EMCON Associates
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ALCO HAZMAT

94 APR -7 AM 9:12

March 29, 1994
Project 0117-115.01

Mr. Lynn Walker
Shell Oil Company
P.O. Box 5278
Concord, California 94520

Re: First Quarter 1994 Groundwater Monitoring Report for Shell Oil Company (Shell) Service Station, 15275 Washington, San Leandro, California (WIC No. 204-6852-1008)

Dear Mr. Walker:

This letter presents the results of the first quarter 1994 monitoring performed by Blaine Tech Services, Inc. (Blaine) at and near the Shell service station located at 15275 Washington in San Leandro, California (see Figure 1). The monitoring activities were performed consistent with regulatory requirements for quarterly monitoring and reporting.

Groundwater samples were collected from monitoring wells S-1, S-3, S-5, S-7 through S-10, S-16, S-18, and SR-1 on January 27, 1994. Water levels were also measured in each of these wells. Samples were collected and water levels were measured consistent with the procedures described in Blaine's *Quarterly Groundwater Sampling Report 940127-F-1*, presented in Attachment A.

BACKGROUND

In July 1985 four groundwater monitoring wells (S-1 through S-4) were installed by EMCON Associates to assess soil and groundwater conditions beneath the site (see Figure 2). Total petroleum hydrocarbons as gasoline (TPHG) were detected in soil and groundwater samples, and well S-3 contained approximately 0.5 foot of floating product.

In August 1986 four soil borings (S-A through S-D) were drilled within the underground fuel tank complex prior to removal of the tanks. Boring S-A was drilled adjacent to the former waste oil tank, and boring S-B was converted to a temporary tank backfill monitoring well. TPHG was detected in soil samples from these borings; however, no waste oil was detected in the analyzed soil samples.

In June 1987 the underground fuel storage tanks were removed. The temporary tank backfill well S-B and monitoring wells S-2 and S-4 were destroyed during construction activities.

Between December 1986 and May 1991 fourteen groundwater monitoring wells (S-5 through S-18) and one recovery well (SR-1) were installed on and off site. The groundwater monitoring well network has been monitored quarterly since September 1988.

In October 1988 a soil-gas survey was conducted by Tracer Research Corporation at 15 off-site locations. Samples were collected south of the site along Lewelling Boulevard and on the adjacent property to the west. The highest soil vapor concentrations were detected south of the site along Lewelling Boulevard.

In March 1990 hydraulic testing was conducted. A variable discharge test was conducted using well SR-1, and slug tests were conducted in several wells. The hydraulic tests indicated low-yield conditions in the shallow aquifer.

GROUNDWATER FLOW DIRECTION

Table 1 presents a summary of historical groundwater elevation data, including data for the first quarter of 1994. Wells S-11 through S-15 have been paved over and were inaccessible during the first quarter 1994 monitoring event. Based on water levels measured in wells S-1 through S-10, S-16 through S-18, SR-1 on January 27, 1994 (see Table 1), and top-of-casing elevations, the direction of groundwater flow at the site is generally toward the south-southeast (see Figure 2). The historical direction of groundwater flow has generally been southwest.

SAMPLING FREQUENCY

Groundwater samples are collected quarterly from monitoring wells S-1, S-3, S-5, S-7 through S-10, S-12, S-15, S-16, S-18, and SR-1. **Wells S-6, S-11, S-13, S-14, and S-17 are sampled semiannually during the second and fourth quarters.** The samples are analyzed for TPHG and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Wells S-11 through S-15 were paved over in late 1993 and were therefore not sampled. **Efforts to uncover the paved over wells were tentatively scheduled for January 1994; however, efforts to date have been unsuccessful.** It is anticipated that the paved over wells will be uncovered in the second quarter of 1994. If the well casings were damaged during repaving they will be repaired, new vault boxes will be installed, and the top-of-casing elevations for the repaired wells will be resurveyed.

when was this approved?

why?

FLOATING PRODUCT

During the January 27, 1994, site visit, floating product was not observed in any of the wells.

ANALYTICAL RESULTS

Table 2 presents a summary of historical groundwater analytical results, including analytical results for the first quarter 1994 monitoring event. Certified analytical reports are included in Attachment A. Figure 3 shows the concentrations of TPHG and BTEX at each monitoring location.

TPHG was not detected in samples from wells S-1 or S-18. BTEX was not detected in the sample from well S-7. The highest TPHG and BTEX concentrations were detected in the sample from well S-3, which contained 190 milligrams per liter (mg/l) of TPHG and 3.2 mg/l of benzene.

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

If you have any questions, please call

Sincerely,

EMCON Associates

Robert H. Husk
Project Manager
C.E.G. 1530

Charles S. Metzinger
Project Supervisor

Attachments:

Table 1	Summary of Historical Groundwater Elevation Data
Table 2	Summary of Historical Groundwater Analytical Data
Figure 1	Site Location Map
Figure 2	Groundwater Contour Map, January 27, 1994
Figure 3	TPHG and BTEX Concentration Map, January 27, 1994
Attachment A	*Quarterly Groundwater Sampling Report 940127-F-1*, Blaine Tech Services, Inc.

cc: Juliette Shin, Alameda County Department of Environmental Health
Rich Hiett, Regional Water Quality Control Board, San Francisco Bay Region

Table 1
Summary of Historical Groundwater Elevation Data

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
S-1	11/22/88	21.55	8.01	NA	0.00	13.54
	8/10/89	21.55	7.93	NA	0.00	13.62
	10/10/89	21.55	8.09	NA	0.00	13.46
	1/25/90	21.55	7.73	NA	0.00	13.82
	4/18/90	21.55	7.91	NA	0.00	13.64
	7/23/90	21.55	7.72	NA	0.00	13.83
	10/18/90	21.55	8.55	NA	0.00	13.00
	1/28/91	21.55	8.52	NA	0.00	13.03
	4/25/91	21.55	7.18	NA	0.00	14.37
	7/9/91	21.55	8.22	NA	0.00	13.33
	10/8/91	21.55	8.70	NA	0.00	12.85
	2/5/92	21.55	8.14	NA	0.00	13.41
	4/28/92	21.55	7.52	NA	0.00	14.03
	7/27/92	21.55	8.28	NA	0.00	13.27
	10/26/92	21.55	8.74	NA	0.00	12.81
	1/13/93	21.55	5.91	NA	0.00	15.64
	4/16/93	21.55	6.66	NA	0.00	14.89
	7/23/93	21.55	7.53	NA	0.00	14.02
	10/27/93	21.55	8.20	NA	0.00	13.35
	1/27/94	21.55	7.26	NA	0.00	14.29
S-3	11/22/88	21.14	7.76	NA	0.00	13.38
	8/10/89	21.14	7.92	NA	0.00	13.22
	10/10/89	21.14	8.00	NA	0.00	13.14
	1/25/90	21.14	7.54	NA	0.00	13.60
	4/18/90	21.14	7.74	NA	0.00	13.40
	7/23/90	21.14	7.55	NA	0.00	13.59
	10/18/90	21.14	8.47	NA	0.00	12.67
	1/28/91	21.14	8.38	NA	0.00	12.76
	4/25/91	21.14	6.91	NA	0.00	14.23
	7/9/91	21.14	8.07	NA	0.00	13.07
	10/8/91	21.14	8.61	NA	0.00	12.53
	2/5/92	21.14	7.80	NA	0.00	13.34
	4/28/92	21.14	7.27	NA	0.00	13.87
	7/27/92	21.14	8.10	NA	0.00	13.04
	10/26/92	21.14	8.62	NA	0.00	12.52
	1/13/93	21.14	5.16	NA	0.00	15.98
	4/16/93	21.14	7.18	NA	0.00	13.96
	7/23/93	21.14	7.34	NA	0.00	13.80
	10/27/93	21.14	8.03	NA	0.00	13.11
	1/27/94	21.14	6.79	NA	0.00	14.35

Table 1
Summary of Historical Groundwater Elevation Data
(continued)

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
S-5	8/10/89	21.41	8.28	NA	0.00	13.13
	10/10/89	21.41	8.32	NA	0.00	13.09
	1/25/90	21.41	8.20	NA	0.00	13.21
	4/18/90	21.41	8.32	NA	0.00	13.09
	7/23/90	21.41	8.03	NA	0.00	13.38
	10/18/90	21.41	9.03	NA	0.00	12.38
	1/28/91	21.41	8.80	NA	0.00	12.61
	4/25/91	21.41	7.40	NA	0.00	14.01
	7/9/91	21.41	8.52	NA	0.00	12.89
	10/8/91	21.41	9.00	NA	0.00	12.41
	2/5/92	21.41	8.11	NA	0.00	13.30
	4/28/92	21.41	7.70	NA	0.00	13.71
	7/27/92	21.41	8.52	NA	0.00	12.89
	10/26/92	21.41	9.02	NA	0.00	12.39
	1/13/93	21.41	5.22	NA	0.00	16.19
	4/16/93	21.41	7.04	NA	0.00	14.37
	7/23/93	21.41	7.75	NA	0.00	13.66
	10/27/93	21.41	8.49	NA	0.00	12.92
	1/27/94	21.41	7.04	NA	0.00	14.37
S-6	11/22/88	22.02	8.58	NA	0.00	13.44
	8/10/89	22.02	8.54	NA	0.00	13.48
	10/10/89	22.02	8.58	NA	0.00	13.44
	1/25/90	22.02	8.31	NA	0.00	13.71
	4/18/90	22.02	8.43	NA	0.00	13.59
	7/23/90	22.02	8.24	NA	0.00	13.78
	10/18/90	22.02	9.20	NA	0.00	12.82
	1/28/91	22.02	9.10	NA	0.00	12.92
	4/25/91	22.02	7.74	NA	0.00	14.28
	7/9/91	22.02	8.81	NA	0.00	13.21
	10/8/91	22.02	9.26	NA	0.00	12.76
	2/5/92	22.02	8.47	NA	0.00	13.55
	4/28/92	22.02	7.91	NA	0.00	14.11
	7/27/92	22.02	8.83	NA	0.00	13.19
	10/26/92	22.02	9.29	NA	0.00	12.73
	1/13/93	22.02	6.43	NA	0.00	15.59
	4/16/93	22.02	7.12	NA	0.00	14.90
	7/23/93	22.02	8.14	NA	0.00	13.88
	10/27/93	22.02	8.75	NA	0.00	13.27
	1/27/94	22.02	7.87	NA	0.00	14.15

Table 1
Summary of Historical Groundwater Elevation Data
(continued)

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
S-7	11/22/88	21.47	8.24	NA	0.00	13.23
	8/10/89	21.47	8.18	NA	0.00	13.29
	10/10/89	21.47	8.35	NA	0.00	13.12
	1/25/90	21.47	7.95	NA	0.00	13.52
	4/18/90	21.47	8.06	NA	0.00	13.41
	7/23/90	21.47	7.89	NA	0.00	13.58
	10/18/90	21.47	8.83	NA	0.00	12.64
	1/28/91	21.47	8.77	NA	0.00	12.70
	4/25/91	21.47	7.25	NA	0.00	14.22
	7/9/91	21.47	8.41	NA	0.00	13.06
	10/8/91	21.47	8.95	NA	0.00	12.52
	2/5/92	21.47	8.04	NA	0.00	13.43
	4/28/92	21.47	7.45	NA	0.00	14.02
	7/27/92	21.47	8.48	NA	0.00	12.99
	10/26/92	21.47	9.95	NA	0.00	11.52
	1/13/93	21.47	5.84	NA	0.00	15.63
	4/16/93	21.47	6.38	NA	0.00	15.09
	7/23/93	21.47	7.72	NA	0.00	13.75
	10/27/93	21.47	7.79	NA	0.00	13.68
	1/27/94	21.47	7.85	NA	0.00	13.62
S-8	11/22/88	20.72	7.76	NA	0.00	12.96
	8/10/89	20.72	7.79	NA	0.00	12.93
	10/10/89	20.72	7.84	NA	0.00	12.88
	1/25/90	20.72	7.47	NA	0.00	13.25
	4/18/90	20.72	7.59	NA	0.00	13.13
	7/23/90	20.72	7.49	NA	0.00	13.23
	10/18/90	20.72	8.44	NA	0.00	12.28
	1/28/91	20.72	8.28	NA	0.00	12.44
	4/25/91	20.72	6.72	NA	0.00	14.00
	7/9/91	20.72	7.98	NA	0.00	12.74
	10/8/91	20.72	8.55	NA	0.00	12.17
	2/5/92	20.72	7.50	NA	0.00	13.22
	4/28/92	20.72	7.14	NA	0.00	13.58
	7/27/92	20.72	8.06	NA	0.00	12.66
	10/26/92	20.72	8.58	NA	0.00	12.14
	1/13/93	20.72	5.32	NA	0.00	15.40
	4/16/93	20.72	5.76	NA	0.00	14.96
	7/23/93	20.72	7.29	NA	0.00	13.43
	10/27/93	20.72	7.93	NA	0.00	12.79
	1/27/94	20.72	6.31	NA	0.00	14.41

Table 1
Summary of Historical Groundwater Elevation Data
(continued)

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
S-9	11/22/88	20.96	7.78	NA	0.00	13.18
	8/10/89	20.96	7.82	NA	0.00	13.14
	10/10/89	20.96	7.87	NA	0.00	13.09
	1/25/90	20.96	7.41	NA	0.00	13.55
	4/18/90	20.96	7.65	NA	0.00	13.31
	7/23/90	20.96	7.58	NA	0.00	13.38
	10/18/90	20.96	8.46	NA	0.00	12.50
	1/28/91	20.96	8.29	NA	0.00	12.67
	4/25/91	20.96	6.09	NA	0.00	14.87
	7/9/91	20.96	7.82	NA	0.00	13.14
	10/8/91	20.96	8.55	NA	0.00	12.41
	2/5/92	20.96	6.96	NA	0.00	14.00
	4/28/92	20.96	6.76	NA	0.00	14.20
	7/27/92	20.96	8.10	NA	0.00	12.86
	10/26/92	20.96	8.53	NA	0.00	12.43
	1/13/93	20.96	6.80	NA	0.00	14.16
	4/16/93	20.96	6.28	NA	0.00	14.68
	7/23/93	20.96	7.26	NA	0.00	13.70
	10/27/93	20.96	8.00	NA	0.00	12.96
	1/27/94	20.96	5.96	NA	0.00	15.00
S-10	11/22/88	20.69	7.91	NA	0.00	12.78
	8/10/89	20.69	7.94	NA	0.00	12.75
	10/10/89	20.69	7.99	NA	0.00	12.70
	1/25/90	20.69	7.56	NA	0.00	13.13
	4/18/90	20.69	7.71	NA	0.00	12.98
	7/23/90	20.69	7.64	NA	0.00	13.05
	10/18/90	20.69	8.58	NA	0.00	12.11
	1/28/91	20.69	8.35	NA	0.00	12.34
	4/25/91	20.69	6.91	NA	0.00	13.78
	7/9/91	20.69	8.14	NA	0.00	12.55
	10/8/91	20.69	8.70	NA	0.00	11.99
	2/5/92	20.69	7.57	NA	0.00	13.12
	4/28/92	20.69	7.20	NA	0.00	13.49
	7/27/92	20.69	8.17	NA	0.00	12.52
	10/26/92	20.69	8.68	NA	0.00	12.01
	1/13/93	20.69	3.78	NA	0.00	16.91
	4/16/93	20.69	6.46	NA	0.00	14.23
	7/23/93	20.69	7.38	NA	0.00	13.31
	10/27/93	20.69	8.09	NA	0.00	12.60
	1/27/94	20.69	5.81	NA	0.00	14.88

Table 1
Summary of Historical Groundwater Elevation Data
(continued)

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
S-11	11/22/88	21.26	8.62	NA	0.00	12.64
	8/10/89	21.26	8.65	NA	0.00	12.61
	10/10/89	21.26	8.64	NA	0.00	12.62
	1/25/90	21.26	8.43	NA	0.00	12.83
	4/18/90	21.26	8.42	NA	0.00	12.84
	7/23/90	21.26	8.23	NA	0.00	13.03
	10/18/90	21.26	9.20	NA	0.00	12.06
	1/28/91	21.26	9.13	NA	0.00	12.13
	4/25/91	21.26	7.53	NA	0.00	13.73
	7/9/91	21.26	8.85	NA	0.00	12.41
	10/8/91	21.26	9.34	NA	0.00	11.92
	2/5/92	21.26	8.50	NA	0.00	12.76
	4/28/92	21.26	7.80	NA	0.00	13.46
	7/27/92	21.26	8.80	NA	0.00	12.46
	10/26/92	21.26	9.42	NA	0.00	11.84
	1/13/93	21.26	6.52	NA	0.00	14.74
	4/16/93	21.26	6.86	NA	0.00	14.40
	7/23/93	21.26	8.07	NA	0.00	13.19
	10/27/93	21.26	NM	NM	NM	NM
	1/27/94	21.26	NM	NM	NM	NM
S-12	8/10/89	21.05	8.32	NA	0.00	12.73
	10/10/89	21.05	8.32	NA	0.00	12.73
	1/25/90	21.05	8.18	NA	0.00	12.87
	4/18/90	21.05	8.05	NA	0.00	13.00
	7/23/90	21.05	7.92	NA	0.00	13.13
	10/18/90	21.05	8.90	NA	0.00	12.15
	1/28/91	21.05	8.54	NA	0.00	12.51
	4/25/91	21.05	7.08	NA	0.00	13.97
	7/9/91	21.05	8.42	NA	0.00	12.63
	10/8/91	21.05	8.80	NA	0.00	12.25
	2/5/92	21.05	8.07	NA	0.00	12.98
	4/28/92	21.05	8.33	NA	0.00	12.72
	7/27/92	21.05	8.55	NA	0.00	12.50
	10/26/92	21.05	9.03	NA	0.00	12.02
	1/13/93	21.05	6.38	NA	0.00	14.67
	4/16/93	21.05	6.56	NA	0.00	14.49
	7/23/93	21.05	7.76	NA	0.00	13.29
	10/27/93	21.05	NM	NM	NM	NM
	1/27/94	21.05	NM	NM	NM	NM

Table 1
Summary of Historical Groundwater Elevation Data
(continued)

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
S-13	8/10/89	20.57	8.00	NA	0.00	12.57
	10/10/89	20.57	7.95	NA	0.00	12.62
	1/25/90	20.57	7.79	NA	0.00	12.78
	4/18/90	20.57	7.73	NA	0.00	12.84
	7/23/90	20.57	7.63	NA	0.00	12.94
	10/18/90	20.57	8.58	NA	0.00	11.99
	1/28/91	20.57	8.39	NA	0.00	12.18
	4/25/91	20.57	7.00	NA	0.00	13.57
	7/9/91	20.57	8.12	NA	0.00	12.45
	10/8/91	20.57	8.69	NA	0.00	11.88
	2/5/92	20.57	7.62	NA	0.00	12.95
	4/28/92	20.57	7.15	NA	0.00	13.42
	7/27/92	20.57	8.20	NA	0.00	12.37
	10/26/92	20.57	8.73	NA	0.00	11.84
	1/13/93	20.57	5.06	NA	0.00	15.51
	4/16/93	20.57	6.38	NA	0.00	14.19
	7/23/93	20.57	7.45	NA	0.00	13.12
	10/27/93	20.57	NM	NM	NM	NM
	1/27/94	20.57	NM	NM	NM	NM
S-14	8/10/89	20.44	7.58	NA	0.00	12.86
	10/10/89	20.44	7.62	NA	0.00	12.82
	1/25/90	20.44	7.82	NA	0.00	12.62
	4/18/90	20.44	7.37	NA	0.00	13.07
	7/23/90	20.44	7.28	NA	0.00	13.16
	10/18/90	20.44	8.10	NA	0.00	12.34
	1/28/91	20.44	8.04	NA	0.00	12.40
	4/25/91	20.44	6.40	NA	0.00	14.04
	7/9/91	20.44	7.69	NA	0.00	12.75
	10/8/91	20.44	8.24	NA	0.00	12.20
	2/5/92	20.44	7.20	NA	0.00	13.24
	4/28/92	20.44	9.75	NA	0.00	10.69
	7/27/92	20.44	7.64	NA	0.00	12.80
	10/26/92	20.44	8.32	NA	0.00	12.12
	1/13/93	20.44	5.07	NA	0.00	15.37
	4/16/93	20.44	5.86	NA	0.00	14.58
	7/23/93	20.44	7.06	NA	0.00	13.38
	10/27/93	20.44	NM	NM	NM	NM
	1/27/94	20.44	NM	NM	NM	NM

Table 1
Summary of Historical Groundwater Elevation Data
(continued)

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
S-15	8/10/89	22.22	8.48	NA	0.00	13.74
	10/10/89	22.22	8.46	NA	0.00	13.76
	1/25/90	22.22	8.34	NA	0.00	13.88
	4/18/90	22.22	8.45	NA	0.00	13.77
	7/23/90	22.22	8.22	NA	0.00	14.00
	10/18/90	22.22	9.11	NA	0.00	13.11
	1/28/91	22.22	9.13	NA	0.00	13.09
	4/25/91	22.22	7.83	NA	0.00	14.39
	7/9/91	22.22	8.93	NA	0.00	13.29
	10/8/91	22.22	9.26	NA	0.00	12.96
	2/5/92	22.22	8.60	NA	0.00	13.62
	4/28/92	22.22	8.09	NA	0.00	14.13
	7/27/92	22.22	8.83	NA	0.00	13.39
	10/26/92	22.22	9.31	NA	0.00	12.91
	1/13/93	22.22	6.64	NA	0.00	15.58
	4/16/93	22.22	7.14	NA	0.00	15.08
	7/23/93	22.22	8.23	NA	0.00	13.99
	10/27/93	22.22	NM	NM	NM	NM
	1/27/94	22.22	NM	NM	NM	NM
S-16	8/10/89	21.82	8.36	NA	0.00	13.46
	10/10/89	21.82	8.23	NA	0.00	13.59
	1/25/90	21.82	7.88	NA	0.00	13.94
	4/18/90	21.82	8.19	NA	0.00	13.63
	7/23/90	21.82	8.09	NA	0.00	13.73
	10/18/90	21.82	8.90	NA	0.00	12.92
	1/28/91	21.82	8.55	NA	0.00	13.27
	4/25/91	21.82	7.48	NA	0.00	14.34
	7/9/91	21.82	8.48	NA	0.00	13.34
	10/8/91	21.82	8.95	NA	0.00	12.87
	2/5/92	21.82	8.20	NA	0.00	13.62
	4/28/92	21.82	7.80	NA	0.00	14.02
	7/27/92	21.82	8.29	NA	0.00	13.53
	10/26/92	21.82	9.02	NA	0.00	12.80
	1/13/93	21.82	5.78	NA	0.00	16.04
	4/16/93	21.82	6.80	NA	0.00	15.02
	7/23/93	21.82	7.67	NA	0.00	14.15
	10/27/93	21.82	8.52	NA	0.00	13.30
	1/27/94	21.82	7.20	NA	0.00	14.62

Table 1
Summary of Historical Groundwater Elevation Data
(continued)

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
S-17	8/10/89	20.95	8.13	NA	0.00	12.82
	10/10/89	20.95	8.18	NA	0.00	12.77
	1/25/90	20.95	7.60	NA	0.00	13.35
	4/18/90	20.95	7.95	NA	0.00	13.00
	7/23/90	20.95	7.87	NA	0.00	13.08
	10/18/90	20.95	8.71	NA	0.00	12.24
	1/28/91	20.95	8.54	NA	0.00	12.41
	4/25/91	20.95	7.15	NA	0.00	13.80
	7/9/91	20.95	8.24	NA	0.00	12.71
	10/8/91	20.95	8.86	NA	0.00	12.09
	2/5/92	20.95	7.74	NA	0.00	13.21
	4/28/92	20.95	7.41	NA	0.00	13.54
	7/27/92	20.95	8.34	NA	0.00	12.61
	10/26/92	20.95	8.87	NA	0.00	12.08
	1/13/93	20.95	3.43	NA	0.00	17.52
	4/16/93	20.95	6.70	NA	0.00	14.25
	7/23/93	20.95	7.53	NA	0.00	13.42
	10/27/93	20.95	8.29	NA	0.00	12.66
	1/27/94	20.95	5.78	NA	0.00	15.17
S-18	4/25/91	21.03	NM	NM	NM	NM
	7/9/91	21.03	8.23	NA	0.00	12.80
	10/8/91	21.03	8.84	NA	0.00	12.19
	2/5/92	21.03	7.67	NA	0.00	13.36
	4/28/92	21.03	7.40	NA	0.00	13.63
	7/27/92	21.03	8.34	NA	0.00	12.69
	10/26/92	21.03	8.83	NA	0.00	12.20
	1/13/93	21.03	5.86	NA	0.00	15.17
	4/16/93	21.03	4.88	NA	0.00	16.15
	7/23/93	21.03	7.56	NA	0.00	13.47
	10/27/93	21.03	8.30	NA	0.00	12.73
	1/27/94	21.03	6.84	NA	0.00	14.19

Table 1
Summary of Historical Groundwater Elevation Data
(continued)

Well	Date	Reference Elevation (Ft.-MSL)	Depth to Groundwater (feet)	Depth to Floating Product (feet)	Floating Product Thickness (feet)	Groundwater Elevation (Ft.-MSL)
SR-1	1/25/90	21.45	7.53	NA	0.00	13.92
	4/18/90	21.45	8.17	NA	0.00	13.28
	7/23/90	21.45	7.58	NA	0.00	13.87
	10/18/90	21.45	8.81	NA	0.00	12.64
	1/28/91	21.45	8.37	NA	0.00	13.08
	4/25/91	21.45	6.91	NA	0.00	14.54
	7/9/91	21.45	8.11	NA	0.00	13.34
	10/8/91	21.45	8.63	NA	0.00	12.82
	2/5/92	21.45	7.68	NA	0.00	13.77
	4/28/92	21.45	7.27	NA	0.00	14.18
	7/27/92	21.45	8.11	8.10	0.01	13.34
	10/26/92	21.45	8.63	NA	0.00	12.82
	1/13/93	21.45	5.46	NA	0.00	15.99
	4/16/93	21.45	6.28	NA	0.00	15.17
	7/23/93	21.45	7.34	NA	0.00	14.11
	10/27/93	21.45	8.04	NA	0.00	13.41
	1/27/94	21.45	6.68	NA	0.00	14.77

Ft.-MSL = feet above mean sea level
NM = not measured

Table 2

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-1	07/08/85	0.52	NA	NA	NA	NA
	09/06/88	<0.050	<0.0005	<0.001	<0.001	<0.003
	11/16/88	<0.050	<0.0005	<0.001	<0.001	<0.003
	02/27/89	<0.050	0.0005	<0.001	<0.001	<0.003
	05/04/89	<0.050	0.001	<0.001	<0.001	<0.003
	08/10/89	<0.050	0.0007	<0.001	<0.001	<0.003
	10/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	01/25/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	04/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	07/23/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/18/90	0.080	0.005	<0.0005	<0.0005	0.003
	01/28/91	<0.050	0.0045	<0.0005	<0.0005	0.002
	04/25/91	0.080*	0.0037	<0.0005	0.0007	0.002
	07/09/91	0.20	0.016	<0.0005	0.0013	0.0058
	10/08/91	<0.050	0.0023	<0.0005	<0.0005	<0.0005
	02/05/92	0.16	0.0089	<0.0005	0.0021	0.006
	04/28/92	<0.050	0.0024	<0.0005	<0.0005	0.0009
	07/27/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	0.057	0.003	0.0016	0.0014	0.0017
	01/14/93	0.49	0.053	0.0012	0.020	0.033
	04/16/93	0.24	0.020	<0.0005	0.015	0.24
	07/23/93	<0.050	0.0005	<0.0005	<0.0005	<0.0005
	10/27/93	0.060	0.0059	<0.0005	0.0025	0.0017
	01/27/94	<0.050	0.0021	<0.0005	<0.0005	0.00063
S-3	09/06/88	96	3.4	9.5	2.7	17
	11/16/88	70	4.6	8.4	2.5	13
	02/27/89	32	2.4	3.1	1.5	6.4
	05/04/89	47	4.4	0.30	2.4	15
	08/10/89	110	5.7	5.7	3.2	19
	10/10/89	52	4.6	3.3	2.6	15
	01/25/90	420	5.2	4.1	6.7	34
	04/18/90	58	3.8	1.4	2.4	12
	07/23/90	49	3.4	1.8	2.3	12
	10/18/90	44	3.5	0.65	2.4	11
	01/28/91	64	40.9	0.57	1.94	8.09
	04/25/91	120	3.9	3.6	2.4	8.9
	07/09/91	50	3.6	2.3	1.8	10
	10/08/91	130	3.6	1.0	2.8	8.4

Table 2 (Continued)

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-3	02/05/92	150	2.5	0.67	2.7	10
	04/28/92	120	2.2	1.2	2.0	5.8
	07/27/92	190	1.4	<1.25	<1.25	3.4
	10/26/92	950	2.0	8.4	16	36
	01/14/93	41	2.7	2.5	1.8	6.9
	04/16/93	40	0.93	2.8	1.9	14
	07/23/93	87	1.6	<0.0050	1.3	4.0
	10/27/93	36	2.2	<0.5	1.5	3.2
	01/27/94	190	3.2	3.1	4.1	15
S-5	01/08/87	7.8	0.38	0.51	NR	1.0
	09/06/88	7.0	2.6	0.060	0.40	0.70
	11/16/88	3.0	0.66	0.060	0.12	0.22
	02/27/89	5.7	2.0	0.22	0.26	0.32
	05/04/89	9.0	3.0	0.60	0.63	1.7
	08/10/89	5.1	1.1	<0.050	0.27	0.40
	10/10/89	15	3.3	0.16	0.83	2.2
	01/25/90	12	2.4	0.36	0.57	1.4
	04/18/90	5.2	1.1	0.040	0.30	0.46
	07/23/90	5.5	1.3	0.14	0.32	0.73
	10/18/90	12	3.2	0.040	0.72	0.9
	01/28/91	2.55	0.41	0.015	0.11	0.060
	04/25/91	67	5.1	3.1	2.8	11
	07/09/91	4.9	0.48	0.036	0.36	1.0
	10/08/91	6.6	0.37	0.007	0.19	0.38
	02/05/92	44	4.8	0.85	2.7	8.4
	04/28/92	33	1.4	0.32	1.6	5.2
	07/27/92	20	2.4	<0.125	1.8	5.3
	10/26/92	21	1.6	0.14	1.5	2.8
	01/14/93	54	1.9	1.0	2.7	16
	04/16/93	42	2.0	1.3	4.3	18
	07/23/93	46	2.5	2.2	3.4	11
	10/27/93	6.5	0.99	0.031	1.1	1.0
	01/27/94	34	1.8	0.58	2.9	9.7
S-6	11/16/88	0.050	0.0007	<0.001	<0.001	<0.003
	02/27/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	05/04/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	08/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	10/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003

Table 2 (Continued)

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-6	01/25/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	04/18/90	<0.050	<0.0005	0.0006	<0.0005	0.001
	07/23/90	<0.050	<0.0005	0.0009	<0.0005	0.0018
	10/18/90	<0.050	<0.0005	0.0007	<0.0005	0.0008
	01/28/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/25/91	<0.050	<0.0005	<0.0005	<0.0005	0.0007
	07/09/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/08/91	<0.050	0.0007	<0.0005	<0.0005	<0.0005
	04/28/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/13/93	NR	NR	NR	NR	NR
	04/16/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/23/93	NR	NR	NR	NR	NR
	10/27/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/27/94	NR	NR	NR	NR	NR
S-7	11/16/88	0.10	0.0051	0.015	0.002	0.013
	02/27/89	0.050	0.0005	0.003	0.001	0.011
	05/04/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	08/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	10/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	01/25/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	04/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	07/23/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/18/90	<0.050	<0.0005	0.0005	0.0005	0.0041
	01/28/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/25/91	0.060*	<0.0005	<0.0005	<0.0005	<0.0005
	07/09/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/08/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	02/05/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/28/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/27/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	0.057^	<0.0005	<0.0005	<0.0005	<0.0005
	01/14/93	0.056^	<0.0005	<0.0005	<0.0005	<0.0005
	04/16/93	0.11	0.028	<0.0005	<0.0005	0.0018
	07/23/93	0.080	0.0048	<0.0005	<0.0005	0.0008
	10/27/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/27/94	0.070**	<0.0005	<0.0005	<0.0005	<0.0005

Table 2 (Continued)

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-8	11/16/88	0.21	0.005	<0.001	0.001	0.005
	02/27/89	<0.050	0.0024	<0.001	<0.001	<0.003
	05/03/89	<0.050	0.0075	<0.001	0.002	<0.003
	08/10/89	<0.050	0.0006	<0.001	<0.001	<0.003
	10/09/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	01/25/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	04/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	07/23/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/28/91	<0.050	0.055	0.0005	<0.0005	0.0014
	04/25/91	0.13*	0.019	<0.0005	0.0013	0.0011
	07/09/91	0.20	0.033	<0.0005	0.0018	0.0028
	10/08/91	0.58	0.095	0.0022	0.0049	0.0065
	02/05/92	0.090*	0.018	<0.0005	0.0062	0.0018
	04/28/92	<0.050	0.0059	<0.0005	0.0025	<0.0005
	07/27/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/14/93	0.27	0.074	0.0009	0.025	0.0055
	04/16/93	1.1	0.42	<0.0005	0.20	0.020
	07/23/93	0.16	0.023	<0.0005	0.0012	0.0015
	10/27/93	0.42	0.065	0.0007	0.011	0.0017
	01/27/94	0.29	0.065	<0.0010	0.0069	0.0024
S-9	11/16/88	1.4	0.069	0.003	0.052	0.18
	02/27/89	1.6	0.24	0.004	0.13	0.18
	05/03/89	2.6	0.47	0.010	0.24	0.48
	08/10/89	0.52	0.073	<0.01	0.040	<0.030
	10/09/89	0.38	0.082	<0.001	0.046	0.013
	01/25/90	0.75	0.14	0.0012	0.069	0.075
	04/18/90	0.68	0.15	0.0017	0.050	0.037
	07/23/90	0.49	0.094	0.0012	0.032	0.024
	10/18/90	0.39	0.14	0.0007	0.0033	0.024
	01/28/91	1.04	0.45	0.0046	0.085	0.097
	04/25/91	5.8	0.88	0.009	0.36	0.50
	07/09/91	1.4	0.22	0.0028	0.082	0.10
	10/08/91	0.89	0.96	<0.0025	0.016	0.029
	02/05/92	0.95	0.24	<0.0025	0.028	0.055
	04/28/92	1.4*	0.29	0.003	0.10	0.081
	07/27/92	0.89	0.19	<0.0025	0.066	0.068

Table 2 (Continued)

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-9	10/26/92	0.65	0.16	<0.0025	0.063	0.089
	01/13/93	19	2.4	0.038	1.7	2.2
	04/16/93	10	1.5	<0.0005	1.1	0.99
	07/23/93	1.1	0.40	<0.0050	0.26	0.16
	10/27/93	2.5	0.40	<0.005	0.19	0.11
	01/27/94	4.8	0.99	0.016	0.63	0.49
S-10	11/16/88	0.33	0.0005	<0.001	0.001	0.011
	02/27/89	0.14	<0.0005	<0.003	0.002	0.006
	05/03/89	0.22	<0.0005	0.001	0.002	0.007
	08/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	10/09/89	0.17	<0.0005	<0.001	<0.001	<0.003
	01/25/90	<0.050	<0.0005	<0.0005	0.0011	0.004
	04/18/90	<0.050	<0.0005	0.0009	<0.0005	0.002
	07/23/90	0.59	<0.0005	<0.0005	0.0019	0.019
	10/18/90	0.14	<0.0005	0.0007	<0.0005	0.007
	01/28/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/25/91	<0.050	<0.0005	<0.0005	0.0011	0.0008
	07/09/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/08/91	0.14	<0.0005	<0.0005	<0.0005	<0.0005
	02/05/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/28/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/27/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/13/93	0.088	<0.0005	0.0006	<0.0005	<0.0005
	04/16/93	0.080	<0.0005	<0.0005	<0.0005	<0.0005
	07/23/93	<0.050	0.0015	<0.0005	0.0007	0.0027
	10/27/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/27/94	0.27	0.0011	0.0013	0.0020	0.0074
S-11	11/16/88	<0.050	<0.0005	<0.001	<0.001	<0.003
	02/27/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	05/03/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	08/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	10/09/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	01/25/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	04/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	07/23/90	<0.050	<0.0005	0.0006	<0.0005	0.0011
	10/18/90	<0.050	<0.0005	<0.0005	<0.0005	0.0005
	01/28/91	0.063	<0.0005	0.0033	0.0009	0.007

Table 2 (Continued)

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-11	04/25/91	<0.050	<0.0005	<0.0005	0.0008	<0.0005
	07/09/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/08/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/28/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/13/93	NR	NR	NR	NR	NR
	04/16/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/23/93	NR	NR	NR	NR	NR
	10/27/93	NA	NA	NA	NA	NA
	01/27/94	NR	NR	NR	NR	NR
S-12	11/16/88	0.050	0.0035	<0.001	<0.001	<0.003
	02/27/89	<0.050	0.0008	<0.001	<0.001	<0.003
	05/03/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	08/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	10/09/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	01/25/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	04/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	07/23/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/28/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/25/91	0.090	0.0054	<0.0005	0.0011	0.0007
	07/09/91	<0.050	0.0029	<0.0005	<0.0005	<0.0005
	10/08/91	0.050	<0.0005	<0.0005	<0.0005	<0.0005
	02/05/92	0.050*	<0.0005	<0.0005	<0.0005	<0.0005
	04/28/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/27/92	0.094^	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	0.086^	<0.0005	<0.0005	<0.0005	<0.0005
	01/14/93	0.12	0.002	<0.0005	<0.0005	<0.0005
	04/16/93	0.060	<0.0005	<0.0005	<0.0005	<0.0005
	07/23/93	0.090	<0.0005	<0.0005	<0.0005	0.0009
	10/27/93	NA	NA	NA	NA	NA
	01/27/94	NA	NA	NA	NA	NA
S-13	05/03/89	0.15	0.0049	0.004	0.002	0.014
	08/10/89	0.11	0.0029	<0.001	<0.001	<0.003
	10/09/89	0.077	0.0014	<0.001	<0.001	<0.003
	01/25/90	0.051	0.0005	<0.0005	<0.0005	<0.001
	04/18/90	0.085	0.0087	<0.0005	<0.0005	<0.001
	07/23/90	0.080	0.0008	<0.0005	<0.0005	<0.0005

Table 2 (Continued)

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-13	10/18/90	0.13	<0.0005	<0.0005	<0.0005	<0.0005
	01/28/91	<0.050	<0.0005	0.0009	<0.0005	0.001
	04/25/91	0.44*	0.0038	<0.0005	0.0012	0.0006
	07/09/91	0.32*	0.0006	<0.0005	<0.0005	<0.0005
	10/08/91	0.31	<0.0005	<0.0005	<0.0005	<0.0005
	04/28/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	0.18^	<0.0005	<0.0005	<0.0005	<0.0005
	01/13/93	NR	NR	NR	NR	NR
	04/16/93	0.24	0.0048	<0.0005	0.0013	<0.0005
	07/23/93	NR	NR	NR	NR	NR
	10/27/93	NA	NA	NA	NA	NA
	01/27/94	NR	NR	NR	NR	NR
S-14	05/03/89	5.3	0.75	0.40	0.20	0.80
	08/10/89	1.8	0.54	0.14	0.042	0.050
	10/09/89	1.0	0.36	0.060	0.020	0.030
	01/25/90	0.64	0.16	0.077	0.017	0.039
	04/18/90	1.2	0.20	0.11	0.030	0.096
	07/23/90	5.0	0.43	0.34	0.14	0.66
	10/18/90	1.8	0.77	0.013	0.017	0.12
	01/28/91	0.72	0.20	0.036	0.021	0.078
	04/25/91	14	0.93	0.43	0.25	0.97
	07/09/91	0.16	0.030	0.0053	0.005	0.016
	10/08/91	5.4	0.081	0.057	0.095	0.38
	04/28/92	2.0	0.27	0.14	0.048	0.17
	10/26/92	0.92	0.033	0.012	0.025	0.088
	01/13/93	NR	NR	NR	NR	NR
	04/16/93	4.5	1.1	0.029	0.091	0.17
	07/23/93	NR	NR	NR	NR	NR
	10/27/93	NA	NA	NA	NA	NA
	01/27/94	NR	NR	NR	NR	NR
S-15	05/03/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	08/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	10/09/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	01/25/90	<0.050	<0.0005	<0.001	<0.001	<0.001
	04/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	07/23/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/28/91	<0.050	<0.0005	0.0006	<0.0005	0.0008

Table 2 (Continued)

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-15	04/25/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/09/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/08/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	02/05/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/28/92	0.050	0.0008	0.0009	<0.0005	0.0014
	07/27/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/14/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/16/93	<0.050	0.0006	0.001	<0.0005	0.0007
	07/23/93	<0.050	0.0012	<0.0005	<0.0005	0.0016
	10/27/93	NA	NA	NA	NA	NA
	01/27/94	NA	NA	NA	NA	NA
S-16	05/04/89	0.38	0.044	0.003	0.002	<0.003
	08/10/89	<0.050	0.0006	<0.001	<0.001	<0.003
	10/10/89	<0.005	<0.0005	<0.001	<0.001	<0.003
	01/25/90	0.24	0.16	0.0033	0.0008	0.011
	04/18/90	<0.050	0.001	<0.0005	<0.0005	<0.001
	07/23/90	<0.050	0.0011	<0.0005	<0.0005	<0.0005
	10/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/28/91	<0.050	<0.0005	0.0006	<0.0005	0.0009
	04/25/91	0.060^	0.021	0.0005	0.0032	0.0048
	07/09/91	<0.050	0.001	<0.0005	<0.0005	<0.0005
	10/08/91	0.050	0.017	0.0014	0.0012	0.0055
	02/05/92	0.15	0.065	0.0007	<0.0005	0.0084
	04/28/92	<0.050	0.013	<0.0005	<0.0005	<0.0005
	07/27/92	0.51	0.13	<0.0025	<0.0005	0.021
	10/26/92	<0.050	<0.0005	<0.0005	<0.0025	<0.0005
	01/13/93	0.10	0.025	0.0019	<0.0005	0.0084
	04/16/93	0.15	0.056	0.0018	0.0046	0.012
	07/23/93	<0.050	0.0009	<0.0005	<0.0005	<0.0005
	10/27/93	<0.050	0.0015	<0.0005	<0.0005	<0.0005
	01/27/94	0.14	0.085	<0.0010	<0.0010	0.013
S-17	05/03/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	08/10/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	10/09/89	<0.050	<0.0005	<0.001	<0.001	<0.003
	01/25/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	04/18/90	<0.050	<0.0005	<0.0005	<0.0005	<0.001
	07/23/90	<0.050	<0.0005	<0.0005	<0.0005	<0.0005

Table 2 (Continued)

Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
S-17	10/18/90	0.39	0.010	0.062	0.022	0.11
	01/28/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/25/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/09/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/08/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/28/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/13/93	NR	NR	NR	NR	NR
	04/16/93	0.13	<0.0005	<0.0005	<0.0005	<0.0005
	07/23/93	NR	NR	NR	NR	NR
	10/27/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/27/94	NR	NR	NR	NR	NR
S-18	05/31/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/09/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/08/91	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	02/05/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/28/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/27/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/26/92	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/13/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	04/16/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/23/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	10/27/93	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/27/94	<0.050	0.0019	<0.0005	<0.0005	<0.0005
SR-1	03/22/89	5.4	1.1	0.23	0.35	1.3
	01/25/90	2.2	0.47	0.12	0.11	0.51
	04/18/90	1.0	0.13	0.047	0.047	0.22
	07/23/90	3.2	0.47	0.32	0.17	0.87
	10/18/90	1.3	0.28	0.0066	0.11	0.13
	01/28/91	0.11	0.12	0.012	0.051	0.11
	07/09/91	1.4	0.20	0.027	0.13	0.34
	10/08/91	0.98	0.079	0.0015	0.044	0.052
	02/05/92	3.8	0.58	0.036	0.32	0.40
	04/28/92	38	1.8	0.46	1.9	0.75
	07/27/92	FP	FP	FP	FP	FP
	10/26/92	1.8	0.37	0.010	0.13	0.13
	01/13/93	47	1.0	1.1	1.7	13

Table 2 (Continued)

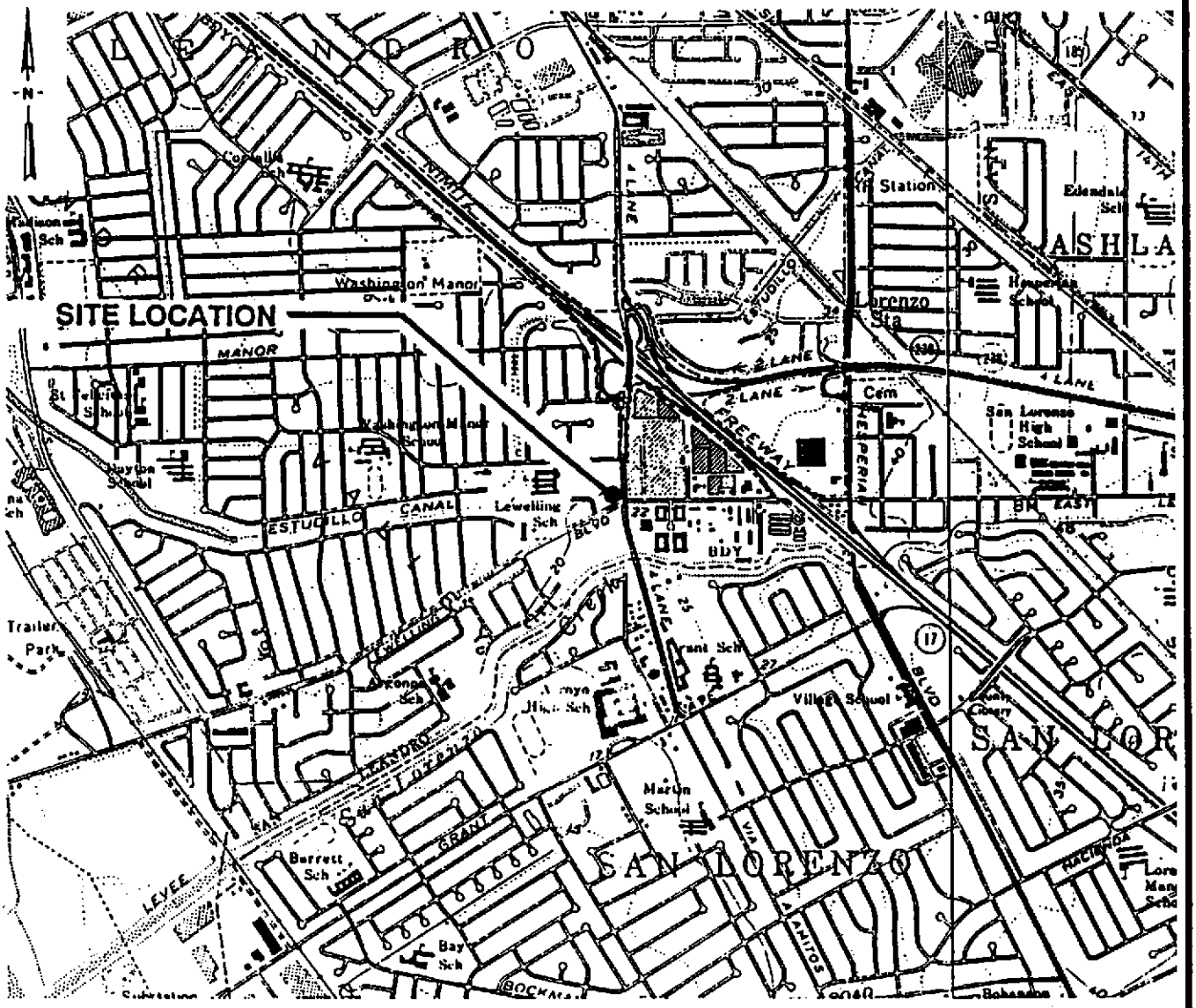
Summary of Historical Groundwater Analytical Results

(milligrams per liter)

Well Number	Sampling Date	TPHG	Benzene	Toluene	Ethylbenzene	Total Xylenes
SR-1	04/16/93	25	1.7	0.43	2.4	8.3
	07/23/93	33	2.4	2.0	3.8	14
	10/27/93	2.3	0.34	<0.0125	0.27	0.44
	01/27/94	36	2.0	1.7	3.0	11

TPHG = Total petroleum hydrocarbons as gasoline by EPA Method 8015 (modified).
BTEX = Benzene, toluene, ethylbenzene and total xylenes by EPA Method 8020.
NA = Not analyzed; well inaccessible.
NR = Not required.
* = Compounds detected within the chromatographic range of gasoline but not characteristic of the standard gasoline pattern.
** = The concentration reported as gasoline is primarily due to the presence of a discrete peak not indicative of gasoline.
^ = Compounds detected are volatile aromatics (BTEX) present in sample.

152753



SCALE: 0 2000 FEET

12/93

Base map from GeoStrategies, Inc.

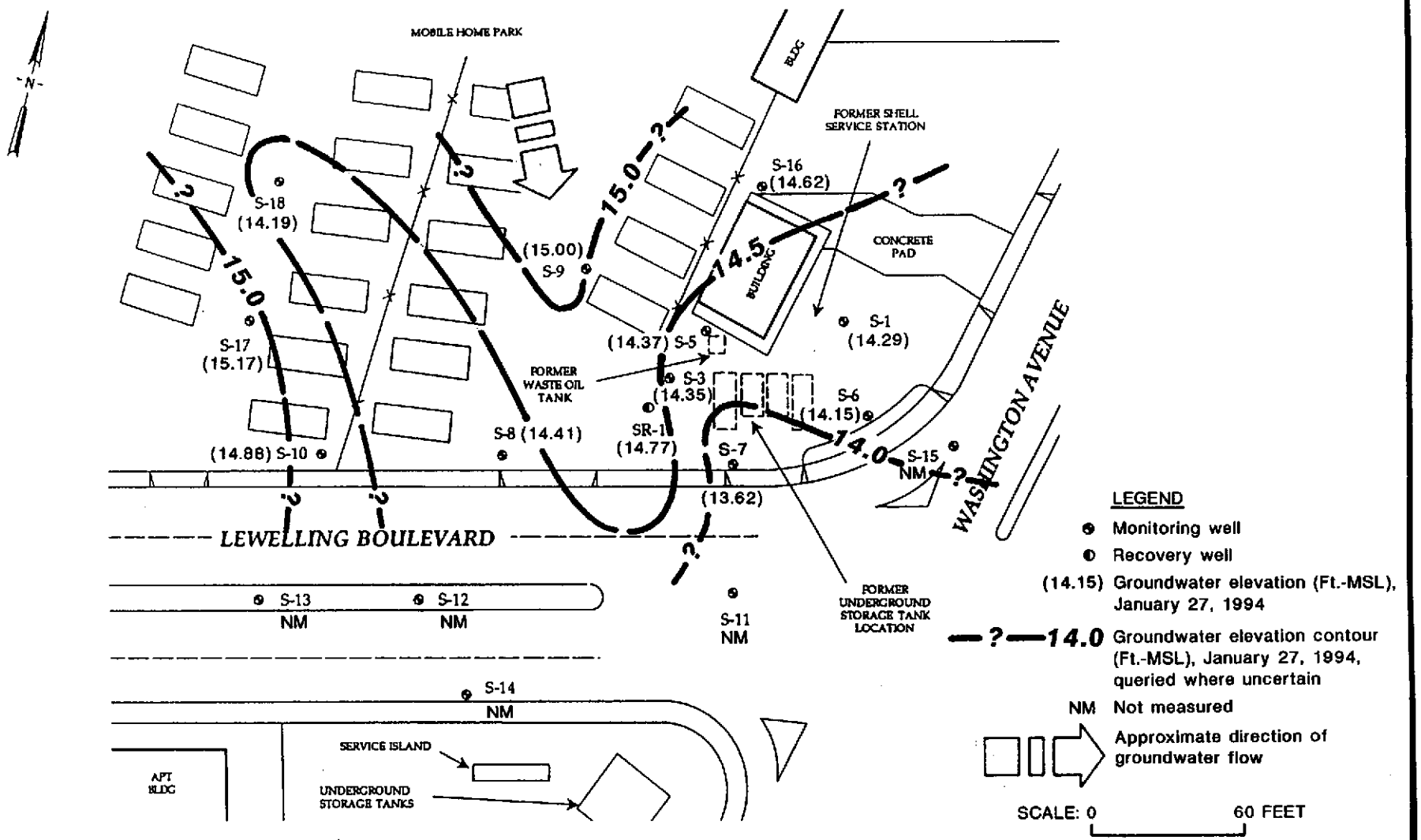
EMCON Associates

SHELL OIL COMPANY
FORMER SHELL SERVICE STATION
15275 WASHINGTON AVENUE
SAN LEANDRO, CALIFORNIA

SITE LOCATION MAP

FIGURE
1
PROJECT NO.
0117-115.01

149964



Base map from Hydro-Environmental Technologies, Inc.

3/94

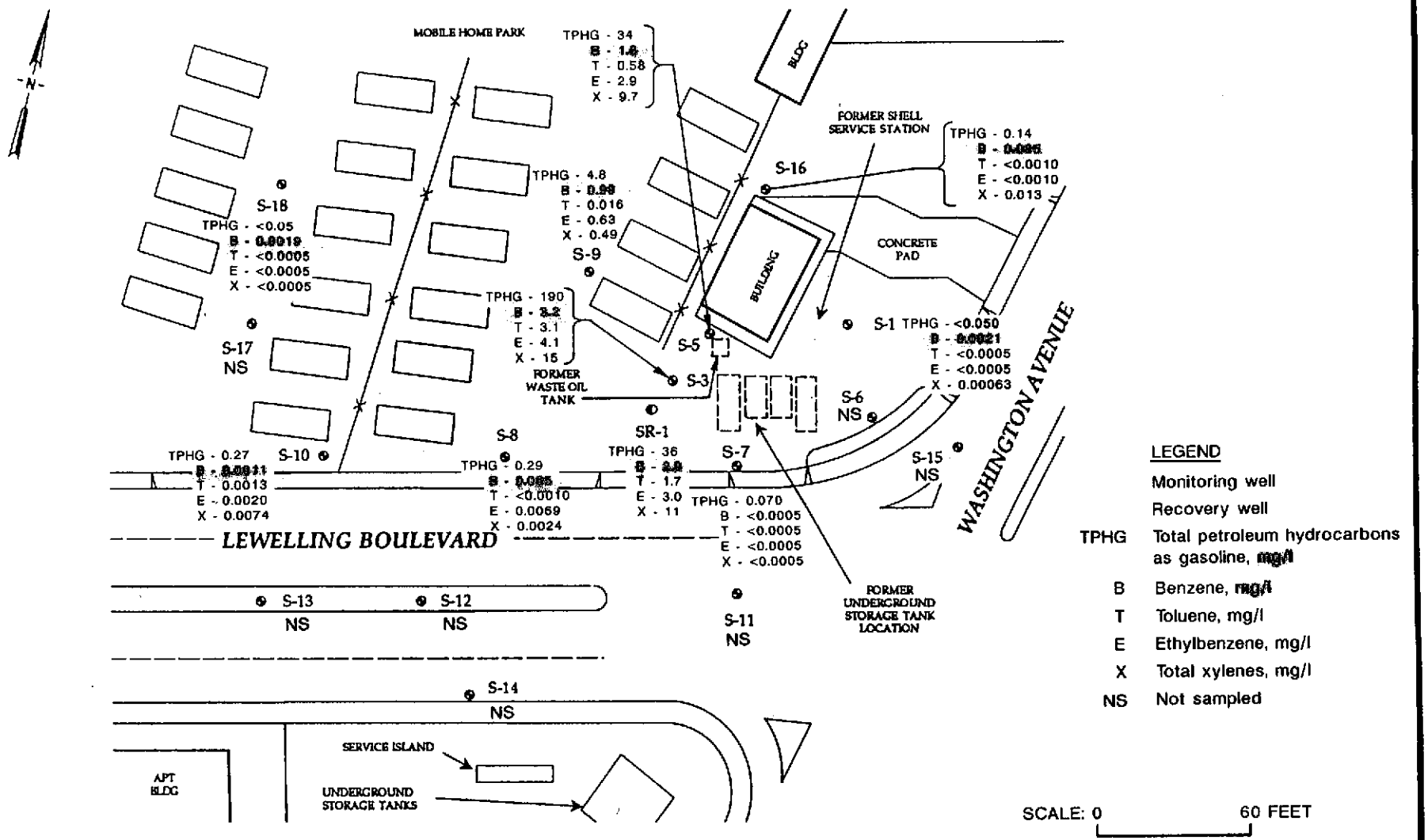
EMCON Associates
Sacramento, California

SHELL OIL COMPANY
FORMER SHELL SERVICE STATION
15275 WASHINGTON AVENUE
SAN LEANDRO, CALIFORNIA

GROUNDWATER CONTOUR MAP, JANUARY 27, 1994

FIGURE
2
PROJECT NO.
0117-115.01

149964



Base map from Hydro-Environmental Technologies, Inc.

3/94

EMCON Associates

SHELL OIL COMPANY
FORMER SHELL SERVICE STATION
15275 WASHINGTON AVENUE
SAN LEANDRO, CALIFORNIA

TPHG AND BTEX CONCENTRATION MAP,
JANUARY 27, 1994

FIGURE
3
PROJECT NO.
0117-115.01

ATTACHMENT A

QUARTERLY
GROUNDWATER SAMPLING REPORT 931027-W-1,
BLAINE TECH SERVICES, INC.

BLAINE
TECH SERVICES INC.

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

February 15, 1994

Shell Oil Company
P.O. Box 5278
Concord, CA 94520-9998

Attn: Lynn Walker

SITE:
Shell WIC #204-6852-1008
15275 Washington
San Leandro, California

QUARTER:
1st quarter of 1994

QUARTERLY GROUNDWATER SAMPLING REPORT 940127-F-1

This report contains data collected during routine inspection, gauging and sampling of groundwater monitoring wells performed by Blaine Tech Services, Inc. in response to the request of the consultant who is overseeing work at this site on behalf of our mutual client, Shell Oil Company. Data collected in the course of our field work is presented in a TABLE OF WELL GAUGING DATA. The field information was collected during our preliminary gauging and inspection of the wells, the subsequent evacuation of each well prior to sampling, and at the time of sampling.

Measurements taken include the total depth of the well and the depth to water. The surface of water was further inspected for the presence of immiscibles which may be present as a thin film (a sheen on the surface of the water) or as a measurable free product zone (FPZ). At intervals during the evacuation phase, the purge water was monitored with instruments that measure electrical conductivity (EC), potential hydrogen (pH), temperature (degrees Fahrenheit), and turbidity (NTU). In the interest of simplicity, fundamental information is tabulated here, while the bulk of the information is turned over directly to the consultant who is making professional interpretations and evaluations of the conditions at the site.

STANDARD PROCEDURES

Evacuation

Groundwater wells are thoroughly purged before sampling to insure that the sample is collected from water that has been newly drawn into the well from the surrounding geologic formation. The selection of equipment to evacuate each well is based on the physical characteristics of the well and what is known about the performance of the formation in which the well has been installed. There are several suitable devices which can be used for evacuation. The most commonly employed devices are air or gas actuated pumps, electric submersible pumps, and hand or mechanically actuated bailers. Our personnel frequently employ USGS/Middleburg positive displacement pumps or similar air actuated pumps which do not agitate the water standing in the well.

Normal evacuation removes three case volumes of water from the well. More than three case volumes of water are removed in cases where more evacuation is needed to achieve stabilization of water parameters and when requested by the local implementing agency. Less water may be removed in cases where the well dewaters and does not recharge to 80% of its original volume within two hours and any additional time our personnel have reason to remain at the site. In such cases, our personnel return to the site within twenty four hours and collect sample material from the water which has recharged into the well case.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site. Effluent water from purging and on-site equipment cleaning is collected and transported to Shell's Martinez Manufacturing Complex in Martinez, California.

Free Product Skimmer

The column headed, VOLUME OF IMMISCIBLES REMOVED (ml) is included in the TABLE OF WELL GAUGING DATA to cover situations where a free product skimming device must be removed from the well prior to gauging. Skimmers are installed in wells with a free product zone on the surface of the water. The skimmer is a free product recovery device which often prevents normal well gauging and free product zone measurements. The 2.0" and 3.0" PetroTraps fall into the category of devices that obstruct normal gauging. In cases where the consultant elects to have our personnel pull the skimmers out of the well and gauge the well, our personnel perform the additional task of draining the accumulated free product out of the PetroTrap before putting it back in the well. This

recovered free product is measured and logged in the VOLUME OF IMMISCIBLES REMOVED column. Gauging at such site is performed in accordance with specific directions from the professional consulting firm overseeing work at the site on Shell's behalf.

Sample Containers

Sample material is collected in specially prepared containers which are provided by the laboratory that performs the analyses.

Sampling

Sample material is collected in stainless steel bailer type devices normally fitted with both a top and a bottom check valve. Water is promptly decanted into new sample containers in a manner which reduces the loss of volatile constituents and follows the applicable EPA standard for handling volatile organic and semi-volatile compounds.

Following collection, samples are promptly placed in an ice chest containing prefrozen blocks of an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with a site designation and a discrete sample identification number specific to that particular groundwater well. Additional standard notations (e.g. time, date, sampler) are also made on the label.

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under a standard Shell Oil Company chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date, and signature of the person releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to Anametrix, Inc. in San Jose, California. Anametrix, Inc. is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #1234.

Objective Information Collection

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation 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. performs no consulting and does not become involved in the marketing or installation of remedial systems of any kind. Blaine Tech Services, Inc. is concerned only with the generation of objective information, not with the use of that information to support evaluations and recommendations concerning the environmental condition of the site. Even the straightforward interpretation of objective analytical data is better performed by interested regulatory agencies, and those engineers and geologists who are engaged in the work of providing professional opinions about the site and proposals to perform additional investigation or design remedial systems.

Reportage

Submission of this report and the attached laboratory report to interested regulatory agencies is handled by the consultant in charge of the project. Any professional evaluations or recommendations will be made by the consultant under separate cover.

Please call if we can be of any further assistance.

Richard C. Blaine

RCB/lp

attachments: table of well gauging data
chain of custody
certified analytical report

cc: EMCON Associates
1433 N. Market Blvd.
Sacramento, CA 95834-1943
ATTN: Bob Husk

TABLE OF WELL GAUGING DATA

WELL I.D.	DATA COLLECTION DATE	MEASUREMENT REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLES LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLES LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
S-1	1/27/94	TOB	ODOR	NONE	--	--	7.26	20.01
S-3	1/27/94	TOB	ODOR	--	--	--	6.79	15.60
S-5	1/27/94	TOB	ODOR	NONE	--	--	7.04	18.53
S-6	1/27/94	TOB	--	NONE	--	--	7.87	24.82
S-7	1/27/94	TOB	--	NONE	--	--	7.85	24.44
S-8 *	1/27/94	TOB	ODOR	NONE	--	--	6.31	24.34
S-9	1/27/94	TOB	ODOR	NONE	--	--	5.96	18.02
S-10	1/27/94	TOB	--	NONE	--	--	5.81	18.29
S-11	1/27/94	INACCESSIBLE						
S-12	1/27/94	INACCESSIBLE						
S-13	1/27/94	INACCESSIBLE						
S-14	1/27/94	INACCESSIBLE						
S-15	1/27/94	INACCESSIBLE						
S-16	1/27/94	TOB	--	NONE	--	--	7.20	24.35
S-17	1/27/94	TOB	--	NONE	--	--	5.78	24.42
S-18	1/27/94	TOB	--	NONE	--	--	6.84	18.15
SR-1	1/27/94	TOB	ODOR	NONE	--	--	6.68	21.30

* Sample DUP was a duplicate sample taken from well S-8.

1054

9401358 (18)

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 940122F1

Date:
Page 1 of 2

Site Address:	15275 Washington, San Leandro
WIC#:	204-6852-1008
Shell Engineer:	Lynn Walker — Phone No.: (510) 675-6170 Fax #: 675-6170
Consultant Name & Address:	Blaine Tech Services, Inc. 985 Timothy Drive, San Jose, CA 95133
Consultant Contact:	Jim Keller — Phone No.: (408) 995-5535 Fax #: 293-8773
Comments:	
Sampled by:	Tom Flory
Printed Name:	Tom Flory

LAB: Anametrix

CHECK ONE (1) BOX ONLY — CT/DT — TURN AROUND TIME

- Quarterly Monitoring XXX — 6441 — 24 hours ☐
- Site Investigation ☐ — 6441 — 48 hours ☐
- Soil Classify/Disposal ☐ — 6442 — 15 days X (Normal)
- Water Classify/Disposal ☐ — 6443 — Other ☐
- Soil/Air Rem. or Sys. O & M ☐ — 6462
- Water Rem. or Sys. O & M ☐ — 6463
- Other ☐

NOTE: Notify Lab ... soon as Possible of 24/48 hrs. TAT.

	Sample ID	Time	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size 40 ml VOA	Preparation Used HCl	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
1	S-1	1210	11/7/94			X		3						X				X	X			
2	S-3	1440				X		3						X				X	X			
3	S-5	1410				X		3						X				X	X			
4	S-7	1110				X		3						X				X	X			
5	S-8	1230				X		3						X				X	X			
6	S-9	1340				X		3						X				X	X			
7	S-10	1510				X		3						X				X	X			
8	S-16	1145				X		3						X				X	X			

Relinquished By (signature):	Printed Name:	Date: 11-23-94 Time: 1010	Received (signature):	Printed Name:	Date: 11-23-94 Time: 1019
Relinquished By (signature):	Printed Name: BENNY S. CARRIZOSA	Date: 11-23-94 Time: 1025	Received (signature):	Printed Name: Maria Barajas	Date: 11/23/94 Time: 10:25
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

1054

9401358 (18)

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 940127F1

Date:
Page 2 of 2

Site Address: 15275 Washington, San Leandro

WIC#: 204-6852-1008

Shell Engineer: Lynn Walker — Phone No.: (510) 675-6170 — Fax #: 675-6170

Consultant Name & Address: Blaine Tech Services, Inc. 985 Timothy Drive, San Jose, CA 95133

Consultant Contact: Jim Keller — Phone No.: (408) 995-5535 — Fax #: 293-8773

Comments:

Sampled by: [signature]

Printed Name: Tom Flory

LAB: Anametrix

CHECK ONE (1) BOX ONLY — CT/DT:
- Quarterly Monitoring [X] 5441
- Site Investigation [ ] 5441
- Soil Classify/Disposal [ ] 5442
- Water Classify/Disposal [ ] 5443
- Soil/Air Rem. or Sys. O & M [ ] 5452
- Water Rem. or Sys. O & M [ ] 5453
- Other [ ]

TURN AROUND TIME:
- 24 hours [ ]
- 48 hours [ ]
- 15 days [X] (Normal)
- Other [ ]

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

Analysis Required

Sample ID	Time	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size 40 ml VOA	Preparation Used HCl	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
(9) S-18	1050	1/27/94			X		3						X				X	X			
(10) SR-1	1315	|			X		3						X				X	X			
(11) EB	1115	|			X		3						X				X	X			
(12) Dup	—	|			X		3						X				X	X			
(13) TB	LAB	⊥			X		2						X				X	X			

Relinquished By (signature)	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
[signature]	Tim Flory	Date: 1-28-94 Time: 1010	[signature]	Benny S. Carrizosa	Date: 1-28-94 Time: 1010
[signature]	Benny S. Carrizosa	Date: 1-28-94 Time: 1025	[signature]	Maria Baraja	Date: 1/28/94 Time: 10:25
		Date: Time:			Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Inchcape Testing Services
Anametrix Laboratories

1961 Concourse Drive
Suite E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8198

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY DRIVE
SAN JOSE, CA 95133

Workorder # : 9401358
Date Received : 01/28/94
Project ID : 204-6852-1008
Purchase Order: MOH-B813

The following samples were received at Anametrix for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9401358- 1	S-1
9401358- 2	S-3
9401358- 3	S-5
9401358- 4	S-7
9401358- 5	S-8
9401358- 6	S-9
9401358- 7	S-10
9401358- 8	S-16
9401358- 9	S-18
9401358-10	SR-1
9401358-11	EB
9401358-12	DUP
9401358-13	TB

This report consists of 10 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call us as soon as possible. Thank you for using Anametrix.

Doug Robbins
Laboratory Director

2-11-94
Date

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY DRIVE
SAN JOSE, CA 95133

Workorder # : 9401358
Date Received : 01/28/94
Project ID : 204-6852-1008
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9401358- 1	S-1	WATER	01/27/94	TPHgBTEX
9401358- 2	S-3	WATER	01/27/94	TPHgBTEX
9401358- 3	S-5	WATER	01/27/94	TPHgBTEX
9401358- 4	S-7	WATER	01/27/94	TPHgBTEX
9401358- 5	S-8	WATER	01/27/94	TPHgBTEX
9401358- 6	S-9	WATER	01/27/94	TPHgBTEX
9401358- 7	S-10	WATER	01/27/94	TPHgBTEX
9401358- 8	S-16	WATER	01/27/94	TPHgBTEX
9401358- 9	S-18	WATER	01/27/94	TPHgBTEX
9401358-10	SR-1	WATER	01/27/94	TPHgBTEX
9401358-12	DUP	WATER	01/27/94	TPHgBTEX
9401358-13	TB	WATER	01/27/94	TPHgBTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY DRIVE
SAN JOSE, CA 95133

Workorder # : 9401358
Date Received : 01/28/94
Project ID : 204-6852-1008
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as gasoline for sample S-7 is primarily due to the presence of a discrete peak not indicative of gasoline.

Cheryl Balmer 2/9/94
Department Supervisor Date

Leena Shah 2/9/94
Chemist Date

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9401358
Matrix : WATER

Client Project ID : 204-6852-1008
Units : ug/L

Compound Name	Method Reporting Limit*	Client ID S-1 Lab ID 9401358-01	Client ID S-3 Lab ID 9401358-02	Client ID S-5 Lab ID 9401358-03	Client ID S-7 Lab ID 9401358-04	Client ID S-8 Lab ID 9401358-05
Benzene	0.50	2.1	3200	1800	ND	65
Toluene	0.50	ND	3100	580	ND	<1.0
Ethylbenzene	0.50	ND	4100	2900	ND	6.9
Total Xylenes	0.50	0.63	15000	9700	ND	2.4
TPH as Gasoline	50	ND	190000	34000	70	290
Surrogate Recovery		119%	107%	100%	119%	125%
Instrument ID		HP12	HP12	HP12	HP12	HP12
Date Sampled		01/27/94	01/27/94	01/27/94	01/27/94	01/27/94
Date Analyzed		02/04/94	02/04/94	02/04/94	02/04/94	02/04/94
RLMF		1	500	250	1	2
Filename Reference		FPJ35801.D	FRJ35802.D	FRJ35803.D	FPJ35804.D	FPJ35805.D

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.
TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Linda Shor 2/9/94
Analyst Date

Cheryl Balmer 2/9/94
Supervisor Date

Issued on 2/9/94 @ 1:20 pm

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9401358 | Client Project ID : 204-6852-1008

Matrix : WATER | Units : ug/L

Compound Name	Method Reporting Limit*	Client ID S-9 / Lab ID 9401358-06	Client ID S-10 / Lab ID 9401358-07	Client ID S-16 / Lab ID 9401358-08	Client ID S-18 / Lab ID 9401358-09	Client ID SR-1 / Lab ID 9401358-10
Benzene	0.50	990	1.1	85	1.9	2000
Toluene	0.50	16	1.3	<1.0	ND	1700
Ethylbenzene	0.50	630	2.0	<1.0	ND	3000
Total Xylenes	0.50	490	7.4	13	ND	11000
TPH as Gasoline	50	4800	270	140	ND	36000
Surrogate Recovery		115%	119%	125%	119%	105%
Instrument ID		HP12	HP12	HP12	HP12	HP12
Date Sampled		01/27/94	01/27/94	01/27/94	01/27/94	01/27/94
Date Analyzed		02/04/94	02/04/94	02/04/94	02/03/94	02/07/94
RLMF		25	1	2	1	250
Filename Reference		FRJ35806.D	FPJ35807.D	FPJ35808.D	FPJ35809.D	FRJ35810.D

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.

TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.

BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst   Date

Supervisor   Date 2/9/94

Issued on 2/9/94 @ 1:21 pm

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9401358
Matrix : WATER

Client Project ID : 204-6852-1008
Units : ug/L

Compound Name	Method Reporting Limit*	Client ID DUP Lab ID 9401358-12	Client ID TB Lab ID 9401358-13	Client ID Lab ID Method Blank	Client ID Lab ID Method Blank	Client ID Lab ID Method Blank
Benzene	0.50	71	ND	ND	ND	ND
Toluene	0.50	<1.0	ND	ND	ND	ND
Ethylbenzene	0.50	7.3	ND	ND	ND	ND
Total Xylenes	0.50	2.4	ND	ND	ND	ND
TPH as Gasoline	50	330	ND	ND	ND	ND
Surrogate Recovery		128%	111%	101%	112%	111%
Instrument ID		HP12	HP12	HP12	HP12	HP12
Date Sampled		01/27/94	01/27/94	N/A	N/A	N/A
Date Analyzed		02/04/94	02/04/94	02/03/94	02/04/94	02/07/94
RLMF		2	1	1	1	1
Filename Reference		FRJ35812.D	FPJ35813.D	BF0301E1.D	BF0401E1.D	BF0701E1.D

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.
TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Teresa Sloan 2/9/94
Analyst Date

Cheryl Balmer 2/9/94
Supervisor Date

Issued on 2/9/94 @ 1:22 pm

Matrix Spike Report

Total Petroleum Hydrocarbons as Gasoline

ITS - Anametrix Laboratories - (408)432-8192

Project ID : 204-6852-1008
Sample ID : S-18
Matrix : WATER
Date Sampled : 01/27/94

Laboratory ID : 9401358-09
Analyst : IS
Supervisor : CS
Instrument ID : HP12
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	SAMPLE RESULTS	MS RECOVERY	MSD RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS
Gasoline	500	ND	70%	78%	50-139	-11%	30
Surrogate Recovery		119%	114%	112%			
Date Analyzed		02/03/94	02/04/94	02/04/94			
Multiplier		1	1	1			
Filename Reference		FPJ35809.D	FMJ35809.D	FDJ35809.D			

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Matrix Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Project ID : 204-6852-1008
Sample ID : S-1
Matrix : WATER
Date Sampled : 01/27/94

Laboratory ID : 9401358-01
Analyst : IS
Supervisor : [illegible]
Instrument ID : HP12
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	SAMPLE RESULTS	MS RECOVERY	MSD RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS
Benzene	20	2.1	70%	95%	45-139	-30%	30
Toluene	20	ND	80%	100%	51-138	-22%	30
Ethylbenzene	20	ND	85%	110%	48-146	-26%	30
Total Xylenes	20	0.63	82%	102%	50-139	-22%	30
Surrogate Recovery		119%	105%	106%			
Date Analyzed		02/04/94	02/04/94	02/04/94			
Multiplier		1	1	1			
Filename Reference		FPJ35801.D	FMJ35801.D	FDJ35801.D			

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as Gasoline
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : IS
Supervisor : mg
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Gasoline	500	72%	56-141
Surrogate Recovery		109%	61-139
Date Analyzed		02/04/94	
Multiplier		1	
Filename Reference		MF0302E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : IS
Supervisor : MJ
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	20	95%	52-133
Toluene	20	100%	57-136
Ethylbenzene	20	105%	56-139
Total Xylenes	20	105%	56-141
Surrogate Recovery		103%	61-139
Date Analyzed		02/04/94	
Multiplier		1	
Filename Reference		MF0404E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as Gasoline
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : IS
Supervisor : [signature]
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Gasoline	500	82%	56-141
Surrogate Recovery		102%	61-139
Date Analyzed		02/08/94	
Multiplier		1	
Filename Reference		MF0702E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

WELL GAUGING DATA

WIC# 204 6852 1008

Project # 940127 F1 Date 1-27-94 Client Shell

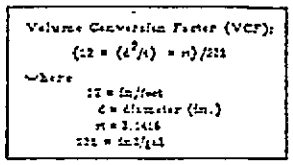
Site 15275 Washington San Leandro, CA.

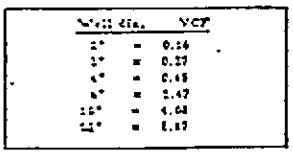
	Well I.D.	Well Size (in.)	Sheen/ Odor	Depth to Immiscible Liquid (feet)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to Water (feet)	Depth to Well Bottom (feet)	Survey Point: TOB or TOC
	S-1	3	odor				7.26	20.01	TOB
	S-3	3					6.79	15.60	
	S-5	4	odor				7.04	18.53	
*	S-6	3					7.87	24.82	
	S-7	3					7.85	24.44	
	S-8	3	odor				6.31	24.34	
	S-9	3	odor				5.96	18.02	
	S-10	3					5.81	18.29	
	S-16	3					7.20	24.35	
*	S-17	3					5.78	24.42	
	S-18	3					6.84	18.15	
	SR-1	6	strong gas odor				6.68	21.30	
	S-11, S-12, S-13, S-14 & S-15 STILL INACCESSIBLE DUE TO ROAD PAVING								

* Gauge only

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: Tom	Date Sampled: 1-27-94
Well I.D.: S-1	Well Diameter: (circle one) 2 (3) 4 6 ____
Total Well Depth: Before 20.01 After	Depth to Water: Before 7.26 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC (Grade) Other --	





4.5	x	4	=	18
1 Case Volume		Specified Volumes		gallons

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:
1156	68.7	7.7	1700	>200	4.5	gas odor
1200	68.5	7.6	1500	>200	9.0	
1203	69.1	7.5	1400	>200	13.5	
1207	69.4	7.6	1400	>200	18.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 18.0

Sampling Time: 1210

Sample I.D.: S-1 Laboratory: SA

Analyzed for: TPH G-BTEX

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

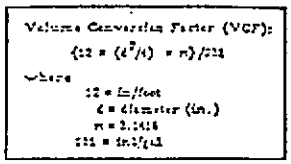
Analyzed for: TPH G-BTEX

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: TOM	Date Sampled: 1-27-94
Well I.D.: S-3	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 15.60 After	Depth to Water: Before 6.79 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC (Grade) Other --	



Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
10"	= 4.08
12"	= 5.87

3.0	x	4	=	12.0
1 Case Volume		Specified Volumes		gallons

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:
1422	67.6	7.8	1800	>200	3.0	SLIGHT gas odor
1426	67.9	7.9	1900	>200	6.0	↓
1430	68.2	7.9	1700	147.4	9.0	
1437	67.7	7.9	1800		12.0	↓

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 12.0

Sampling Time: 1440

Sample I.D.: S-3 Laboratory: (A)

Analyzed for: TPHG - BTEX

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

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: Tom	Date Sampled: 1-27-94
Well I.D.: S-5	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 18.53 After	Depth to Water: Before 7.04 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC (Grade) Other --	

Volume Conversion Factor (VCF):
$(2 = (d^2/4) \times \pi)/231$
where
2 = in./foot
d = diameter (in.)
π = 3.1416
231 = in³/gal

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
10"	= 4.08
12"	= 5.87

7.5 (1 Case Volume) × 4 (Specified Volumes) = 30.0 gallons

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:
1351	69.6	7.8	1100	>200	7.5	gas odor
1355	68.2	7.8	1200	>200	15.0	
1402	67.3	7.8	1200	123.6	22.5	
1407	67.6	7.8	1500	167.1	30.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 30.0

Sampling Time: 1410

Sample I.D.: S-5 Laboratory: (A)

Analyzed for: TPHG-BTEX

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

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: Tom	Date Sampled: 1-27-94
Well I.D.: S-7	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 24.44 After	Depth to Water: Before 7.85 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (Grade)	Other --

Volume Conversion Factor (VCF):

$(12 \times (d^2/4) \times \pi)/231$

where

12 = in/foot

d = diameter (in.)

π = 3.1416

231 = in^3/gal

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
10"	= 4.08
12"	= 5.87

1 Case Volume		Specified Volumes		gallons
6.0	x	4	=	24.0

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:
1058	67.8	7.7	2500	>200	6.0	
1059	69.6	7.9	2600	>200	12.0	
1103	69.8	8.0	2600	>200	18.0	
1105	70.0	8.0	2600	>200	24.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 24.0

Sampling Time: 1110

Sample I.D.: S-7 Laboratory: A

Analyzed for: TPHG BTEX

Duplicate I.D.: Cleaning Blank I.D.: EB 1115

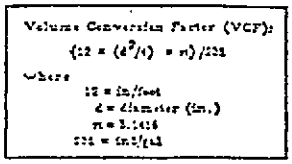
Analyzed for:

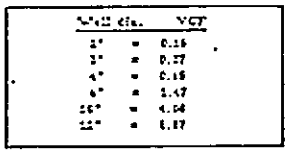
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: Tom	Date Sampled: 1-27-94
Well I.D.: S-8	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 24.34 After	Depth to Water: Before 6.31 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC (Grade) Other --	





1 Case Volume	x	Specified Volumes	=	gallons
6.5	x	4	=	26.0

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:
1218	68.4	7.6	1500	>200	6.5	odor
1222	68.6	7.6	1400	>200	13.0	
1225	67.1	7.6	1500	>200	19.5	
1227	66.8	7.6	1200	>200	26.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 26.0

Sampling Time: 1230

Sample I.D.: S-8 Laboratory: (ED)

Analyzed for: TPHG - BTEX

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

Analyzed for: TPHG - BTEX

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: Tom	Date Sampled: 1-27-94
Well I.D.: S-9	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 18.02 After	Depth to Water: Before 5.96 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC (Grade) Other --	

Volume Conversion Factor (VCF):
$(12 \times (d^2/4) \times \pi)/231$
where
12 = in./foot
d = diameter (in.)
π = 3.1416
231 = in.^{3}/gal

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
10"	= 4.08
12"	= 5.87

4.5	x	4	=	18
1 Case Volume		Specified Volumes		gallons

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:
1322	69.0	7.7	1000	>200	4.5	strong gas odor
1327	69.8	7.8	1000	>200	9.0	↓
1329	69.7	7.7	1100	143.1	13.5	
1334	69.6	7.7	1100	118.4	18.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 18.0

Sampling Time: 1340

Sample I.D.: S-9 Laboratory: A

Analyzed for: TPHG - BTEX

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

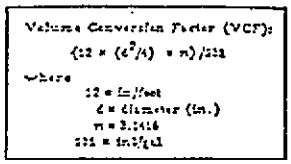
Analyzed for:

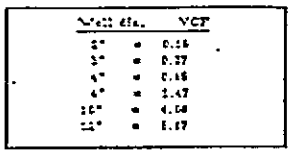
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1003
Sampler: Tom	Date Sampled: 1-27-94
Well I.D.: S-10	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 18.29 After	Depth to Water: Before 5.81 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC)	Grade Other --





4.5	x	4	=	18.0
1 Case Volume		Specified Volumes		gallons

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:
1450	66.9	7.6	1000	>200	4.5	
1454	67.7	8.0	800	>200	9.0	
1459	67.3	8.0	700	178.4	13.5	
1503	67.8	8.1	760	>200	18.0	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 18.0

Sampling Time: 1510

Sample I.D.: S-10 Laboratory: (A)

Analyzed for: TPHG' BTEX

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

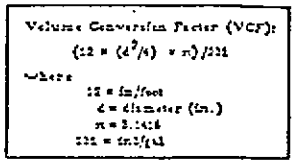
Analyzed for:

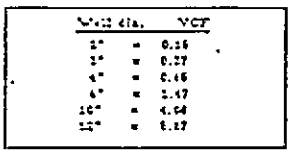
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: Tom	Date Sampled: 1-27-94
Well I.D.: S-16	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 24.35 After	Depth to Water: Before 7.22 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (TOC) Grade	Other --





6.5	x	4	=	26.0
1 Case Volume		Specified Volumes		gallons

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:
1130	65.7	7.4	1800	>200	6.5	
1134	66.5	7.5	2000	>200	13.0	
1137	66.5	7.4	2000	181.6	19.5	
1141	66.8	7.5	1800	>200	26.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 26.0

Sampling Time: 1145

Sample I.D.: S-16 Laboratory: (H)

Analyzed for: TPHG-BTEX

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

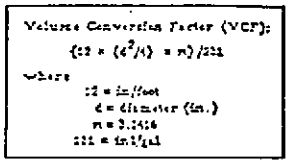
Analyzed for:

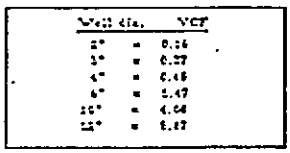
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: TOM	Date Sampled: 1-27-94
Well I.D.: S-18	Well Diameter: (circle one) 2 (3) 4 6 ____
Total Well Depth: Before 18.15 After	Depth to Water: Before 6.84 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC ~~Grade~~	Other --





4.0 (1 Case Volume) × 4 (Specified Volumes) = 16.0 gallons

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:
1030	65.0	7.6	1100	37.8	4.0	
1034	66.8	7.6	1500	42.1	8.0	
1039	68.8	7.6	1000	49.8	12.0	
1042	67.4	7.6	900	66.5	16.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 16.0

Sampling Time: 1050

Sample I.D.: S-18 Laboratory: (K)

Analyzed for: TPH 6 - BTEX

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

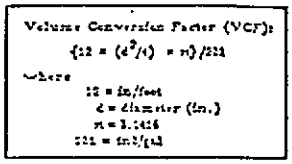
Analyzed for:

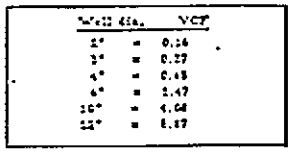
Shipping Notations:

Additional Notations: Slow Recharge

SHELL WELL MONITORING DATA SHEET

Project #: 940127F1	Wic # 204 6852 1008
Sampler: TOM	Date Sampled: 1-27-94
Well I.D.: SR-1	Well Diameter: (circle one) 2 3 4 6 ___
Total Well Depth: Before 21.30 After	Depth to Water: Before 6.68 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC Grade Other --	





1 Case Volume	x	Specified Volumes	=	gallons
21.5	x	4	=	86.0

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:
1248	67.4	7.9	1100	93.6	21.5	odor
1254	66.8	7.8	900	31.5	43.0	
1302	67.9	7.9	950	22.8	64.5	STRONG GAS odor
1310	68.6	7.8	960	32.5	86.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 86.0

Sampling Time: 1315

Sample I.D.: SR-1 Laboratory: A

Analyzed for: TPHG - BTEX

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

Analyzed for:

Shipping Notations:

Additional Notations: