



Cal/EPA

San Francisco Bay
Regional Water
Quality Control
Board

2101 Webster Street
Suite 500
Oakland, CA 94612
(510) 286-1255
FAX (510) 286-1380



Pete Wilson
Governor

ENVIRONMENTAL
PROTECTION

July 14, 1997

File No. 2198.11 (KLG)

01-2040

7/28/97

To Arvin:
This site needs
special attention
re: integrity
of the UST
system.
Susan

Mr. Gordon Coleman
Alameda County Environmental Health Department
1131 Harbor Bay Parkway
Second Floor
Alameda, CA 94502-6577

Subject: Audit of Underground Storage Tank System Integrity, Chevron Service Station,
340 Highland Avenue, Piedmont, CA

Dear Mr. Coleman:

It has come to our attention that significant levels of Methyl Tertiary Butyl Ether (MTBE) are present at increasing levels in the groundwater beneath the subject site. Because MTBE is a recent addition to gasoline, this may indicate that releases of petroleum are occurring either from the tank system, appurtenant structures, or through poor management practices.

A copy of the latest quarterly monitoring report is attached. As the site map indicates, well C-2 is down gradient of the tanks and pump islands. Concentrations in this well have increased to 160,000 parts per billion (ppb) in the latest sampling event. The current regulatory level for MTBE in water is 35 ppb.

The San Francisco Bay Regional Water Quality Control Board has the authority to regulate the quality of water in the San Francisco Bay area as expressed in the Porter-Cologne Water Quality Control Act. This authority includes requiring the cleanup or abatement of pollution discharged to waters of the state, which includes groundwater.

Your agency issues permits for the operation of USTs in this jurisdiction and is responsible for enforcement of the UST regulations contained in Title 23, Division 3, Chapter 16 of the California Code of Regulations. We request that you audit this particular tank system and require of the owner/operator whatever is appropriate to determine and, if necessary, restore the integrity of the tank system and abate the source of the MTBE and petroleum at the site.



Recycled Paper

Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.



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97 JUL 22 PM 4: 10 July 14, 1997

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Alameda County Environmental Health Department
1131 Harbor Bay Parkway
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Alameda, CA 94502-6577

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Recycled Paper

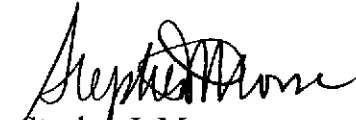
Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

Page 2 of 2
Gordon Coleman
July 14, 1997

If you have any questions regarding this matter please contact Kevin Graves of Board staff at (510) 286-0435.

Sincerely,

Loretta K. Barsamian
Executive Officer


Stephen I. Morse
Chief, Toxics Division

cc:

Mr. Frank Hoffman
Hoffman Investment Company
1760 Willow Road
Hillsborough, CA 94010
(w/ attachment)

Mr. Philip R. Briggs
Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583-0904
(w/o attachment)

locletr.doc



Recycled Paper

Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.



Chevron

June 2, 1997

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

Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Marketing - Sales West
Phone 510 842-9500

**Re: Chevron Service Station #9-0329
340 Highland Avenue
Piedmont, California**

Dear Ms. Hugo:

Enclosed is the Second Quarter Groundwater Monitoring report for 1997, prepared by our consultant Blaine Tech Services Inc. for the above noted facility. Ground water samples were analyzed for TPH-g, BTEX, and MtBE.

The results from sampling monitoring wells C-3, C-5 and C-6 were below method detection levels for all constituents, while well C-4 was below method detection limits for the benzene and ethyl-benzene constituents. The results from well C-6 may be in question, as the wellbox was flooded with the cap off. Well C-2 continues to detect concentrations of all constituents, with MtBE concentration slightly increasing from the previous sampling event.

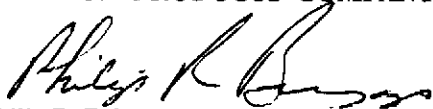
The depth to the groundwater varied with well C-6 being flooded to well C-4 at 4.25 feet below grade. The direction of flow is south southeast.

As stated previously, Chevron has no explanation for the high concentration of the MtBE constituent in monitoring well C-2, as Chevron has not owned or operated this station since 1990 and have had no control over its operation or maintenance. As stated in the last report cover letter, Chevron has sent a letter to the owner, Mr. Frank Hoffman and the operators Mir Ghafari and Fred Manoucheri, requesting that they provide a work plan to determine the integrity of the tank and piping systems. Chevron continues to believe that the responsibility to proceed with the submittal of the work plan and the testing of the tank and piping systems rests with the current owner and operators, since Chevron has not owned or operated the station since 1990.

