5.13	--	--	--	--	2200	770	42	<10	92	--
10/05/94	8.22	2.61	5.61	--	--	--	--	15,000	3300	90	130	320	--
01/12/95	8.22	5.39	2.83	--	--	--	--	340	57	<1.3	18	6.4	--
04/26/95	8.22	5.87	2.35	--	--	--	--	15,000	3700	210	520	800	--
TMW-1													
11/11/93	--	--	--	--	--	--	--	<1.0	<0.5	<0.5	<0.5	<0.5	--

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	Analytical results are in parts per billion (ppb)					
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Other
TRIP BLANK													
02/14/90	--	--	--	--	--	--	--	<50	<0.5	1.1	<0.5	<0.5	--
09/06/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/15/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/03/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/04/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/13/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/11/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/14/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/13/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/19/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
01/27/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/07/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/01/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/05/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/12/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/26/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on November 1, 1994.
 Earlier field data and analytical results are drawn from the September 27, 1994 Groundwater Technology, Inc. report.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons
 SPH = Seperate-Phase Hydrocarbons

Analytical Appendix



Blaine Technical Services	Client Proj. ID: Chevron 9-1153, 950426-C2	Sampled: 04/26/95
985 Timothy Drive	Sample Descript: MW-4	Received: 04/27/95
San Jose, CA 95133	Matrix: LIQUID	
Attention: Jim Keller	Analysis Method: 8015Mod/8020	Analyzed: 05/02/95
	Lab Number: 9504168-01	Reported: 05/05/95

QC Batch Number: GC050195BTEX20A
Instrument ID: GCHP20

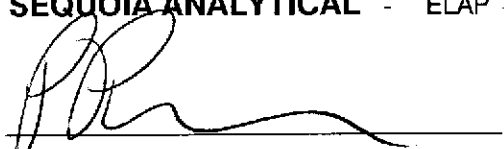
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133 Attention: Jim Keller	Client Proj. ID: Chevron 9-1153, 950426-C2 Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9504168-02	Sampled: 04/26/95 Received: 04/27/95 Analyzed: 05/02/95 Reported: 05/05/95
---	--	---

QC Batch Number: GC050295BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	1600
Benzene	5.0	52
Toluene	5.0	N.D.
Ethyl Benzene	5.0	36
Xylenes (Total)	5.0	61
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	110

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron 9-1153, 950426-C2 Sample Descript: MW-6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9504168-03	Sampled: 04/26/95 Received: 04/27/95 Analyzed: 05/02/95 Reported: 05/05/95
--	--	---

QC Batch Number: GC050295BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	5.5
Toluene	0.50	0.67
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	1.3

Chromatogram Pattern:

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	109

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager





Blaine Technical Services	Client Proj. ID: Chevron 9-1153, 950426-C2	Sampled: 04/26/95
985 Timothy Drive	Sample Descript: MW-7	Received: 04/27/95
San Jose, CA 95133	Matrix: LIQUID	
Attention: Jim Keller	Analysis Method: 8015Mod/8020	Analyzed: 05/02/95
	Lab Number: 9504168-04	Reported: 05/05/95

QC Batch Number: GC050295BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	2500	15000
Benzene	25	3700
Toluene	25	210
Ethyl Benzene	25	520
Xylenes (Total)	25	800
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133 Attention: Jim Keller	Client Proj. ID: Chevron 9-1153, 950426-C2 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9504168-05	Sampled: 04/26/95 Received: 04/27/95 Analyzed: 05/02/95 Reported: 05/05/95
---	--	---

QC Batch Number: GC050195BTEX20A
Instrument ID: GCHP20

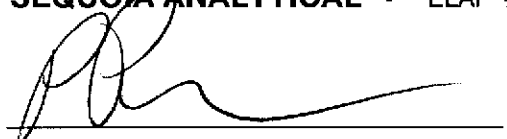
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	84

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Peggy Penner
Project Manager





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Proj. ID: Chevron 9-1153, 950426-C2

