

ENVIRONMENTAL
PROTECTION



Chevron

96 SEP 25 PM 2:55

Chevron U.S.A. Products Company

6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

Marketing -- Northwest Region
Phone 510 842 9500

September 9, 1996

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

Re: Former Chevron SS#9-5630
997 Grant Avenue, San Lorenzo, CA

Dear Juliet:

As previously promised, enclosed is a Site Status Evaluation dated August 16, 1996 prepared by our consultant, RRM, for the above referenced site. The purpose of the site status review was to determine if a change in site status is appropriate in light of corrected analytical data. As previously reported, Chevron discovered that some groundwater data results were incorrectly reported in previously submitted reports.

You will find in the report that RRM does not recommend any change in site status.

If you would like to discuss further by phone you can reach me at (510) 842-9625.

Sincerely,

A handwritten signature in cursive script that reads "John Randall".

John Randall
Manager
Site Assessment & Remediation

cc: Phil Briggs, Chevron



August 29, 1996
Project AA02

Mr. John Randall
Chevron Products Company
P.O. Box 5004
San Ramon, California 94804

Re: *Site Status Evaluation*
Former Chevron Service Station 9-5630
997 Grant Avenue
San Lorenzo, California

Dear Mr. Randall:

This letter, prepared by RRM, Inc. (RRM) for Chevron Products Company (Chevron), presents the results of a site status evaluation that was performed at the site referenced above (Figure 1). In preparation for a risk assessment, Chevron performed a cursory review of groundwater monitoring data contained in various quarterly groundwater monitoring reports. It was noted, when comparing recent reports against earlier reports, that concentrations in one well (Well C-2) looked suspiciously high. Upon further investigation of original laboratory data from Sierra Environmental Services (SES), Chevron realized that the higher concentrations were correct and incorrect data was reported to the Alameda County Health Agency Division of Environmental Protection Department of Environmental Health (ACHAD). The purpose of this site evaluation is to determine if the current site status, considering the correct groundwater analytical data, is appropriate.

This letter includes a brief discussion on site background, incorrect groundwater analytical data, correct groundwater analytical data, and recommendations.

Site Background

The site was a former Chevron Service Station located at 997 Grant Avenue in San Lorenzo, California. The site is located approximately 1.25 miles to the east of the San Francisco Bay. The service station and associated product facilities were excavated and removed in 1990.

In 1990, approximately 5,200 cubic yards of soil were excavated during product facilities removal. The bulk of the excavated soil was aerated on-site and reused as backfill. The maximum total petroleum hydrocarbon calculated as gasoline (TPH-g) concentration in soils after over-excavation was 270 parts per million (ppm). The maximum benzene concentration in soils after soil over-excavation was 0.05 ppm.

From 1990 to 1994, seven groundwater monitoring wells (C-1 through C-7) have been installed at the site. Well C-4 was abandoned in 1991. Quarterly groundwater monitoring has been performed at the site from 1991 to 1993 and from 1994 to the present. Within the last two years, TPH-g, benzene, toluene, ethylbenzene, and xylenes (BTEX) have either not been detected or detected at low concentrations (C-1, C-2, C-3, C-5, and C-7). Within the last two years, Well C-6 has contained TPH-g and benzene at maximum concentrations of 1,900 parts per billion (ppb) and 7.4 ppb, respectively. During the most recent quarterly monitoring event (June 12, 1996), TPH-g and benzene were not detected in Wells C-1, C-2, C-5, and C-7. Well C-6 contained TPH-g and benzene at concentrations of 270 and 0.84 ppb, respectively. Well C-3 was inaccessible. Cumulative well data and analytical results are presented as Attachment A.

Incorrect Quarterly Groundwater Monitoring Data

Incorrect data included changed laboratory analytical results for groundwater samples collected from Wells C-1, C-2, C-3, and C-5. The incorrect data was presented in various quarterly groundwater monitoring reports prepared by SES from June 1992 through September 1993. A total of six quarterly groundwater monitoring reports with incorrect data were submitted to the ACHAD by Chevron.

Correct Quarterly Groundwater Monitoring Data

Correct quarterly groundwater monitoring data, which was obtained from SES files, along with previously submitted data is summarized in Table 1. Copies of original reports with correct data were obtained from SES files and submitted by Chevron to ACHAD for their information and files.

Recommendations

After a review of site background information and the correct groundwater analytical data, it is RRM's recommendation that the site status remain unchanged. This recommendation is based on the following considerations:

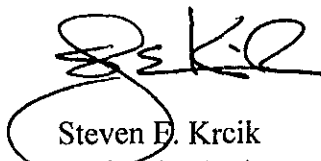
- The sources of petroleum hydrocarbons at the site has been removed. The station and the associated product facilities were removed in January 1990. At this time, approximately 5,200 cubic yards of soils with petroleum hydrocarbons were over-excavated and aerated on-site prior to reuse as backfill.
- Site soil and groundwater conditions have been adequately characterized. Numerous soil samples collected from the former UST excavation, over-excavation, and borings and wells have adequately characterized site soil conditions. Results of quarterly groundwater monitoring since December 1990 show that the dissolved plume beneath the site is stable, decreasing in size, and nearly defined laterally.
- A risk assessment or similar review, as requested by ACHAD, will be performed prior to recommending case closure. A groundwater monitoring program is intended to continue at the site until case closure is issued.

If you have any questions regarding the contents of this letter please do not hesitate to call (408) 662-9454.

Sincerely,
RRM, Inc.



Dave A. Reinsma
Project Geologist



Steven E. Krcik
Senior Geologist
RG 4976



Attachments: Table 1 - Groundwater Analytical Data Summary Historical Groundwater Monitoring Reports

Figure 1 - Groundwater Elevation Contour Map - June 12, 1996

Attachment A - Cumulative Well Data and Analytical Results

Table 1

**Groundwater Analytical Data Summary
Historical Groundwater Monitoring Reports**

Former Chevron Service Station 9-5630
997 Grant Avenue
San Lorenzo, California

Data Type	Sample I.D.	Sample Date	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	
Previously Submitted Sample Data	C-1	3/23/93	<50	<0.5	<0.5	<0.5	<0.5	
		6/15/93	<50	<0.5	<0.5	<0.5	<1.5	
Correct Sample Data		3/23/93	200	13	8.7	<0.5	10	
		6/15/93	74	1.4	5.2	1.6	11	
Previously Submitted Sample Data	C-2	6/3/92	<50	<0.5	<0.5	<0.5	<0.5	
		9/2/92	<50	<0.5	<0.5	<0.5	<0.5	
		12/1/92	<50	<0.5	<0.5	<0.5	<0.5	
		3/23/93	<50	<0.5	<0.5	<0.5	<0.5	
		6/15/93	<50	<0.5	<0.5	<0.5	<1.5	
		9/7/93	<50	<0.5	<0.5	<0.5	<1.5	
		Correct Sample Data	6/3/92	180	12	13	7.9	21
			9/2/92	630	14	30	18	54
			12/1/92	1,000	47	83	51	150
			3/23/93	80	5.0	7.9	6.0	18
Previously Submitted Sample Data	C-3	6/3/92	180	3.0	1.4	0.6	1.5	
		9/2/92	<50	<0.5	<0.5	<0.5	0.9	
Previously Submitted Sample Data	C-3	12/1/92	<50	<0.5	<0.5	<0.5	<0.5	
		3/23/93	<50	<0.5	<0.5	<0.5	<0.5	
		6/15/93	<50	<0.5	<0.5	<0.5	<1.5	

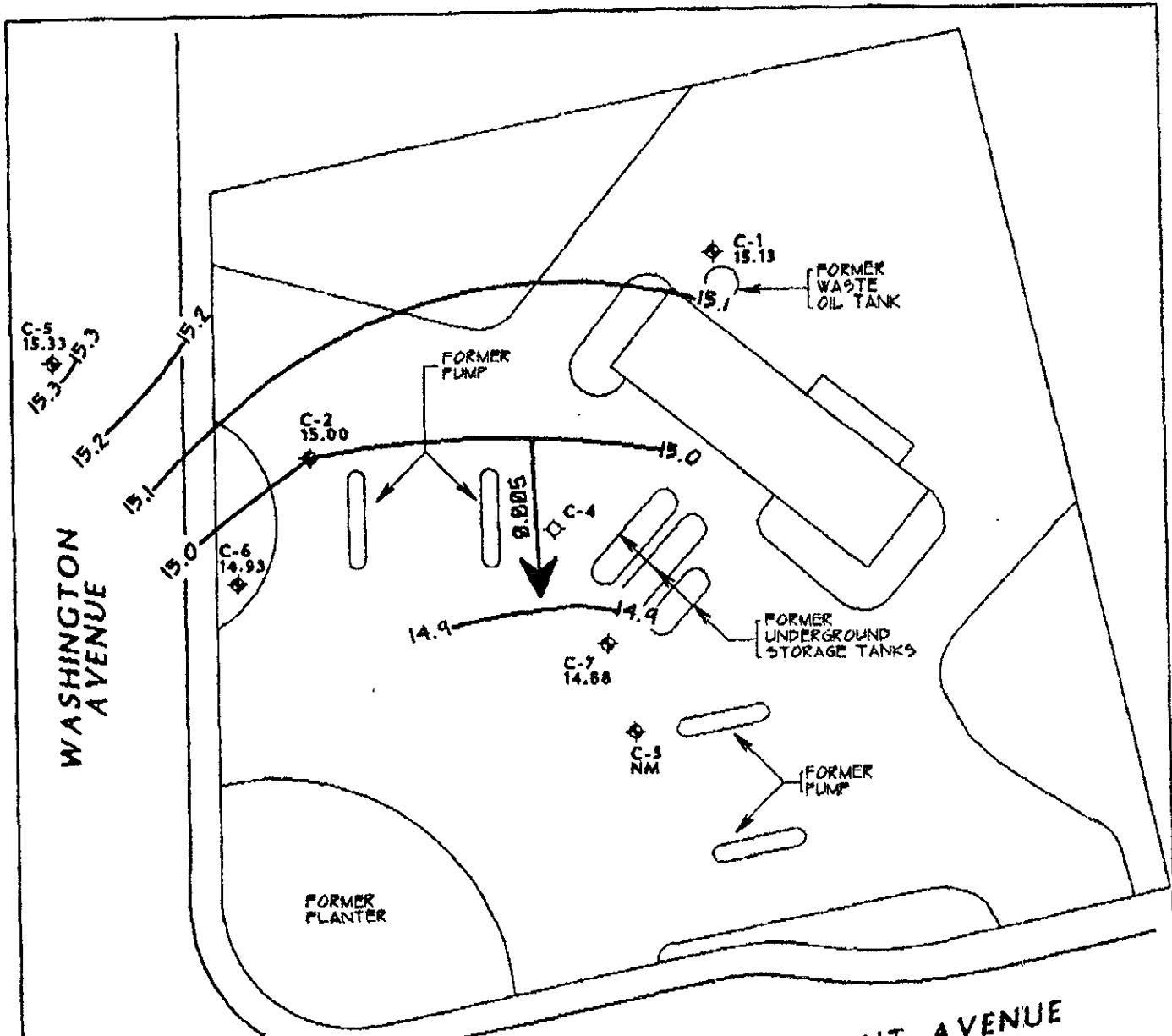
Table 1 (continued)

**Groundwater Analytical Data Summary
Historical Groundwater Monitoring Reports**

Former Chevron Service Station 9-5630
997 Grant Avenue
San Lorenzo, California

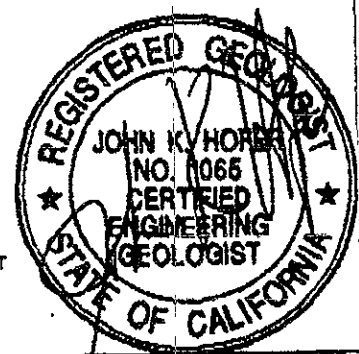
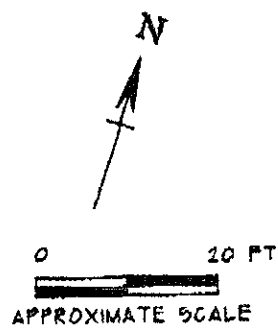
Data Type	Sample I.D.	Sample Date	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
Correct Sample Data	C-3 (Cont.)	6/3/92	7,600	94	86	26	89
		9/2/92	<50	<0.5	<0.5	<0.5	0.9
		12/1/92	54	0.8	5.7	1.1	5.9
		3/23/93	<50	1.1	1.4	<0.5	1.7
		6/15/93	67	1.3	3.9	1.1	7.8
Previously Submitted Sample Data	C-5	6/15/93	<50	<0.5	<0.5	<0.5	<1.5
Correct Sample Data		6/15/93	70	0.7	1.7	<0.5	2.8

ppb = Parts per billion
< = Constituent not detected, detection limit specified



EXPLANATION

◆ C-7	GROUND-WATER MONITORING WELL INSTALLED BY GERAGHTY & MILLER
◇ C-4	DESTROYED WELL
14.88	GROUND-WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
NM	NOT MEASURED
— 14.9	GROUND-WATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
→ 0.005	APPROXIMATE DIRECTION OF GROUND-WATER FLOW. GRADIENT INDICATED IN FEET / FEET



TITLE : GROUND-WATER ELEVATION CONTOUR MAP -
JUNE 12, 1996

LOCATION: FORMER CHEVRON SERVICE STATION #9-563B
997 GRANT AVENUE, SAN LORENZO, CALIFORNIA

SOURCE : SIERRA



GeoCONSULTANTS, INC
SAN JOSE, CALIFORNIA
Project No. Q768-09
DRAWING NO: WBB1298 REV: 8

**ATTACHMENT A
CUMULATIVE 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	TOG	MTBE
C-1											
12/05/90	24.08	11.64	12.44	--	<50	<0.5	<0.5	<0.5	<0.5	<5000	--
09/06/91	23.88	10.68	13.20	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/04/91	23.88	12.17	11.71	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
04/02/92	23.88	14.45	9.43	--	<50	<0.5	<0.5	<0.5	<0.5	<5000	--
06/03/92	23.88	13.74	10.14	--	<50	1.4	1.5	0.6	3.0	--	--
09/02/92	23.88	12.09	11.79	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/01/92	23.88	12.10	11.78	--	<50	0.6	3.5	0.7	3.4	--	--
03/23/93	23.88	15.94	7.94	--	200	13	8.7	<0.5	10	--	--
06/15/93	23.88	14.49	9.39	--	74	1.4	5.2	1.6	11	--	--
09/07/93	23.88	13.16	10.72	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
11/30/94	23.88	14.80	9.08	--	--	--	--	--	--	--	--
02/01/95	23.88	16.57	7.31	--	--	--	--	--	--	--	--
09/13/95	23.88	13.86	10.02	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/29/95	23.88	14.88	9.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
03/08/96	23.88	16.81	7.07	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
06/12/96	23.88	15.13	8.75	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
C-2											
12/05/90	22.69	11.39	11.30	--	<50	0.7	<0.5	<0.5	0.5	--	--
09/06/91	21.54	10.54	11.00	--	<50	1.3	0.6	0.7	1.5	--	--
12/04/91	21.54	12.16	9.38	--	--	--	--	--	--	--	--
04/02/92	21.54	14.21	7.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/03/92	21.54	12.55	8.99	--	180	12	13	7.9	21	--	--
09/02/92	21.54	11.95	9.59	--	630	14	30	18	54	--	--
12/01/92	21.54	11.96	9.58	--	1000	47	83	51	150	--	--
03/23/93	21.54	15.24	6.30	--	80	5.0	7.9	6.0	18	--	--
06/15/93	21.54	14.27	7.27	--	220	9.0	16	12	37	--	--
09/07/93	21.54	12.99	8.55	--	200	13	21	15	43	--	--
09/13/95	21.54	7.86	13.68	--	<50	<0.5	0.60	0.84	2.3	--	--
12/29/95	21.54	14.52	7.02	--	<50	2.7	<0.5	<0.5	<0.5	--	<2.5
03/08/96	21.54	16.08	5.46	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
06/12/96	21.54	15.00	6.54	--	<50	<0.5	<0.5	0.99	2.5	--	<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	TOG	MTBE
C-3											
12/05/90	23.45	11.70	11.75	--	<50	1.0	0.7	<0.5	<0.5	--	--
09/06/91	22.40	10.78	11.62	--	1100	150	0.6	51	1.9	--	--
12/04/91	22.40	12.26	10.14	--	89	<0.5	<0.5	0.7	0.6	--	--
04/02/92	22.40	14.33	8.07	--	60	2.1	1.3	1.1	3.2	--	--
06/03/92	22.40	13.77	8.63	--	7600	94	86	26	89	--	--
09/02/92	22.40	12.10	10.30	--	<50	<0.5	<0.5	<0.5	0.9	--	--
12/01/92	22.40	12.16	10.24	--	54	0.8	5.7	1.1	5.9	--	--
03/23/93	22.40	15.57	6.83	--	<50	1.1	1.4	<0.5	1.7	--	--
06/15/93	22.40	14.45	7.95	--	67	1.3	3.9	1.1	7.8	--	--
09/07/93	22.40	--	--	Inaccessible	--	--	--	--	--	--	--
09/13/95	22.40	--	--	Inaccessible	--	--	--	--	--	--	--
12/29/95	22.40	--	--	Inaccessible	--	--	--	--	--	--	--
03/08/96	22.40	--	--	Inaccessible	--	--	--	--	--	--	--
06/12/96	22.40	--	--	Inaccessible	--	--	--	--	--	--	--
C-4											
12/05/90	23.32	11.47	11.85	--	<50	4.0	2.0	0.7	3.0	--	--
09/06/91	--	--	--	Well destroyed	--	--	--	--	--	--	--
C-5											
02/16/93	22.01	15.37	6.64	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/23/93	22.01	15.41	6.60	--	<50	<1.5	0.9	<0.5	<1.5	--	--
06/15/93	22.01	13.91	8.10	--	70	0.7	1.7	<0.5	2.8	--	--
09/07/93	22.01	12.61	9.40	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
11/30/94	22.01	14.25	7.76	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/01/95	22.01	15.94	6.07	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/13/95	22.01	13.29	8.72	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/29/95	22.01	14.31	7.70	--	<50	<0.5	<0.5	<0.5	<0.5	--	7.3
03/08/96	22.01	16.14	5.87	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
06/12/96	22.01	15.33	6.68	--	<50	<0.5	<0.5	<0.5	<0.5	--	5.7

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	TOG	MTBE
C-6											
08/17/94	21.42	5.40	16.02	--	430	0.7	2.7	<0.5	28	--	--
11/30/94	21.42	14.16	7.26	--	610	2.1	0.57	30	14	--	--
02/01/95	21.42	14.77	6.65	--	210	<0.5	<0.5	<0.5	0.94	--	--
09/13/95	21.42	13.64	7.78	--	860	4.6	<0.5	40	0.52	--	--
12/29/95	21.42	14.63	6.79	--	1900	7.4	<2.5	86	<2.5	--	2.0
03/08/96	21.42	16.01	5.41	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
06/12/96	21.42	14.93	6.49	--	270	0.84	<0.5	10	<0.5	--	13
C-7											
08/17/94	23.21	13.14	10.07	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/30/94	23.21	14.73	8.48	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/01/95	23.21	15.99	7.22	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/13/95	23.21	13.71	9.50	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/29/95	23.21	14.77	8.44	--	<50	<0.5	<0.5	<0.5	<0.5	--	4.4
03/08/96	23.21	16.15	7.06	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
06/12/96	23.21	14.88	8.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	4.4

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	TOG	MTBE
TRIP BLANK											
12/05/90	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/06/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/04/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
04/02/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/03/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/02/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/01/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/23/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/15/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
09/07/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
11/30/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/01/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/13/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/29/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/08/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
06/12/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

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	TOG	MTBE
BAILER BLANK											
09/06/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/04/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
04/02/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/03/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/02/92	--	--	--	--	<50	<0.5	<0.5	<0.5	0.4	--	--
12/01/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/23/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/15/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
09/07/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on September 13, 1995. Earlier field data and analytical results are drawn from the March 1, 1995 Sierra Environmental Services report.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

ND = Not detected at or above the minimum quantitation limit. See laboratory reports for minimum quantitation limits.

TOG = Total Oil & Grease

MTBE = Methyl t-butyl ether