Chevron will continue to monitor the site quarterly. If you have any questions or comments call me at (510) 842-9136.

June 2, 1997
Ms. Susan Hugo
Chevron Service Station # 9-0329
Page 2

Sincerely,
CHEVRON PRODUCTS COMPANY



Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Ms. Bette Owen, Chevron

Mr. Kevin Graves
RWQCB-San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Mr. Frank Hoffman
Hoffman Investment Company
1760 Willet Road
Hillsborough, CA 94010

Mir Ghafari
Service Station
340 Highland Avenue
Piedmont, CA 94611

WELL HEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client CHEVRON #9-0329 Inspection date: 4-8-97
 Site address 340 Highlands Ave. Inspected by: BB
Piedmont, CA BTS Event # 970408-2z

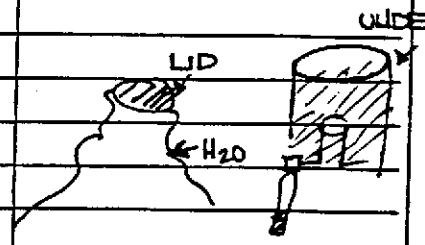
- | | | |
|---------------------------|--------------------------------------|-----------------------------|
| 1. Lid on the box? Yes No | 5. Water standing in the well box? | 7. Can cap be pulled loose? |
| 2. Lid whole? | 5a. Standing above well top? | 8. Can cap seal out water? |
| 3. Lid secure? | 5b. Standing below well top? | 9. Padlock present? |
| 4. Lid seal intact? | 5c. Water even with top of well cap? | 10. Padlock found locked? |
| | 6. Well cap/plug present? | 11. Padlock functional? |

Check box if *no deficiencies* were found. Note below deficiencies you were able to correct.

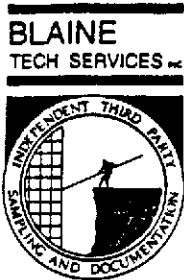
Well I.D.	Deficiency	Corrective Action Taken

Note below all deficiencies that could not be corrected and *still need to be corrected*.

Well I.D.	Persisting Deficiency	BTS Office assigns or defers Correction to:	Date assigned	Date corrected
C-6	CAP WAS OFF H ₂ O LEVEL TOP OF BOX	Artesian Well		
		H ₂ O		



Office review and assignments made by _____ date _____



1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
(408) 573-7771 FAX
(408) 573-0555 PHONE

May 20, 1997

Phil Briggs
Chevron U.S.A. Products Company
P.O. Box 6004
San Ramon, CA 94583-0904

2nd Quarter 1997 Monitoring at 9-0329

Second Quarter 1997 Groundwater Monitoring at
Chevron Service Station Number 9-0329
340 Highland Avenue
Piedmont, CA

Monitoring Performed on April 8, 1997

Groundwater Sampling Report 970408-Z-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 McKittrick Waste Treatment Site 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,

A handwritten signature in black ink, appearing to read "Francis Thie", written in a cursive style.