Lab Proj. ID: 9504I68

Received: 04/27/95

Reported: 05/05/95

LABORATORY NARRATIVE

TPPH Note: Sample 9504I68-02 was diluted 10-fold.
Sample 9504I68-04 was diluted 100-fold.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager





Blaine Tech Services, Inc.
 985 Timothy Drive
 San Jose, CA 95133
 Attention: Jim Keller

Client Project ID: Chevron 9-1153, 950426-C2
 Matrix: Liquid

Work Order #: 9504168 -01, 05

Reported: May 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050195BTEX20A	GC050195BTEX20A	GC050195BTEX20A	GC050195BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504F5004	9504F5004	9504F5004	9504F5004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/1/95	5/1/95	5/1/95	5/1/95
Analyzed Date:	5/1/95	5/1/95	5/1/95	5/1/95
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.2	9.3	9.3	27
MS % Recovery:	92	93	93	90
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	8.3	7.3	7.3	11
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120
Control Limits				

Please Note:
 The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Peggy Penner
 Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9504168.BLA <1>





Blaine Tech Services, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: **Chevron 9-1153, 950426-C2**
Matrix: **Liquid**

Work Order #: **9504168-03-04**

Reported: **May 9, 1995**

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050295BTEX21A	GC050295BTEX21A	GC050295BTEX21A	GC050295BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950416112	950416112	950416112	950416112
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/2/95	5/2/95	5/2/95	5/2/95
Analyzed Date:	5/2/95	5/2/95	5/2/95	5/2/95
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.5	9.2	9.3	27
MS % Recovery:	85	92	93	90
Dup. Result:	8.9	9.5	9.5	29
MSD % Recov.:	89	95	95	97
RPD:	4.6	3.2	2.1	7.1
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Peggy Penner
Peggy Penner
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9504168.BLA <2>





Blaine Tech Services, Inc. Client Project ID: Chevron 9-1153, 950426-C2
 985 Timothy Drive Matrix: Liquid
 San Jose, CA 95133
 Attention: Jim Keller Work Order #: 9504168-02 Reported: May 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050295BTEX17A	GC050295BTEX17A	GC050295BTEX17A	GC050295BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950416110	950416110	950416110	950416110
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/2/95	5/2/95	5/2/95	5/2/95
Analyzed Date:	5/2/95	5/2/95	5/2/95	5/2/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.3	9.9	9.5	28
MS % Recovery:	93	99	95	93
Dup. Result:	9.8	9.9	9.7	30
MSD % Recov.:	98	99	97	100
RPD:	5.2	0.0	2.1	6.9
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Please Note:
 The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Peggy Penner
 Peggy Penner
 Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9504168.BLA <3>





Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Client Proj. ID: Chevron 9-1153/950502C1
Sample Descript: C3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505246-01

Sampled: 05/02/95
Received: 05/03/95
Analyzed: 05/06/95
Reported: 05/09/95

QC Batch Number: GC050595BTEX02A
Instrument ID: GCHP02

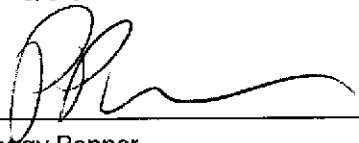
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	81

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





Blaine Tech Services, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: **Chevron 9-1153/950502C1**
Matrix: **Liquid**

Work Order #: **9505246 -01**

Reported: **May 11, 1995**

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050595BTEX02A	GC050595BTEX02A	GC050595BTEX02A	GC050595BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504J3003	9504J3003	9504J3003	9504J3003
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/5/95	5/5/95	5/5/95	5/5/95
Analyzed Date:	5/5/95	5/5/95	5/5/95	5/5/95
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	9.8	9.7	30
MS % Recovery:	100	98	97	100
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	0.0	2.0	3.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

MS/MSD				
LCS	71-133	72-128	72-130	71-120
Control Limits				

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Peggy Penner
Peggy Penner
Project Manager

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9505246.BLA <1>



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

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-1153</u>	Chevron Contact (Name) <u>Mark Miller</u>
	Facility Address <u>3126 Fernside Blvd., Alameda, CA</u>	(Phone) <u>(510) 842-8134</u>
	Consultant Project Number <u>950426 C2</u>	Laboratory Name <u>Sequoia</u>
	Consultant Name <u>Blaine Tech Services, Inc.</u> Address <u>985 Timothy Dr., San Jose, CA 95133</u>	Laboratory Release Number <u>2172740</u>
Project Contact (Name) <u>Jim Keller</u>	Samples Collected by (Name) <u>SCOTT BRODERICK</u>	Collection Date <u>4-26-95</u>
(Phone) <u>108-995-5535</u> (Fax Number) <u>408-293-8773</u>	Signature <u>[Signature]</u>	

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type G = Grab C = Composite D = Diurnal	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											DO NOT BILL FOR TB-LB	Remarks			
								BTX + TPH GAS (E20 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8250)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)								
MW4	01	3	W	D	1415	HCL	Y	✓															
MW5	02	3			1544			✓															
MW6	03	3			1440			✓															
MW7	04	3			1544			✓															
TS	05	2	↓	↓				✓															

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>BTS</u>	Date/Time <u>4/27/95</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Sequoia</u>	Date/Time <u>4/27/95</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>4/27</u>	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>4/27/95</u>	

Field Data Sheets

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>950426C2</u>		Station #: <u>9-1153</u>	
Sampler: <u>SCOTT BRODERICK</u>		Start Date: <u>4-26-95</u>	
Well I.D.: <u>C1</u>		Well Diameter: (circle one) 2 <u>3</u> 4 6	
Total Well Depth: Before _____ After _____		Depth to Water: Before <u>4.40</u> After _____	
Depth to Free Product: <u>2.20</u>		Thickness of Free Product (feet): <u>2.20</u>	
Measurements referenced to: <u>PVC</u> Grade Other: _____			

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

_____ X _____	Specified Volumes	=	_____ gallons
1 Case Volume			

Purging: Bailer DISPOS.
 Disposable Bailer
 Middleburg
 Electric Submersible
 Extraction Pump
 Other _____

Sampling: Bailer DISPOS.
 Disposable Bailer
 Extraction Port
 Other _____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
<u>1640</u>	<u>BAILED</u>	<u>FREE</u>	<u>PRODUCT</u>		<u>5L / FREE PRODUCT</u>	
					<u>1 GAL</u>	<u>H₂O</u>

Did Well Dewater? NO If yes, gals. _____ Gallons Actually Evacuated: 1

Sampling Time: 1640 Sampling Date: 4-26-95

Sample I.D.: C1 Laboratory: CHEVRON TERMINAL

Analyzed for: TPH-G BTEX TPH-D OTHER:
 (Circle)

Duplicate I.D.: _____ Cleaning Blank I.D.: _____

Analyzed for: TPH-G BTEX TPH-D OTHER:
 (Circle)

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>950426 C2</u>		Station # <u>9-1153</u>	
Sampler: <u>SCOTT BRODERIEK</u>		Date Sampled:	
Well I.D.: <u>C3</u>		Well Diameter: (circle one) 2 3 4 6 <u> </u>	
Total Well Depth:		Depth to Water:	
Before	After	Before	After
Depth to Free Product:		Thickness of Free Product (feet):	
Measurements referenced to: <u>PVC</u> Grade Other --			

_____ X _____	=	_____ gallons
1 Case Volume	Specified Volumes	

Purging: Bailer
 Middleburg
 Electric Submersible
 Suction Pump
 Type of Installed Pump _____

Sampling: Bailer
 Middleburg
 Electric Submersible
 Suction Pump
 Installed Pump _____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
						<u>INACCESSABLE - WELL IN BACK YARD - GATES LOCKED / NOBODY HOME</u>

Did Well Dewater? If yes, gals. Gallons Actually Evacuated:

Sampling Time:

Sample I.D.: C3 Laboratory: SEQ

Analyzed for: TPHG, BTEX

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>950426C2</u>	Station #: <u>9-1153</u>
Sampler: <u>SCOTT BRODERICK</u>	Date Sampled: <u>4-26-95</u>
Well I.D.: <u>MW4</u>	Well Diameter: (circle one) <u>(2)</u> 3 4 6
Total Well Depth: Before <u>13.40</u> After	Depth to Water: Before <u>1.15</u> After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>(PVC)</u> Grade Other --	

<u>2</u>	<u>x</u>	<u>3</u>	<u>=</u>	<u>6</u>
1 Case Volume		Specified Volumes		gallons

Purging: Sailer DISPOS
 Middleburg
 Electric Submersible
 Suction Pump
 Type of Installed Pump _____

Sampling: Sailer DISPOS
 Middleburg
 Electric Submersible
 Suction Pump
 Installed Pump _____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
<u>1404</u>	<u>61.8</u>	<u>7.3</u>	<u>920</u>	<u>—</u>	<u>2</u>	
<u>1408</u>	<u>61.6</u>	<u>7.1</u>	<u>900</u>	<u>—</u>	<u>4</u>	
<u>1411</u>	<u>61.2</u>	<u>7.0</u>	<u>900</u>	<u>—</u>	<u>6</u>	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 6

Sampling Time: 1415

Sample I.D.: MW4

Laboratory: SEQ.

Analyzed for: TPHG, BTEX

Duplicate I.D.:

Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

CHEVRON WELL MONITORING DATA SHEET

Project #: 950426-C2	Station #: 9-1153
Sampler: SCOTT	Date Sampled: 4-26-95
Well I.D.: MW5	Well Diameter: (circle one) <u>(2)</u> 3 4 6
Total Well Depth: Before 13.25 After	Depth to Water: Before .50 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to:	<u>(PVC)</u> Grade Other --

2	x	3	=	6	
1 Case Volume		Specified Volumes		gallons	

Purging: ~~Bailer~~ DRSPOS.
 Middleburg
 Electric Submersible
 Suction Pump
 Type of Installed Pump _____

Sampling: ~~Bailer~~ DRSPOS.
 Middleburg
 Electric Submersible
 Suction Pump
 Installed Pump _____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1532	65.6	7.2	900	—	2	
1535	65.2	7.1	880	—	4	
1539	65.0	7.0	860	—	6	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 6

Sampling Time: 1544

Sample I.D.: MW5

Laboratory: SEQ

Analyzed for: TPHG, BTEX

Duplicate I.D.:

Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>95042602</u>	Station # <u>9-1153</u>
Sampler: <u>SCOTT</u>	Date Sampled: <u>4-26-95</u>
Well I.D.: <u>MW6</u>	Well Diameter: (circle one) <u>2</u> 3 4 6
Total Well Depth: Before <u>14.22</u> After	Depth to Water: Before <u>2.06</u> After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>PVC</u> Grade Other --	

<u>1.9</u>	x	<u>3</u>	=	<u>5.7</u>
1 Case Volume		Specified Volumes		gallons

Purging: Bailer DPBALS
 Middleburg
 Electric Submersible
 Suction Pump
 Type of Installed Pump _____

Sampling: Bailer DPBALS
 Middleburg
 Electric Submersible
 Suction Pump
 Installed Pump

TIME	TEMP. (F)	PH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
<u>1430</u>	<u>65.2</u>	<u>7.0</u>	<u>540</u>	<u>—</u>	<u>2</u>	
<u>1433</u>	<u>65.0</u>	<u>7.0</u>	<u>560</u>	<u>—</u>	<u>4</u>	
<u>1436</u>	<u>65.2</u>	<u>7.0</u>	<u>560</u>	<u>—</u>	<u>6</u>	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 6

Sampling Time: 1440

Sample I.D.: MW6 Laboratory: SEQ.

Analyzed for: TPH, BTEX

Duplicate I.D.: _____ Cleaning Blank I.D.: _____

Analyzed for: _____

Shipping Notations: _____

Additional Notations: _____