Weiss Associates Environmental and Geologic Services

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July 24, 1995

Barney Chan
Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

Re: **Second Quarter 1995**
Shell Service Station
WIC #204-5508-5801
630 High Street
Oakland, California
ACDEH STID #3737
WA Job #81-0602-205

Dear Mr. Chan:

This status report satisfies the quarterly reporting requirements prescribed by California Administrative code Title 23 Waters, Division 3, Chapter 16, Article 5, Section 2652.d.

Second Quarter 1995 Activities:

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured depths to ground water and collected ground water samples from the site wells. The BTS report describing these activities and the analytic report for the ground water samples are included as Attachment A.

- Weiss Associates (WA) compiled the ground water elevation and analytic data (Tables 1 and 2), and prepared a map showing ground water elevations and benzene concentrations (Figure 2).

- WA submitted a request to the Alameda County Department of Environmental Health to establish a Non-Attainment Area at this site.

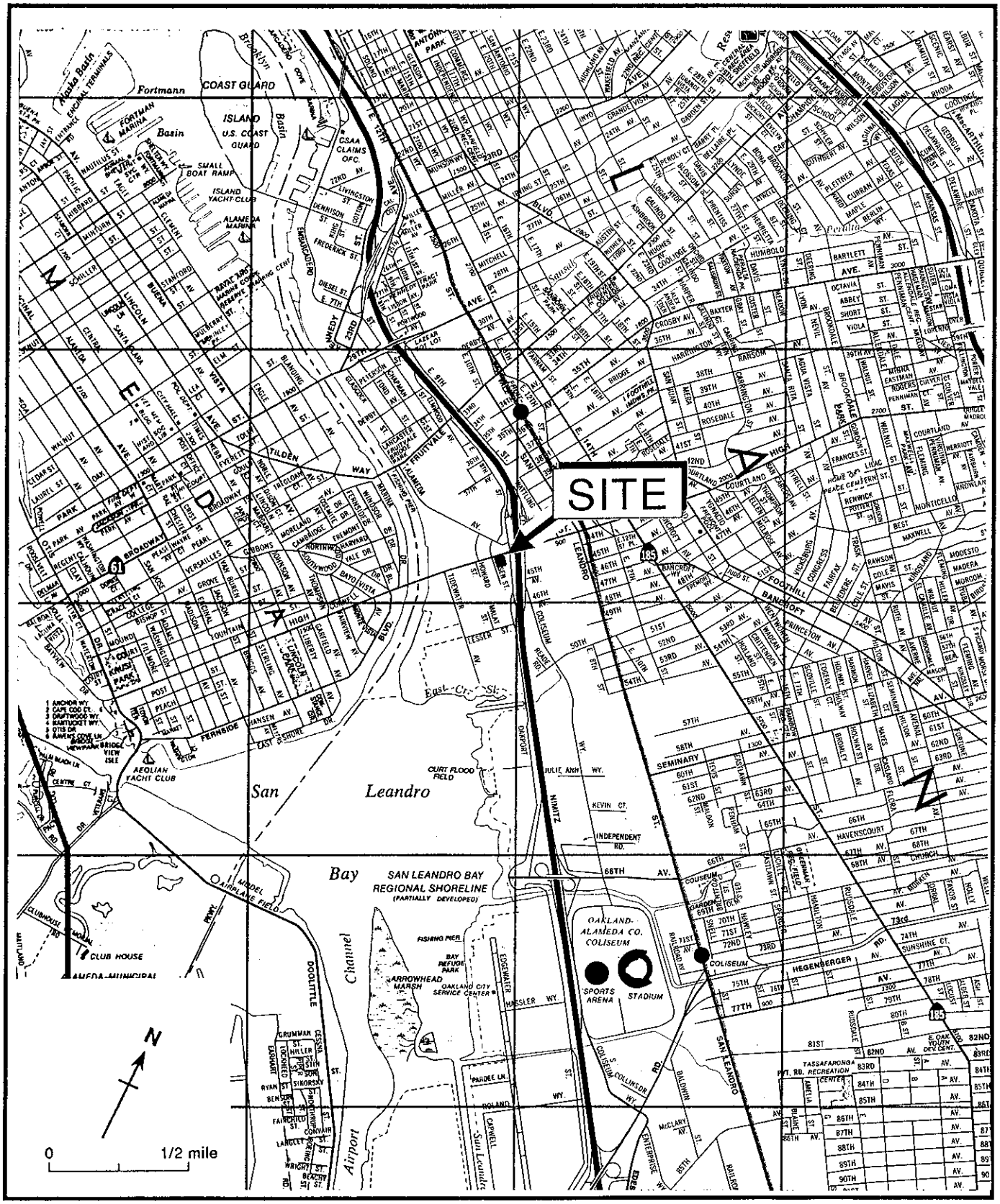

Figure 1. Site Location Map - Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California

2/28/92

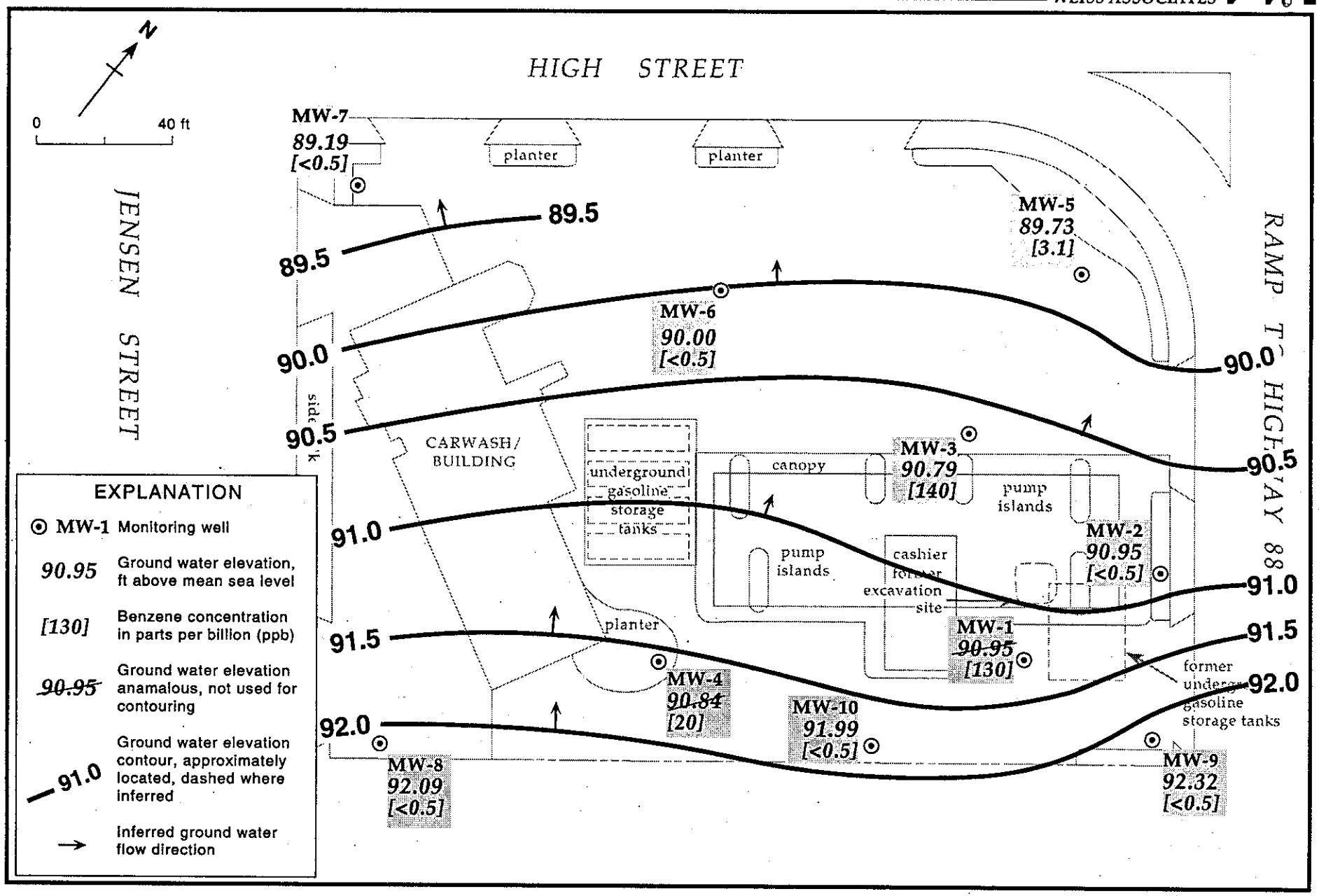

Figure 2. Monitoring Well Locations, Ground Water Elevation Contours and Benzene Concentrations in Ground Water - May 4, 1995 - Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California

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06/15/95

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	01/29/91	99.35	10.79	88.56
	04/30/91		9.48	89.87
	07/22/91		10.53	88.82
	02/21/92		8.31	91.04
	05/22/92		10.02	89.33
	07/07/92		10.06	89.29
	08/20/92		10.32	89.03
	11/18/92		10.64	88.71
	02/09/93		8.71	90.64
	06/16/93		9.71	89.64
	08/24/93		10.23	89.12
	11/23/93		10.48	88.87
	02/14/94		9.17	90.18
	05/25/94		9.52	89.83
	08/04/94		10.51	88.84
	11/08/94		10.20	89.15
	02/01/95		6.94	92.41
	05/04/95		**8.40**	**90.95**
MW-2	01/29/91	101.15	13.25	87.90
	04/30/91		10.94	90.21
	07/22/91		12.14	89.01
	02/21/92		10.08	91.07
	05/22/92		11.52	89.63
	07/07/92		11.50	89.65
	08/20/92		11.72	89.43
	11/18/92		13.06	88.09
	02/09/93		10.06	91.09
	06/16/93		11.60	89.55
	08/24/93		12.16	88.99
	11/23/93		12.74	88.41
	02/14/94		10.91	90.24
	05/25/94		11.06	90.09
	08/04/94		12.04	89.11
	11/08/94		12.38	88.77
	02/01/95		8.76	92.39
	05/04/95		**10.20**	**90.95**

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-3	01/29/91	99.49	11.09	88.40
	04/30/91		9.57	89.92
	07/22/91		10.66	88.83
	02/21/92		8.97	90.52
	05/22/92		9.32	90.17
	07/07/92		10.22	89.27
	08/20/92		10.44	89.05
	11/18/92		10.79	88.70
	02/09/93		9.35	90.14
	06/16/93		9.56	89.93
	08/24/93		10.51	88.98
	11/23/93		10.77	88.72
	02/14/94		9.61	89.88
	05/25/94		10.00	89.49
	08/04/94		10.63	88.86
	11/08/94		11.02	88.47
	02/01/95		8.31	91.18
	05/04/95		**8.70**	**90.79**
MW-4	01/29/91	99.24	10.76	88.48
	04/30/91		9.45	89.79
	07/22/91		10.34	88.90
	02/21/92		7.60	91.64
	05/22/92		9.90	89.34
	07/07/92		10.02	89.22
	08/20/92		10.32	88.92
	11/18/92		10.51	88.73
	02/09/93		8.13	91.11
	06/16/93		9.60	89.64
	08/24/93		10.05	89.19
	11/23/93		10.25	89.99
	02/14/94		8.83	90.41
	05/25/94		9.64	89.60
	08/04/94		10.62	88.62
	11/08/94		9.28	89.96
	02/01/95		6.52	92.72
	05/04/95		**8.40**	**90.84**

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-5	01/29/91	100.08	11.72	88.36
	04/30/91		10.45	89.63
	07/22/91		11.43	88.65
	02/21/92		9.24	90.84
	05/22/92		10.97	89.11
	07/07/92		10.98	89.10
	08/20/92		11.14	88.94
	11/18/92		11.21	88.87
	02/09/93		10.01	90.07
	06/16/93		11.05	89.03
	08/24/93		11.32	88.76
	11/23/93		11.35	88.73
	02/14/94		10.34	89.74
	05/25/94		10.54	89.54
	08/04/94		11.50	88.58
	11/08/94		11.24	88.84
	02/01/95		9.05	91.03
	05/04/95		**10.35**	**89.73**
MW-6	01/29/91	98.56	10.23	88.33
	04/30/91		9.15	89.41
	07/22/91		10.10	88.46
	02/21/92		7.15	91.41
	05/22/92		9.55	89.01
	07/07/92		9.53	89.03
	08/20/92		9.84	88.72
	11/18/92		10.03	88.53
	02/09/93		7.91	90.65
	06/16/93		8.74	89.82
	08/24/93		9.66	88.90
	11/23/93		9.86	88.70
	02/14/94		8.27	90.29
	05/25/94		8.89	89.67
	08/04/94		10.10	88.46
	11/08/94		8.98	89.58
	02/01/95		7.07	91.49
	05/04/95		**8.56**	**90.00**
MW-7	01/29/91	97.53	8.91	88.62
	04/30/91		8.38	89.15
	07/22/91		9.13	88.40
	02/21/92		6.87	90.66
	05/22/92		8.08	89.45
	07/07/92		8.82	88.71
	08/20/92		8.89	88.64

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	11/18/92		9.54	87.99
	02/09/93		7.84	89.69
	06/16/93		7.80	89.73
	08/24/93		8.51	89.02
	11/23/93		8.70	88.83
	02/14/94		7.52	90.01
	05/25/94		9.04	88.49
	08/04/94		9.80	87.83
	11/08/94		8.45	89.08
	02/01/95		5.51	92.02
	05/04/95		**8.34**	**89.19**
MW-8	01/29/91	97.13	8.47	88.66
	04/30/91		7.64	89.49
	07/22/91		8.36	88.77
	02/21/92		6.54	90.59
	05/22/92		7.68	89.45
	07/07/92		8.16	88.97
	08/20/92		8.25	88.88
	11/18/92		8.32	88.81
	02/09/93		5.58	91.55
	06/16/93		7.19	89.94
	08/24/93		7.98	89.15
	11/23/93		8.09	89.04
	02/14/94		9.42	87.71
	05/25/94		7.18	89.95
	08/04/94		8.51	88.62
	11/08/94		6.24	90.89
	02/01/95		3.94	93.19
	05/04/95		**5.04**	**92.09**
MW-9	01/29/91	99.72	8.27	91.45
	04/30/91		7.62	92.10
	07/22/91		8.48	91.24
	02/21/92		6.91	92.81
	05/22/92		8.64	91.08
	07/07/92		7.55	92.17
	08/20/92		7.38	92.34
	11/18/92		10.17	89.55
	02/09/93		6.89	92.83
	06/16/93		8.74	90.98
	08/24/93		8.32	91.40
	11/23/93		8.17	91.55
	02/14/94		7.67	92.05
	05/25/94		7.89	91.83

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	08/04/94		9.76	89.96
	11/08/94		7.75	91.97
	02/01/95		5.66	94.06
	05/04/95		**7.40**	**92.32**
MW-10	01/29/91	98.99	10.81	88.18
	04/30/91		8.79	90.20
	07/22/91		9.94	89.05
	02/21/92		9.11	89.88
	05/22/92		9.14	89.85
	07/07/92		9.87	89.12
	08/20/92		9.30	89.69
	11/18/92		10.21	88.78
	02/09/93		7.63	91.36
	06/16/93		8.57	90.42
	08/24/93		9.61	89.38
	11/23/93		10.10	88.89
	02/14/94		9.01	89.98
	05/25/94		8.84	90.15
	08/04/94		9.82	89.17
	11/08/94		9.40	89.59
	02/01/95		6.78	92.21
	05/04/95		**7.00**	**91.99**

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Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	B	E	T	X	VOCs
			← parts per billion (ug/L) →							
MW-1	01/29/91	10.79	11,000	21,000[a]	<500	310	500	41	400	---
Quarterly	04/30/91	9.48	8,300	2,100	<500	250	310	32	300	---
	07/22/91	10.53	11,000	3,800	<500	310	290	36	280	---
	02/24/92	8.31	7,300	8,900[b]	800	200	340	36	270	---
	05/22/92	10.02	7,600	18,000[bc]	---	140	300	<50	140	---
	07/07/92	10.06	---	---	---	---	---	---	---	---
	08/20/92	10.32	9,100	5,200[b]	---	530	860	340	540	---
	11/18/92	10.64	15,000	4,100[b]	---	220	790	50	340	---
	02/09/93	8.71	7,000	1,200		130	220	23	160	---
	06/16/93	9.71	4,800	---	---	150	320	31	130	---
	08/24/93	10.23	10,000	---	---	170	610	27	170	---
	11/23/93	10.48	7,600	---	---	190	430	<12	140	---
	11/23/93[dup]	10.48	4,800	---	---	190	430	15	130	---
	02/14/94	9.17	8,000	---	---	150	210	47	68	---
	02/14/94[dup]	9.17	8,900	---	---	160	230	45	76	---
	05/25/94	9.52	8,800	---	---	95	210	<10	63	---
	08/04/94	10.51	6,200	---	---	150	350	14	180	---
	08/04/94[dup]	10.51	6,200	---	---	170	280	16	160	---
	11/08/94	10.20	7,600	---	---	190	480	<10	200	---
	02/01/95	6.94	8,200	---	---	130	170	21	130	---
	02/01/95[dup]	6.94	7,100	---	---	130	170	18	130	---
	05/04/95	**8.40**	**7,000**	**---**	**---**	**130**	**190**	**47**	**180**	**---**
	05/04/95[dup]	**8.40**	**6,800**	**---**	**---**	**130**	**180**	**46**	**180**	**---**
MW-2	01/29/91	13.25	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	---
Semi-annual	04/30/91	10.94	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	---
(2nd & 4th	07/22/91	12.14	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	---
Quarter)	02/23/92	10.08	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/22/92	11.52	<50	---	---	<0.5	<0.5	<0.5	<0.5	---

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Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	B	E	T	X	VOCs
			← parts per billion (ug/L) →							
	07/07/92	11.50	---	---	---	---	---	---	---	---
	08/20/92	11.72	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/18/92	13.06	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/09/93	10.046	95	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/16/93	11.60	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/24/93	12.16	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/23/93	12.74	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/14/94	10.91	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/25/94	11.06	100	---	---	1.2	2.3	4.9	13	---
	11/08/94	12.38	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/04/95	**10.20**	**<50**	**—**	**—**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**—**
MW-3 Quarterly	01/29/91	11.09	2,300	410[a]	<500	17	10	14.1	230	---
	04/30/91	9.57	<50	260	<500	22	7.0	4.0	17	---
	07/22/91	10.66	2,000	310	<500	51	<0.5	<0.5	<0.5	---
	02/24/92	8.97	2,800	640[d]	---	15	<2.5	2.8	12	---
	05/22/92	9.32	3,700	220[bc]	---	27	20	11	110	---
	07/07/92	10.22	---	---	---	---	---	---	---	---
	08/20/92	10.44	13,000	340[b]	---	72	71	85	140	---
	11/18/92	10.79	2,100	430[b]	---	21	11	3.6	13	---
	02/09/93	9.35	3,300	83	---	21	6.1	5.6	<0.5	---
	02/02/93[dup]	9.35	3,500	130	---	18	7.2	8.8	<0.5	---
	06/16/93	9.56	3,500[e]	---	---	66	<0.5	6	<0.5	---
	08/24/93	10.51	3,400[e]	---	---	110	<5	<5	<5	---
	11/23/93	10.77	3,000	---	---	36[f]	6.9	44	23	---
	02/14/94	9.61	4,700[g]	---	---	9.9	8.8	5.2	<5.0	---
	05/25/94	10.00	1,200	---	---	<10	<10	<10	<10	---
	08/04/94	10.63	2,600	---	---	29	14	<5	11	---

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Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	B	E	T	X	VOCs
			← parts per billion (ug/L) →							
	11/08/94	11.02	2,600	---	---	5.5	1.9	1.5	0.9	---
	11/08/94[dup]	11.02	2,700	---	---	12	6.8	5.0	3.5	---
	02/01/95	8.31	4,600	---	---	27	3.2	1.2	2.5	---
	05/04/95	**8.70**	**1,800**	**—**	**—**	**140**	**11**	**11**	**16**	**—**
MW-4	01/29/91	10.76	2,600	1,300	<500	83	<0.5	<0.5	110	---
Quarterly	04/30/91	9.45	2,600	750	<500	22	7.0	4.0	17	---
	07/22/91	10.34	4,300	1,200	<500	120	<0.5	<0.5	10	---
	02/24/92	7.60	2,000	8,300[b]	---	31	3.5	6.3	6.6	---
	05/22/92	9.90	3,600	3,400[bc]	---	55	3	5	10	---
	07/07/92	10.02	---	---	---	---	---	---	---	---
	08/20/92	10.32	3,100	3,400	---	100	14	45	45	---
	11/18/92	10.51	2,200	1,400	---	32	4.2	12	24	---
	02/09/93	8.13	1,500	180	---	1.1	<0.5	<0.5	<0.5	---
	06/16/93	9.60	1,100	---	---	120	5.1	47	19	---
	08/24/93	10.05	2,700	---	---	46	25	11	0.97	---
	11/23/93	10.25	2,500	---	---	23	3.7	5.7	16	---
	02/14/94	8.83	1,500	---	---	12	<2.5	7.8	<2.5	---
	05/25/94	9.64	810	---	---	20	<2	<2	4.0	---
	08/04/94	10.62	2,300	---	---	99	6.3	15	24	---
	11/08/94	9.28	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/01/95	6.52	960	---	---	5.6	2.6	2.2	2.8	---
	05/04/95	**8.40**	**960**	**—**	**—**	**20**	**3.7**	**4.7**	**5.6**	**—**
MW-5	01/29/91	11.72	3,100	720	<500	86	24	<0.5	28	---
Quarterly	04/30/91	10.45	<50	90	<500	46	9.0	<0.5	9	---
	07/22/91	11.43	1,700	300	<500	23	6,700	<0.5	10,000	---
	02/23/94	9.24	240	180[h]	<0.5	1	<0.5	<0.5	1	---
	05/22/92	10.97	6,200	7,100[bc]	---	6	56	95	99	---

Weiss Associates

Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	B	E	T	X	VOCs
			← parts per billion (ug/L) →							
	07/07/92	10.98	---	---	---	---	---	---	---	---
	08/20/92	11.14	7,400	120[b]	---	56	91	95	150	---
	11/18/92	11.21	3,300	320[b]	---	27	20	<12.5	470	---
	02/09/93	10.01	160	<50	---	<0.5	<0.5	<0.5	<0.5	---
	06/16/93	11.05	140	---	---	0.8	<0.5	<0.5	<0.5	---
	08/24/93	11.32	1,000	---	---	7.9	2.2	<1	<1.5	---
	11/23/93	11.35	2,000	---	---	67	11	15	33	---
	02/14/94	10.34	660	---	---	1.3	0.5	<0.5	0.7	---
	05/25/94	10.54	670	---	---	0.65	2.6	<0.5	<0.5	---
	08/04/94	11.50	700	---	---	5.0	1.2	<0.5	<0.5	---
	11/08/94	11.24	810	---	---	4.2	1.5	<0.5	0.8	---
	02/01/.95	9.05	110	---	---	7.0	<0.5	<0.5	<0.5	---
	05/04/95	**10.35**	**260**	**---**	**---**	**3.1**	**2.0**	**1.3**	**1.5**	**---**
MW-6 Quarterly	01/29/91	10.23	<50	860	<500	<0.5	<0.5	<0.5	<0.5	---
	04/30/91	9.15	<50	1,100	<500	<0.5	<0.5	<0.5	<0.5	---
	07/22/91	10.10	<50	1,200	<500	<0.5	<0.5	<0.5	<0.5	---
	02/23/92	7.15	<50	60[d]	---	<0.5	<0.5	<0.5	<0.5	---
	05/22/92	9.55	<50	650[c]	---	<0.5	<0.5	<0.5	<0.5	---
	07/07/92	9.53	---	---	---	---	---	---	---	---
	08/20/92	9.84	140[e]	510[c]	---	<0.5	<0.5	<0.5	<0.5	---
	11/18/92	10.03	200[e]	350	---	<0.5	<0.5	<0.5	<0.5	---
	02/09/93	7.91	14,000	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/16/93	8.74	5,700[e]	---	---	<0.5	<0.5	22	34	---
	06/16/93[dup]	8.74	5,600	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/24/93	9.66	4,300[e]	---	---	<12.5	<12.5	<12.5	<12.5	---
	08/24/93[dup]	9.66	3,800[e]	---	---	<12.5	<12.5	<12.5	<12.5	---
	11/23/93	9.86	3,300[e]	---	---	<12	<12	<12	<12	nd
	02/14/94	8.27	14,000[i]	---	---	<12.5	<12.5	<12.5	<12.5	---

Weiss Associates

Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	B	E	T	X	VOCs
			← parts per billion (ug/L) →							
	05/25/94	8.89	<1,000[j]	---	---	<10	<10	<10	<10	---
	05/25/94[dup]	8.89	<1,000[j]	---	---	<10	<10	<10	<10	---
	08/04/94	10.10	250[k]	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/08/94	8.98	4,600[e]	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/01/95	7.07	710[e]	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/04/95	**8.56**	**<50**	**—**	**—**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**—**
MW-7	01/28/91	8.91	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	---
Semi-annual	05/01/91	8.38	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	---
(2nd & 4th	07/23/91	9.13	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	---
Quarters)	02/23/92	6.87	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/22/92	8.08	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	07/07/92	8.82	---	---	---	---	---	---	---	---
	08/20/92	8.89	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/18/92	9.54	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/09/93	7.84	72	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/16/93	7.80	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/24/93	8.51	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/23/93	8.70	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/14/94	7.52	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/25/94	9.04	<50	---	---	<0.5	<0.5	0.6	0.93	---
	11/08/94	8.45	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/04/95	**8.34**	**<50**	**—**	**—**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**—**
MW-8	01/28/91	8.47	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	---
Semi-annual	05/01/91	7.64	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	---
(2nd & 4th	07/23/91	8.36	<50	<50	600	<0.5	<0.5	<0.5	<0.5	---
Quarters)	02/23/92	6.54	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/22/92	7.68	<50	---	---	<0.5	<0.5	<0.5	<0.5	---

Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	B	E	T	X	VOCs
			← parts per billion (ug/L) →							
	07/07/92	8.16	---	---	---	---	---	---	---	---
	08/20/92	8.25	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/18/92	8.32	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/09/93	5.58	63	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/16/93	7.19	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/24/93	7.98	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/23/93	8.09	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/14/94	9.42	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/25/94	7.18	<50	---	---	<0.5	<0.5	1.1	2.5	---
	11/08/94	6.24	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/04/95	**5.04**	**<50**	**—**	**—**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**—**
MW-9	01/28/91	8.27	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	---
Semi-annual	05/01/91	7.62	<50	<50	<500	0.6	<0.5	<0.5	1.1	---
(2nd & 4th	07/23/91	8.48	<50	<50	800	<0.5	<0.5	<0.5	<0.5	---
Quarters)	02/23/92	6.91	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/22/92	8.64	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	07/07/92	7.55	---	---	---	---	---	---	---	---
	08/20/92	7.38	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/20/92[dup]	7.38	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/18/92	10.17	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/18/92[dup]	10.17	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/09/93	6.89	290	110	---	6	<0.5	<0.5	<0.5	---
	06/16/93	8.74	90[e]	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/24/93	8.32	50[e]	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/23/93	8.17	<50	---	---	<0.5	<0.5	<0.5	<0.5	nd
	02/14/94	7.67	<50	---	---	<0.5	<0.5	<0.5	<0.5	---

Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	B	E	T	X	VOCs
			← parts per billion (ug/L) →							
	05/25/94	7.89	56	---	---	1.3	1.4	4.0	8.3	---
	11/08/94	7.75	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/04/95	**7.4**	**<50**	**—**	**—**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**—**
MW-10	01/28/91	10.81	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
Semi-annual	05/01/91	8.79	<50	460	<500	<0.5	<0.5	<0.5	<0.5	---
(2nd & 4th	07/23/91	9.94	<50	<50	900	<0.5	<0.5	<0.5	<0.5	---
Quarter)	02/23/92	9.11	<50	120	---	<0.5	<0.5	<0.5	<0.5	---
	05/22/92	9.14	<50	310	---	<0.5	<0.5	<0.5	<0.5	---
	07/07/92	9.87	---	---	---	---	---	---	---	---
	08/20/92	9.30	<50	460	---	<0.5	<0.5	<0.5	<0.5	---
	11/18/92	10.21	<50	470	---	<0.5	<0.5	<0.5	<0.5	---
	02/09/93	7.63	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/16/93	8.57	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/24/93	9.61	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/23/93	10.10	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/11/94	9.01	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/25/94	8.84	<50	---	---	<0.5	<0.5	1.1	1.4	---
	11/08/94	9.40	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/04/95	**7.00**	**<50**	**—**	**—**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**—**
Travel	02/24/92		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
Blank	05/22/92		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/20/92		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/18/92		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/09/93		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/16/93		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/24/93		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/23/93		<50	---	---	<0.5	<0.5	<0.5	<0.5	---

Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	B	E	T	X	VOCs
			← parts per billion (ug/L) →							
	02/14/94		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	05/25/94		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/04/94		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/08/94		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/01/95		**<50**	**—**	**—**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**—**
Bailer	08/20/92		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
Blank	11/18/92		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
DTSC MCLs			NE	NE	NE	1	680	100[1]	1,750	---

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Table 2. Analytical Results for Ground Water Shell Service Station WIC #204-5508-5801, 630 High Street, Oakland, California (continued)

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015
TPH-D = Total petroleum hydrocarbons as diesel by Modified EPA Method 8015
TPH-MO = Total petroleum hydrocarbons as motor oil by EPA Method 8015
B = Benzene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
VOC = Volatile organic compounds by EPA Method 8240
--- = Not analyzed
<**n** = Not detected at detection limits of **n** ppb
DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water
NE = Not established
nd = not detected at or above the reporting limit for the analysis as performed
dup = Duplicate

Notes:

a = Compounds detected and calculated as diesel do not match the diesel standard; pattern is characteristic of weathered diesel.
b = Concentration reported as diesel is primarily due to the presence of a lighter petroleum product, possible gasoline or kerosene
c = Concentration reported as diesel is primarily due to a heavier petroleum product, possible motor oil or aged diesel fuel
d = Compounds detected within the diesel range are not characteristics of the standard diesel chromatographic pattern
e = Concentration reported as gasoline is partially or primarily due to the presence of a discrete hydrocarbon peak not indicative of gasoline
f = 26 ppb benzene detected using EPA Method 8240
g = The concentration reported as gasoline for MW-3 is due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline
h = Compounds detected and calculated as diesel appear to be the less volatile constituents of gasoline
i = The concentration reported as gasoline for sample MW-6 is primarily due to the presence of a discrete peak not indicative of gasoline
j = Sample diluted due to high-non hydrocarbon peak.
k = The positive result has an atypical pattern for gasoline analysis.
l = DTSC recommended action level; MCL not established.

Weiss Associates

ATTACHMENT A

BTS GROUND WATER MONITORING REPORT

BLAINE
TECH SERVICES INC.

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

May 24, 1995

Shell Oil Company
P.O. Box 4023
Concord, CA 94524

Attn: Daniel T. Kirk

SITE:
Shell WIC #204-5508-5801
630 High Street
Oakland, California

QUARTER:
2nd quarter of 1995

QUARTERLY GROUNDWATER SAMPLING REPORT 950504-S-3

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 sites 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 National Environmental Testing, Inc. in Santa Rosa, California. NET is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #1386.

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: Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608-2411
ATTN: Grady Glasser

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)
MW-1 *	5/4/95	TOC	ODOR	NONE	--	--	8.40	13.84
MW-2	5/4/95	TOC	--	NONE	--	--	10.20	19.12
MW-3	5/4/95	TOC	ODOR	NONE	--	--	8.70	17.30
MW-4	5/4/95	TOC	ODOR	NONE	--	--	8.40	18.40
MW-5	5/4/95	TOC	--	NONE	--	--	10.35	17.82
MW-6	5/4/95	TOC	--	NONE	--	--	8.56	19.40
MW-7	5/4/95	TOC	--	NONE	--	--	8.34	19.35
MW-8	5/4/95	TOC	--	NONE	--	--	5.04	20.60
MW-9	5/4/95	TOC	--	NONE	--	--	7.40	11.50
MW-10	5/4/95	TOC	--	NONE	--	--	7.00	12.55

*. Sample DUP was a duplicate sample taken from well MW-1.

\# 6661

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 45050453

Date:
Page 1 of 2

Site Address: 630 HIGH ST. OAKLAND

WIC#: 204-5508-5801

Shell Engineer: DANIEL KIRK
Phone No.: (510) 675-6168
Fax #: 675-6160

Consultant Name & Address: BLAINE TECH SERVICES, INC 985 TIMOTHY DR, SAN JOSE, CA

Consultant Contact: JIM KELLER
Phone No.: 408 995-5535
Fax #: 2938773

Comments:

Sampled by:

Printed Name: SHAWN R. HOLUB

LAB: NET

CHECK ONE (1) BOX ONLY		CT/DT
Quarterly Monitoring	[X]	5461
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	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	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-1	5/4			W		3						X								
MW-2	↓			↓		3						X								
MW-3						3						X								
MW-4						3						X								
MW-5						3						X								
MW-6						3						X								
MW-7						3						X								(5/5/95)
MW-8	↓			↓		3						X							Seal Intact 5/6/95	

Relinquished By (signature):	Printed Name:	Date / Time	Received (signature):	Printed Name:	Date / Time
[signature]	SHAWN HOLUB	Date: 5/5 Time: 9:40	[signature]	G. LUMBRE	Date: 5/5 Time: 9:40
[signature]	G LUMBRE	Date: 5/5 Time: 19:30			Date: Time:
		Date: Time:	[signature]	PHIL PROSSER	Date: 5/6/95 Time: 0700

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

#6661

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 95050453

Date:

Page 2 of 2

Site Address: 630 HIGH ST. OAKLAND

WIC#: 204-5508-5801

Shell Engineer: DANIEL KIRK

Phone No. (510) 675-6168
Fax #: 675-6160

Consultant Name & Address: BLAINE TECH SERVICES, INC 985 TIMOTHY DR. SAN JOSE, CA

Consultant Contact: JIM KELLER

Phone No.: 408-995-5535
Fax #: 2938773

Comments:

Sampled by:

Printed Name: SHAWN HOLIK

LAB: NET

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring ☐	5461
Site Investigation ☐	5441
Soil Classify/Disposal ☐	5442
Water Classify/Disposal ☐	5443
Soil/Air Rem. or Sys. O & M ☐	5462
Water Rem. or Sys. O & M ☐	5463
Other ☐	

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 16 days ☐ (Normal)
- Other ☐

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

Analysis Required

Sample ID	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	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-9	5/4			W		3						X								
MW10	↓			↓		3						X								
EB	↓			↓		3						X								
DUP	↓			↓		3						X								
TB	↓			W		2						X								

(5/5/95 [initials]) Seal Intact. [initials] 5/6/95

Relinquished By (signature):	Printed Name:	Date: / Time:	Received (signature):	Printed Name:	Date: / Time:
[signature]	SHAWN HOLIK	Date: 5/5 Time: 9:40	[signature]	G. P. LUMBRA	Date: 5/5 Time: 9:40
[signature]	G. P. LUMBRA	Date: 5/5 Time: 14:30			Date: Time:
		Date: Time:	Phil Prosser	PHIL PROSSER	Date: 5/6/95 Time: 0700

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Jim Keller
Blaine Tech Services
985 Timothy Dr.
San Jose, CA 95133

Date: 05/16/1995
NET Client Acct. No: 1821
NET Job No: 95.01831
Received: 05/06/1995

Client Reference Information

Shell 630 High St., Oakland, CA./950504-S3

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Ken Larson
Division Manager

Linda DeMartino
Project Coordinator

Enclosure(s)

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-1
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241394

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	10						05/11/1995	2826
Purgeable TPH	7,000		500	ug/L	5030/M8015		05/11/1995	2826
Carbon Range: C6 to C12	--						05/11/1995	2826
METHOD 8020 (GC, Liquid)	--						05/11/1995	2826
Benzene	130		5	ug/L	8020		05/11/1995	2826
Toluene	47		5	ug/L	8020		05/11/1995	2826
Ethylbenzene	190		5	ug/L	8020		05/11/1995	2826
Xylenes (Total)	180		5	ug/L	8020		05/11/1995	2826
SURROGATE RESULTS	--						05/11/1995	2826
Bromofluorobenzene (SURR)	152	MI		% Rec.	8020		05/11/1995	2826

MI : Matrix interference suspected.

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-2
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241395

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2822
Purgeable TPH	ND		50	ug/L	5030/M8015		05/10/1995	2822
Carbon Range: C6 to C12	--						05/10/1995	2822
METHOD 8020 (GC, Liquid)	--						05/10/1995	2822
Benzene	ND		0.5	ug/L	8020		05/10/1995	2822
Toluene	ND		0.5	ug/L	8020		05/10/1995	2822
Ethylbenzene	ND		0.5	ug/L	8020		05/10/1995	2822
Xylenes (Total)	ND		0.5	ug/L	8020		05/10/1995	2822
SURROGATE RESULTS	--						05/10/1995	2822
Bromofluorobenzene (SURR)	70			% Rec.	8020		05/10/1995	2822

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-3
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241396

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	10						05/10/1995	2823
Purgeable TPH	1,800		500	ug/L	5030/M8015		05/10/1995	2823
Carbon Range: C6 to C12	--						05/10/1995	2823
METHOD 8020 (GC, Liquid)	--						05/10/1995	2823
Benzene	140		5	ug/L	8020		05/10/1995	2823
Toluene	11		5	ug/L	8020		05/10/1995	2823
Ethylbenzene	11		5	ug/L	8020		05/10/1995	2823
Xylenes (Total)	16		5	ug/L	8020		05/10/1995	2823
SURROGATE RESULTS	--						05/10/1995	2823
Bromofluorobenzene (SURR)	95			% Rec.	8020		05/10/1995	2823

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-4
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241397

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2823
Purgeable TPH	960		50	ug/L	5030/M8015		05/10/1995	2823
Carbon Range: C6 to C12	--						05/10/1995	2823
METHOD 8020 (GC, Liquid)	--						05/10/1995	2823
Benzene	20		0.5	ug/L	8020		05/10/1995	2823
Toluene	4.7		0.5	ug/L	8020		05/10/1995	2823
Ethylbenzene	3.7		0.5	ug/L	8020		05/10/1995	2823
Xylenes (Total)	5.6		0.5	ug/L	8020		05/10/1995	2823
SURROGATE RESULTS	--						05/10/1995	2823
Bromofluorobenzene (SURR)	198	MI		% Rec.	8020		05/10/1995	2823

MI : Matrix interference suspected.

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

NET®

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 95.01831

Date: 05/16/1995
ELAP Cert: 1386
Page: 6

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-5
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241398

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2822
Purgeable TPH	260		50	ug/L	5030/M8015		05/10/1995	2822
Carbon Range: C6 to C12	--						05/10/1995	2822
METHOD 8020 (GC, Liquid)	--						05/10/1995	2822
Benzene	3.1		0.5	ug/L	8020		05/10/1995	2822
Toluene	1.3		0.5	ug/L	8020		05/10/1995	2822
Ethylbenzene	2.0		0.5	ug/L	8020		05/10/1995	2822
Xylenes (Total)	1.5		0.5	ug/L	8020		05/10/1995	2822
SURROGATE RESULTS	--						05/10/1995	2822
Bromofluorobenzene (SURR)	78			% Rec.	8020		05/10/1995	2822

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-6
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241399

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/12/1995	2828
Purgeable TPH	ND		50	ug/L	5030/M8015		05/12/1995	2828
Carbon Range: C6 to C12	--						05/12/1995	2828
METHOD 8020 (GC, Liquid)	--						05/12/1995	2828
Benzene	ND		0.5	ug/L	8020		05/12/1995	2828
Toluene	ND		0.5	ug/L	8020		05/12/1995	2828
Ethylbenzene	ND		0.5	ug/L	8020		05/12/1995	2828
Xylenes (Total)	ND		0.5	ug/L	8020		05/12/1995	2828
SURROGATE RESULTS	--						05/12/1995	2828
Bromofluorobenzene (SURR)	85			% Rec.	8020		05/12/1995	2828

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-7
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241400

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2822
Purgeable TPH	ND		50	ug/L	5030/M8015		05/10/1995	2822
Carbon Range: C6 to C12	--						05/10/1995	2822
METHOD 8020 (GC, Liquid)	--						05/10/1995	2822
Benzene	ND		0.5	ug/L	8020		05/10/1995	2822
Toluene	ND		0.5	ug/L	8020		05/10/1995	2822
Ethylbenzene	ND		0.5	ug/L	8020		05/10/1995	2822
Xylenes (Total)	ND		0.5	ug/L	8020		05/10/1995	2822
SURROGATE RESULTS	--						05/10/1995	2822
Bromofluorobenzene (SURR)	71			% Rec.	8020		05/10/1995	2822

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-8
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241401

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2823
Purgeable TPH	ND		50	ug/L	5030/M8015		05/10/1995	2823
Carbon Range: C6 to C12	--						05/10/1995	2823
METHOD 8020 (GC, Liquid)	--						05/10/1995	2823
Benzene	ND		0.5	ug/L	8020		05/10/1995	2823
Toluene	ND		0.5	ug/L	8020		05/10/1995	2823
Ethylbenzene	ND		0.5	ug/L	8020		05/10/1995	2823
Xylenes (Total)	ND		0.5	ug/L	8020		05/10/1995	2823
SURROGATE RESULTS	--						05/10/1995	2823
Bromofluorobenzene (SURR)	79			% Rec.	8020		05/10/1995	2823

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-9
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241402

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2823
Purgeable TPH	ND		50	ug/L	5030/M8015		05/10/1995	2823
Carbon Range: C6 to C12	--						05/10/1995	2823
METHOD 8020 (GC, Liquid)	--						05/10/1995	2823
Benzene	ND		0.5	ug/L	8020		05/10/1995	2823
Toluene	ND		0.5	ug/L	8020		05/10/1995	2823
Ethylbenzene	ND		0.5	ug/L	8020		05/10/1995	2823
Xylenes (Total)	ND		0.5	ug/L	8020		05/10/1995	2823
SURROGATE RESULTS	--						05/10/1995	2823
Bromofluorobenzene (SURR)	95			% Rec.	8020		05/10/1995	2823

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: MW-10
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241403

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2823
Purgeable TPH	ND		50	ug/L	5030/M8015		05/10/1995	2823
Carbon Range: C6 to C12	--						05/10/1995	2823
METHOD 8020 (GC, Liquid)	--						05/10/1995	2823
Benzene	ND		0.5	ug/L	8020		05/10/1995	2823
Toluene	ND		0.5	ug/L	8020		05/10/1995	2823
Ethylbenzene	ND		0.5	ug/L	8020		05/10/1995	2823
Xylenes (Total)	ND		0.5	ug/L	8020		05/10/1995	2823
SURROGATE RESULTS	--						05/10/1995	2823
Bromofluorobenzene (SURR)	95			% Rec.	8020		05/10/1995	2823

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: EB
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241404

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2823
Purgeable TPH	ND		50	ug/L	5030/M8015		05/10/1995	2823
Carbon Range: C6 to C12	--						05/10/1995	2823
METHOD 8020 (GC, Liquid)	--						05/10/1995	2823
Benzene	ND		0.5	ug/L	8020		05/10/1995	2823
Toluene	ND		0.5	ug/L	8020		05/10/1995	2823
Ethylbenzene	ND		0.5	ug/L	8020		05/10/1995	2823
Xylenes (Total)	ND		0.5	ug/L	8020		05/10/1995	2823
SURROGATE RESULTS	--						05/10/1995	2823
Bromofluorobenzene (SURR)	97			% Rec.	8020		05/10/1995	2823

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: DUP
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241405

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	10						05/11/1995	2826
Purgeable TPH	6,800		500	ug/L	5030/M8015		05/11/1995	2826
Carbon Range: C6 to C12	--						05/11/1995	2826
METHOD 8020 (GC, Liquid)	--						05/11/1995	2826
Benzene	130		5	ug/L	8020		05/11/1995	2826
Toluene	46		5	ug/L	8020		05/11/1995	2826
Ethylbenzene	180		5	ug/L	8020		05/11/1995	2826
Xylenes (Total)	180		5	ug/L	8020		05/11/1995	2826
SURROGATE RESULTS	--						05/11/1995	2826
Bromofluorobenzene (SURR)	147	MI		% Rec.	8020		05/11/1995	2826

MI : Matrix interference suspected.

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

SAMPLE DESCRIPTION: TB
Date Taken: 05/04/1995
Time Taken:
NET Sample No: 241406

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						05/10/1995	2823
Purgeable TPH	ND		50	ug/L	5030/M8015		05/10/1995	2823
Carbon Range: C6 to C12	--						05/10/1995	2823
METHOD 8020 (GC, Liquid)	--						05/10/1995	2823
Benzene	ND		0.5	ug/L	8020		05/10/1995	2823
Toluene	ND		0.5	ug/L	8020		05/10/1995	2823
Ethylbenzene	ND		0.5	ug/L	8020		05/10/1995	2823
Xylenes (Total)	ND		0.5	ug/L	8020		05/10/1995	2823
SURROGATE RESULTS	--						05/10/1995	2823
Bromofluorobenzene (SURR)	88			% Rec.	8020		05/10/1995	2823

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 5030/8015-M (Shell)							
Purgeable TPH	100.6	0.503	0.50	mg/L	05/09/1995	pbg	2822
Benzene	106.8	5.34	5.00	ug/L	05/09/1995	pbg	2822
Toluene	100.2	5.01	5.00	ug/L	05/09/1995	pbg	2822
Ethylbenzene	102.6	5.13	5.00	ug/L	05/09/1995	pbg	2822
Xylenes (Total)	102.7	15.4	15.0	ug/L	05/09/1995	pbg	2822
Bromofluorobenzene (SURR)	81.0	81	100	% Rec.	05/09/1995	pbg	2822
METHOD 5030/8015-M (Shell)							
Purgeable TPH	92.6	0.463	0.50	mg/L	05/10/1995	pbg	2823
Benzene	92.6	4.63	5.00	ug/L	05/10/1995	pbg	2823
Toluene	93.0	4.65	5.00	ug/L	05/10/1995	pbg	2823
Ethylbenzene	98.8	4.94	5.00	ug/L	05/10/1995	pbg	2823
Xylenes (Total)	98.7	14.8	15.0	ug/L	05/10/1995	pbg	2823
Bromofluorobenzene (SURR)	120.0	120	100	% Rec.	05/10/1995	pbg	2823
METHOD 5030/8015-M (Shell)							
Purgeable TPH	102.8	0.514	0.50	mg/L	05/11/1995	pbg	2826
Benzene	93.8	4.69	5.00	ug/L	05/11/1995	pbg	2826
Toluene	88.4	4.42	5.00	ug/L	05/11/1995	pbg	2826
Ethylbenzene	92.8	4.64	5.00	ug/L	05/11/1995	pbg	2826
Xylenes (Total)	92.5	13.87	15.0	ug/L	05/11/1995	pbg	2826
Bromofluorobenzene (SURR)	101.0	101	100	% Rec.	05/11/1995	pbg	2826
METHOD 5030/8015-M (Shell)							
Purgeable TPH	92.8	0.464	0.50	mg/L	05/12/1995	pbg	2828
Benzene	92.8	4.64	5.00	ug/L	05/12/1995	pbg	2828
Toluene	86.2	4.31	5.00	ug/L	05/12/1995	pbg	2828
Ethylbenzene	90.4	4.52	5.00	ug/L	05/12/1995	pbg	2828
Xylenes (Total)	89.3	13.39	15.0	ug/L	05/12/1995	pbg	2828
Bromofluorobenzene (SURR)	105.0	105	100	% Rec.	05/12/1995	pbg	2828

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	05/09/1995	pbg	2822
Benzene	ND	0.5	ug/L	05/09/1995	pbg	2822
Toluene	ND	0.5	ug/L	05/09/1995	pbg	2822
Ethylbenzene	ND	0.5	ug/L	05/09/1995	pbg	2822
Xylenes (Total)	ND	0.5	ug/L	05/09/1995	pbg	2822
Bromofluorobenzene (SURR)	73		% Rec.	05/09/1995	pbg	2822
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	05/10/1995	pbg	2823
Benzene	ND	0.5	ug/L	05/10/1995	pbg	2823
Toluene	ND	0.5	ug/L	05/10/1995	pbg	2823
Ethylbenzene	ND	0.5	ug/L	05/10/1995	pbg	2823
Xylenes (Total)	ND	0.5	ug/L	05/10/1995	pbg	2823
Bromofluorobenzene (SURR)	92		% Rec.	05/10/1995	pbg	2823
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	05/11/1995	pbg	2826
Benzene	ND	0.5	ug/L	05/11/1995	pbg	2826
Toluene	ND	0.5	ug/L	05/11/1995	pbg	2826
Ethylbenzene	ND	0.5	ug/L	05/11/1995	pbg	2826
Xylenes (Total)	ND	0.5	ug/L	05/11/1995	pbg	2826
Bromofluorobenzene (SURR)	84		% Rec.	05/11/1995	pbg	2826
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	05/12/1995	pbg	2828
Benzene	ND	0.5	ug/L	05/12/1995	pbg	2828
Toluene	ND	0.5	ug/L	05/12/1995	pbg	2828
Ethylbenzene	ND	0.5	ug/L	05/12/1995	pbg	2828
Xylenes (Total)	ND	0.5	ug/L	05/12/1995	pbg	2828
Bromofluorobenzene (SURR)	99		% Rec.	05/12/1995	pbg	2828

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Shell 630 High St., Oakland, CA./950504-S3

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Run Batch	Sample Spiked
METHOD 5030/8015-M (Shell)											241378
Purgeable TPH	103.2	104.4	1.2	0.50	ND	0.516	0.522	mg/L	05/09/1995	2822	241378
Benzene	104.8	106.4	1.5	8.1	ND	8.49	8.62	ug/L	05/09/1995	2822	241378
Toluene	129.6	132.8	2.4	25.0	ND	32.4	33.2	ug/L	05/09/1995	2822	241378
METHOD 5030/8015-M (Shell)											241401
Purgeable TPH	100.4	102.0	1.6	0.50	ND	0.502	0.510	mg/L	05/10/1995	2823	241401
Benzene	96.1	100.5	4.4	8.12	ND	7.8	8.16	ug/L	05/10/1995	2823	241401
Toluene	112.6	113.0	0.4	26.2	ND	29.5	29.6	ug/L	05/10/1995	2823	241401
METHOD 5030/8015-M (Shell)											241436
Purgeable TPH	78.4	87.6	11.1	0.50	ND	0.392	0.438	mg/L	05/11/1995	2826	241436
Benzene	73.4	80.8	9.6	9.11	ND	6.69	7.36	ug/L	05/11/1995	2826	241436
Toluene	91.2	98.3	7.5	29.7	ND	27.1	29.2	ug/L	05/11/1995	2826	241436
METHOD 5030/8015-M (Shell)											241542
Purgeable TPH	90.6	91.4	0.9	0.50	ND	0.453	0.457	mg/L	05/12/1995	2828	241542
Benzene	93.5	97.7	4.4	7.98	ND	7.46	7.80	ug/L	05/12/1995	2828	241542
Toluene	97.4	99.4	2.0	31.2	ND	30.4	31.0	ug/L	05/12/1995	2828	241542

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KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
ICVS	:	Initial Calibration Verification Standard (External Standard).
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

COOLER RECEIPT FORM

Project: 630 HIGH ST. OAKLAND, CA. 950604-53 Log No: 6661
Cooler received on: 5/6/95 and checked on 5/6/95 by
Phil Russell
(signature)

Were custody papers present?.....YES NO

Were custody papers properly filled out?.....YES NO

Were the custody papers signed?.....YES NO

Was sufficient ice used?.....YES NO TEMP.: 0°c.

Did all bottles arrive in good condition (unbroken)?.....YES NO

Did bottle labels match COC?.....YES NO

Were proper bottles used for analysis indicated?.....YES NO

Correct preservatives used?.....YES NO

VOA vials checked for headspace bubbles?.....YES NO
Note which voas (if any) had bubbles:*

Sample descriptor:	Number of vials:
MW6	1
TB	2

*All VOAs with headspace bubbles have been set aside so they will not be used for analysis.....YES NO

List here all other jobs received in the same cooler:

Client Job #	NET log #

(coolerrec)