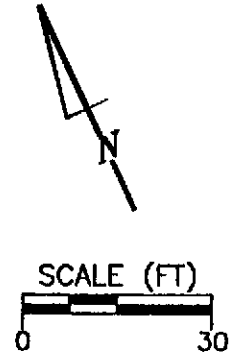
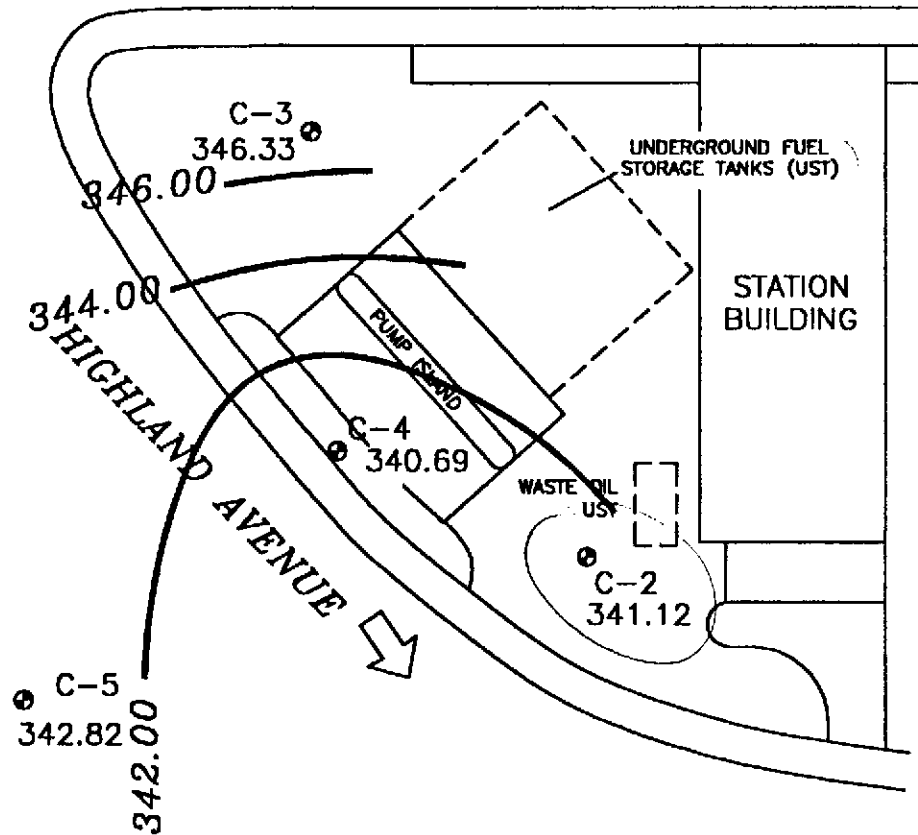
Francis Thie
Vice President

FPT/cg

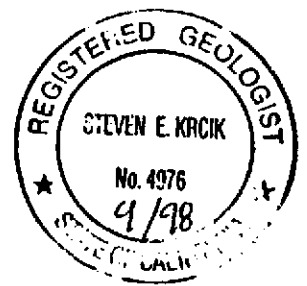
attachments: Professional Engineering Appendix
Cumulative Table of Well Data and Analytical Results
Analytical Appendix
Field Data Sheets

Professional Engineering Appendix

HIGHLAND WAY



- EXPLANATION**
- MONITORING WELL
 - 341.12 GROUNDWATER ELEVATION (FT, MSL)
 - GROUNDWATER ELEVATION CONTOUR (FT, MSL)
 - NA DATA NOT AVAILABLE
 - ↘ APPROXIMATE GROUNDWATER FLOW DIRECTION;
APPROXIMATE GRADIENT = 0.05



Basemap from Cambria Environmental Technology, Inc.

PREPARED BY

RRM
engineering contracting firm

Chevron Station 9-0329
340 Highland Avenue
Piedmont, California

**GROUNDWATER ELEVATION
CONTOUR MAP, APRIL 8, 1997**

**FIGURE:
1
PROJECT:
DAC04**

**Table of
Well Data and
Analytical Results**

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
C-2										
08/07/89	94.19	91.33	2.88	--	34,000	580	60	170	270	--
11/15/89	94.19	91.39	2.80	--	8100	500	36	420	180	--
02/01/91	94.19	90.41	3.75	--	6800	490	21	310	86	--
04/16/91	94.19	91.64	2.55	--	9600	810	43	550	270	--
10/16/91	94.19	90.67	3.52	--	7100	320	23	200	60	--
01/08/92	94.19	90.04	4.15	--	2400	190	9.0	83	22	--
04/10/92	94.19	91.23	2.96	--	6600	550	33	340	170	--
07/14/92	94.19	91.36	2.83	--	9000	680	330	580	690	--
10/05/92	94.19	89.81	4.38	--	5500	250	17	130	82	--
01/06/93	94.19	90.25	3.94	--	5500	190	32	41	54	--
03/29/93	94.19	92.10	2.09	--	19,000	670	40	180	370	--
07/02/93	94.19	92.10	2.09	--	8000	1100	41	420	500	--
10/11/93	94.19	91.43	2.76	--	42,000	940	34	140	87	--
01/10/94	94.19	89.37	4.82	--	12,000	770	20	220	74	--
04/06/94	94.19	91.70	2.49	--	40,000	820	33	190	110	--
07/06/94	94.19	91.72	2.47	--	8800	870	28	140	95	--
11/11/94	94.19	91.32	2.87	--	8600	460	81	180	120	--
01/06/95	94.19	91.64	2.55	--	15,000	880	48	270	140	--
04/13/95	94.19	92.13	2.06	--	56,000	2500	130	730	360	--
07/25/95	94.19	92.05	2.14	--	11,000	1000	34	540	160	--
10/05/95	94.19	91.68	2.51	--	13,000	1000	<20	160	170	--
01/02/96	94.19	91.97	2.22	--	9500	1300	<50	380	87	64,000
04/11/96	94.19	92.27	1.92	--	<10,000	1300	<100	<100	<100	74,000
07/08/96	94.19	92.14	2.05	--	<20,000	1200	<200	<200	<200	110,000
10/03/96	94.19	91.90	2.29	--	<25,000	1200	<250	<250	<250	140,000
01/23/97	343.39	341.49	1.90	--	20,000	1100	<200	460	<200	110,000
02/14/97	343.39	341.42	1.97	Confirmation run	--	--	--	--	--	150,000
04/08/97	343.39	341.12	2.27	--	<50,000	1100	<500	<500	<500	160,000

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
C-3										
08/07/89	97.65	93.36	4.29	--	<50	<0.5	<1.0	<1.0	<3.0	--
11/15/89	97.65	92.48	5.17	--	<500	<0.5	2.8	<0.5	1.1	--
02/01/91	97.65	91.27	6.38	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/16/91	97.65	93.93	3.72	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/16/91	97.65	89.45	8.20	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/08/92	97.65	90.97	6.68	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/10/92	97.65	93.15	4.50	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/14/92	97.65	91.44	6.21	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/05/92	97.65	88.34	9.31	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/06/93	97.65	94.24	3.41	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/29/93	97.65	97.15	0.50	--	<50	<0.5	<0.5	<0.5	0.8	--
07/02/93	97.65	95.06	2.59	--	<50	4.0	3.0	<0.5	3.0	--
10/11/93	97.65	92.75	4.90	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/10/94	97.65	93.26	4.39	--	<50	<0.5	1.0	<0.5	0.8	--
04/06/94	97.65	94.97	2.68	--	<50	<0.5	1.0	0.7	4.5	--
07/06/94	97.65	95.55	2.10	--	<50	2.2	4.1	<0.5	2.8	--
11/11/94	97.65	96.42	1.23	--	<50	<0.5	0.8	<0.5	<0.5	--
01/06/95	97.65	97.05	0.60	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/13/95	97.65	97.05	0.60	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/25/95	97.65	96.00	1.65	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/05/95	97.65	94.02	3.63	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/02/96	97.65	94.53	3.12	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/11/96	97.65	96.83	0.82	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
07/08/96	97.65	96.15	1.50	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/03/96	97.65	95.17	2.48	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/23/97	347.08	346.87	0.21	--	<50	<0.5	<0.5	<0.5	<0.5	3.2
04/08/97	347.08	346.33	0.75	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

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
C-4										
08/07/89	95.60	--	--	Dry	--	--	--	--	--	Dry
11/15/89	95.60	90.65	4.95	--	1300	2.9	310	0.5	2.9	--
02/01/91	95.60	90.82	4.78	--	72	<0.5	9.0	<0.5	<0.5	--
04/16/91	95.60	95.60	4.83	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/16/91	95.60	91.37	4.23	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/08/92	95.60	90.79	4.81	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/10/92	95.60	91.34	4.26	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/14/92	95.60	91.32	4.28	--	<50	<0.5	3.8	<0.5	<0.5	--
10/05/92	95.60	91.31	4.29	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/06/93	95.60	91.31	4.29	--	<50	0.7	<0.5	<0.5	<0.5	--
03/29/93	95.60	91.30	4.30	--	<50	0.5	1.0	<0.5	2.0	--
07/02/93	95.60	91.38	4.22	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/11/93	95.60	91.30	4.30	--	<50	0.6	<0.5	<0.5	<0.5	--
01/10/94	95.60	91.16	4.44	--	<50	0.7	3.0	<0.5	1.0	--
04/06/94	95.60	91.36	4.24	--	130	2.2	5.4	3.3	24	--
07/06/94	95.60	91.36	4.24	--	99	5.9	7.5	2.0	12	--
11/11/94	95.60	91.39	4.21	--	<50	<0.5	9.5	<0.5	<0.5	--
01/06/95	95.60	91.18	4.42	--	<50	0.7	1.0	<0.5	1.1	--
04/13/95	95.60	91.36	4.24	--	67	0.54	7.2	<0.5	1.1	--
07/25/95	95.60	91.36	4.24	--	390	<2.0	150	<2.0	<2.0	--
10/05/95	95.60	91.22	4.38	--	130	<0.5	66	<0.5	<0.5	--
01/02/96	95.60	91.34	4.26	--	<50	<0.5	<0.5	<0.5	<0.5	34
04/11/96	95.60	91.21	4.39	--	<50	<0.5	0.93	<0.5	<0.5	56
07/08/96	95.60	91.32	4.28	--	<50	<0.5	<0.5	<0.5	<0.5	21
10/03/96	95.60	91.38	4.22	--	80	<0.5	31	<0.5	<0.5	9.9
01/23/97	344.94	340.55	4.39	--	<50	<0.5	<0.5	<0.5	<0.5	23
04/08/97	344.94	340.69	4.25	--	87	<0.5	3.6	<0.5	1.7	7.0
C-5										
11/25/96	--	--	3.30	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/23/97	345.14	343.69	1.45	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/08/97	345.14	342.82	2.32	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

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
C-6										
11/25/96	--	--	2.13	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/23/97	338.61	--	0.00	Well flooded	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/08/97	338.61	--	0.00	Well flooded	<50	<0.5	<0.5	<0.5	<0.5	<2.5

Backfill Well: A

08/07/89	--	--	2.10	--	1000	50	6.0	5.0	22	--
11/15/89	--	--	2.04	--	3700	98	2.1	4.3	55	--
02/01/91	--	--	3.05	--	36,000	1100	750	130	6100	--
04/16/91	--	--	2.01	--	8000	370	6.0	86	750	--
10/16/91	--	--	4.15	--	--	--	--	--	--	--

Backfill Well: B

08/07/89	--	--	4.12	--	--	--	--	--	--	--
11/15/89	--	--	--	--	--	--	--	--	--	--
02/01/91	--	--	5.03	--	--	--	--	--	--	--
04/16/91	--	--	4.00	--	--	--	--	--	--	--
10/16/91	--	--	6.24	--	--	--	--	--	--	--

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
TRIP BLANK										
01/06/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/29/93	--	--	--	--	<50	<0.5	<0.5	<0.5	1.0	--
07/02/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/11/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/10/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/06/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/06/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
11/11/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/06/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/13/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/25/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/05/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/02/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/11/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
07/08/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/03/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/23/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/08/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on April 13, 1995.

Earlier field data and analytical results provided by Sierra Environmental.

Survey performed on March 20, 1997 by Ron Archer, Civil Engineer Inc.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl t-butyl ether

Analytical Appendix



Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-0329/970408-Z2 Sample Descript: C-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9704510-01	Sampled: 04/08/97 Received: 04/09/97 Analyzed: 04/16/97 Reported: 04/21/97
--	--	---

QC Batch Number: GC041697BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50000	N.D.
Methyl t-Butyl Ether	2500	160000
Benzene	500	1100
Toluene	500	N.D.
Ethyl Benzene	500	N.D.
Xylenes (Total)	500	N.D.
Chromatogram Pattern:		N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	92

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 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-0329/970408-Z2 Sample Descript: C-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9704510-02	Sampled: 04/08/97 Received: 04/09/97 Analyzed: 04/14/97 Reported: 04/21/97
Attention: Fran Thie		

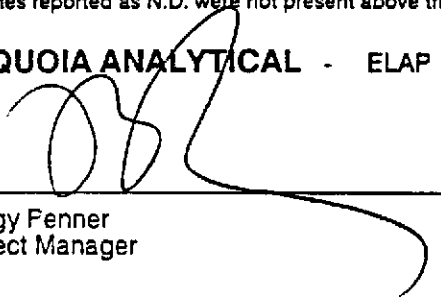
QC Batch Number: GC041497BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	82

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Fenner
Project Manager





Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Client Proj. ID: Chevron 9-0329/970408-Z2
Sample Descript: C-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9704510-03

Sampled: 04/08/97
Received: 04/09/97
Analyzed: 04/16/97
Reported: 04/21/97

QC Batch Number: GC041697BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	87
Methyl t-Butyl Ether	2.5	7.0
Benzene	0.50	N.D.
Toluene	0.50	3.6
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	1.7
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	70

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
1680 Rogers Avenue
San Jose, CA 95112

Client Proj. ID: Chevron 9-0329/970408-Z2
Sample Descript: C-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9704510-04

Sampled: 04/08/97
Received: 04/09/97
Analyzed: 04/14/97
Reported: 04/21/97

QC Batch Number: GC041497BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	85

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
1680 Rogers Avenue
San Jose, CA 95112

Client Proj. ID: Chevron 9-0329/970408-Z2
Sample Descript: C-6
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9704510-05

Sampled: 04/08/97
Received: 04/09/97
Analyzed: 04/14/97
Reported: 04/21/97

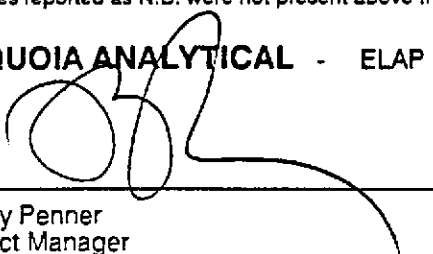
QC Batch Number: GC041497BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	82

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 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie	Client Proj. ID: Chevron 9-0329/970408-Z2 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9704510-06	Sampled: 04/08/97 Received: 04/09/97 Analyzed: 04/14/97 Reported: 04/21/97
--	---	---

QC Batch Number: GC041497BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	85

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	Client Proj. ID: Chevron 9-0329/970408-Z2	Received: 04/09/97
1680 Rogers Avenue		
San Jose, CA 95112	Lab Proj. ID: 9704510	Reported: 04/21/97
Attention: Fran Thie		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 9 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPPH Note: Sample 9704510-01 was diluted 1000-fold.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager





Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Chevron 9-0329/ 970408-Z2
Matrix: Liquid

Work Order #: 9704510 -01, 03

Reported: Apr 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC041697BTEX02A	GC041697BTEX02A	GC041697BTEX02A	GC041697BTEX02A	GC041697BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. MirafTAB	A. MirafTAB	A. MirafTAB	A. MirafTAB	A. MirafTAB
MS/MSD #:	970458307D	970458307D	970458307D	970458307D	970458307D
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Analyzed Date:	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.4	8.6	9.1	28	61
MS % Recovery:	84	86	91	93	102
Dup. Result:	8.3	8.4	8.7	27	63
MSD % Recov.:	83	84	87	90	105
RPD:	1.2	2.4	4.5	3.6	3.2
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK041697A	BLK041697A	BLK041697A	BLK041697A	BLK041697A
Prepared Date:	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Analyzed Date:	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	8.9	8.8	9.0	28	66
LCS % Recov.:	89	88	90	93	110

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

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

9704510.BLA <1>





Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Chevron 9-0329/ 970408-Z2
Matrix: Liquid

Work Order #: 9704510 -02, 04 -06

Reported: Apr 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC041497BTEX02A	GC041497BTEX02A	GC041497BTEX02A	GC041497BTEX02A	GC041497BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	A. MirafTAB	A. MirafTAB	A. MirafTAB	A. MirafTAB	A. MirafTAB
MS/MSD #:	970437204C	970437204C	970437204C	970437204C	970437204C
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97
Analyzed Date:	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.0	8.9	9.0	29	66
MS % Recovery:	90	89	90	97	110
Dup. Result:	9.3	9.3	9.3	30	68
MSD % Recov.:	93	93	93	100	113
RPD:	3.3	4.4	3.3	3.4	3.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK041497	BLK041497	BLK041497	BLK041497	BLK041497
Prepared Date:	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97
Analyzed Date:	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.1	9.0	9.2	29	66
LCS % Recov.:	91	90	92	97	110

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
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.

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

9704510.BLA <2>

SEQUOIA ANALYTICAL

Peggy Fenner
Project Manager



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

Chevron Facility Number 9-0329
Facility Address 340 Highland Ave., Piedmont, CA
Consultant Project Number 710408-21
Consultant Name Blaine Tech Services, Inc.
Address 1680 Rogers Ave., San Jose, CA 95112
Project Contact (Name) Fran Thie
(Phone) (408)573-0555 (Fax Number) (408)573-7771

Chevron Contact (Name) Phil Briggs
(Phone) (510)842-9136
Laboratory Name Sequoia
Laboratory Release Number 9034836
Samples Collected by (Name) BRETT BLEAL
Collection Date 4-8-97
Signature B. Bleal

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type C = Grab C = Composite D = Discrete	Time	Sample Preservation	Lead (Yes or No)	Analytes To Be Performed											Remarks	
								BTEX + TPH GAS + HTBE (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)					
C-2	1	3	S		1510		Y	X												
C-3	2	3	"		1440		"	X												
C-4	3	3	"		1355		"	X												
C-5	4	3	"		1355		"	X												
C-7	5	3	"		1420		"	X												
TB	6	2	"		-		"	X												

DO NOT BILL
FOR TB-LB.

APR 9 12 55

COC-1046/03 91/HCH

Relinquished By (Signature) <u>B. Bleal</u>	Organization <u>BTSS</u>	Date/Time <u>4/9/97</u>	Received By (Signature) <u>F. Thie</u>	Organization <u>Sequoia</u>	Date/Time <u>4/9/97</u>
Relinquished By (Signature) <u>F. Thie</u>	Organization	Date/Time <u>4/9/97</u>	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>M. San</u>	Organization	Date/Time <u>4-9-97 1755</u>

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
6 Days
10 Days
As Contracted

Field Data Sheets

CHEVRON WELL MONITORING DATA SHEET

Project #: 970408-22	Station #: 7-0327
Sampler: BB	Date: 4-8
Well I.D.: C-3	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth: 14.33	Depth to Water: 0.75
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other: _____
--	---

2.2	X	3	=	6.6	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1425	68.4	7.4	240	2.25	
1428	69.0	7.3	230	4.5	
1431	67.6	7.3	230	6.75	

Did well dewater? Yes No Gallons actually evacuated: 6.75

Sampling Time: 1440 Sampling Date: 4-8

Sample I.D.: C-3 Laboratory: (Sequetra) GTEL N. Creek Assoc. Labs

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: _____ mg/L Post-purge: _____ mg/L

O.R.P. (if req'd): Pre-purge: _____ mV Post-purge: _____ mV

CHEVRON WELL MONITORING DATA SHEET

Project #: 970408-2 _L	Station #: 7-0327
Sampler: BB	Date: 4-8
Well I.D.: C-4	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth: 13.10	Depth to Water: 4.25
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other: _____
--	---

.94	X	3	=	2.80	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1443	64.4	7.3	540	1	
1445	64.0	7.2	510	2	
1447	63.6	7.2	510	3	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: 2.0
Sampling Time: 1445 1455	Sampling Date: 4-8
Sample I.D.: C-4	Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
Duplicate I.D.:	Analyzed for: TPH-G BTEX MTBE TPH-D Other:
D.O. (if req'd):	Pre-purge: _____ mg/L Post-purge: _____ mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV Post-purge: _____ mV

CHEVRON WELL MONITORING DATA SHEET

Project #: 970408-2v	Station #: 0329
Sampler: BB	Date: 4-8
Well I.D.: C-5	Well Diameter: ② 3 4 6 8 _____
Total Well Depth: 17.58	Depth to Water: 2.32
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Sampling Method: Bailer
 Disposable Bailer x Disposable Bailer ^
 Middleburg Extraction Port
 Electric Submersible
 Extraction Pump Other: _____
 Other: _____

2.4	X	3	=	7.2	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1345	63.4	7.2	610	2.5	
1348	63.6	7.2	600	5.0	
1350	63.8	7.2	600	7.25	

Did well dewater? Yes No Gallons actually evacuated: 7.25

Sampling Time: 1355 Sampling Date: 4-8

Sample I.D.: m C-5 Laboratory: Sequoia GTEL N. Creek Assoc. Labs

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

CHEVRON WELL MONITORING DATA SHEET

Project #: 970403-21	Station #: 7-0321
Sampler: ea	Date: 4-8
Well I.D.: c-6	Well Diameter: (2) 3 4 6 8
Total Well Depth: 1748	Depth to Water: 0.00
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Disposable Bailer x Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer x Extraction Port Other: _____
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2.8	X	3	=	8.4	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1407	63.4	7.4	560	3	
1410	63.0	7.4	550	6	
1413	62.6	7.4	550	8.5	

Did well dewater? Yes No Gallons actually evacuated: 8.5

Sampling Time: 1426 Sampling Date: 4-8

Sample I.D.: c-6 Laboratory: (Sequon) GTEL N. Creek Assoc. Labs

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV