Weiss Associates Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608-2411 Fax: 510-547-5043 Phone: **510-450-6000**

April 2, 1996

eva chu
Alameda County Department of
Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

Re: **First Quarter 1996**
Shell Service Station
WIC #204-0072-0403
1601 Webster Street
Alameda, California 94501
WA Job #81-0434-206

Dear Ms. chu:

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.

First Quarter 1996 Activities:

- Weiss Associates (WA) conducted monthly operation and maintenance of the ground water oxygenation system on March 8, 1996. WA turned the system off as discussed by eva chu of the Alameda County Department of Environmental Health and WA staff engineer Yi-Ran Wu on March 18, 1996. The system will remain off for at least two quarters to assess the natural progress of attenuation of the petroleum hydrocarbons in ground water.

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths and collected water samples from the site wells (Figures 1 and 2). BTS' report, describing these sampling activities and presenting the analytic results is included as Attachment A.

- WA compiled the ground water elevation and analytic data (Tables 1 and 2), prepared a map showing ground water elevations and benzene concentrations (Figure 2), and tabulated ground water dissolved oxygen levels (Table 3).

Anticipated Second Quarter 1996 Activities:

- WA will submit a report presenting the results of the second quarter 1996 ground water sampling and depth measurements. The report will include tabulated chemical analytic results and a ground water elevation contour map.

Conclusions and Recommendations:

WA recommends continued ground water sampling according to the frequencies described in our second quarter 1994 report. These sampling frequencies include sampling MW-1 and S-1 annually for total petroleum hydrocarbons as gasoline (TPH-G), benzene, ethylbenzene, toluene and xylenes (BETX) and halogenated volatile organic compounds (HVOCs) and sampling MW-2 and MW-3 quarterly for TPH-G, BETX and HVOCs. WA also recommends that methyl tertiary butyl ether (MTBE) be included in the sampling schedule. This frequency is sufficient to monitor hydrocarbon and dissolved oxygen concentrations, and the ground water flow direction at the site.

Please call if you have any questions.

Sincerely,
Weiss Associates

Grady Glasser
Technical Asst.

James W. Carmody, C.H.G.
Senior Project Hydrogeologist

Attachments: A - BTS Associates' Ground Water Monitoring Report

cc: R. Jeff Granberry, Shell Oil Products Company, P.O. Box 4023, Concord, California 94524
Brad Boschetto, Shell Oil Products Company, P.O. Box 4848, Anaheim, CA 92803

GSG/JWC:all
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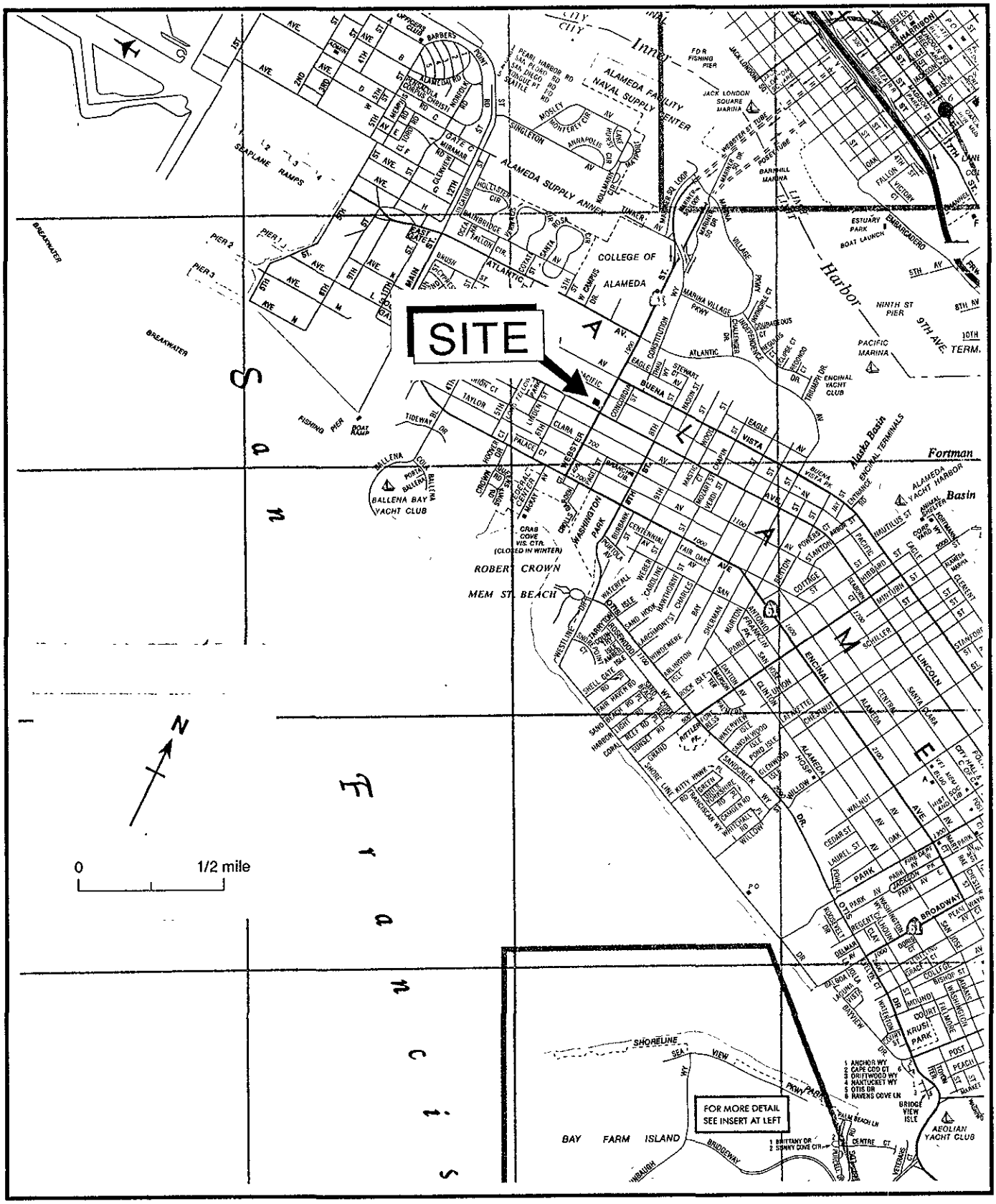

Figure 1. Site Location Map - Shell Service Station, WIC# 204-0072-0403, 1601 Webster Street, Alameda, CA

8/20/90

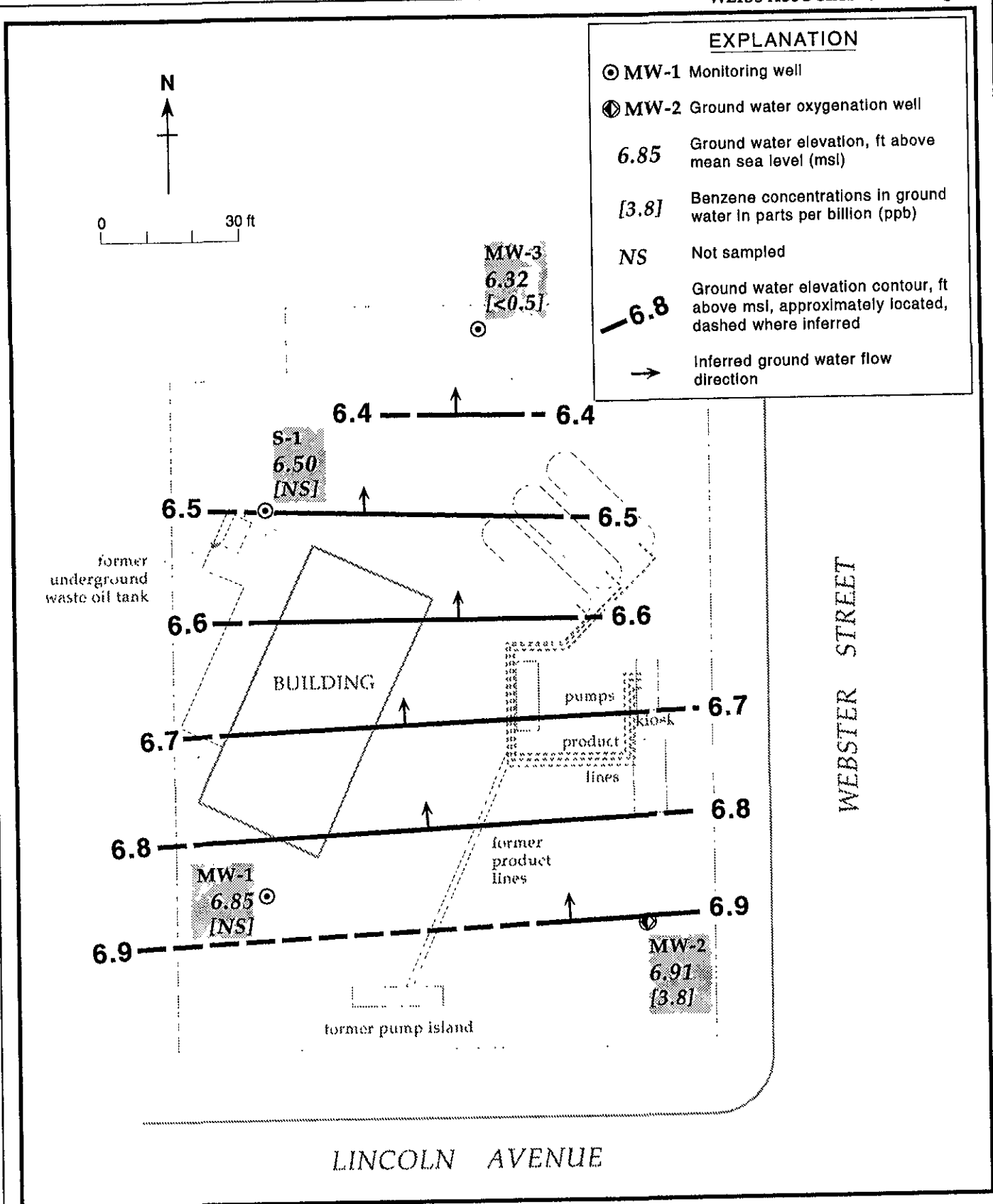

Figure 2. Monitoring Well Locations, Ground Water Elevation Contours and Benzene Concentrations in Ground Water - January 11, 1996 - Shell Service Station WIC #204-0072-0403, 1601 Webster Street, Alameda, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0072-0403, 1601 Webster Street Alameda, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	04/11/90	13.80	8.22	5.58
	07/18/90		9.14	4.66
	10/18/90		10.37	3.43
	01/25/91		10.41	3.39
	04/11/91		7.37	6.43
	07/18/91		8.86	4.94
	10/17/91		10.47	3.33
	01/24/92		9.18	4.62
	04/23/92		6.95	6.85
	07/22/92		8.01	5.79
	10/02/92		9.81	3.99
	01/05/93		7.26	6.54
	04/08/93	13.80[a]	5.85	7.95
	07/20/93		6.83	6.97
	10/15/93		8.07	5.73
	01/07/94		7.82	5.98
	04/13/94		6.91	6.89
	07/26/94		7.51	6.29
	10/06/94		8.71	5.09
	01/26/95		5.43	8.37
	04/20/95		5.50	8.30
	07/12/95		6.48	7.32
	10/12/95		7.44	6.36
	01/11/96		**6.95**	**6.85**
MW-2	04/11/90	13.20	7.69	5.51
	07/18/90		8.56	4.64
	10/18/90		9.76	3.44
	01/25/91		9.78	3.42
	04/11/91		6.87	6.33
	07/18/91		8.27	4.93
	10/17/91		9.89	3.31
	01/24/92		8.60	4.60
	04/23/92		6.48	6.72
	07/02/92		7.37	5.83
	10/02/92		9.20	4.00
	01/05/93		6.80	6.40
	04/08/93	13.20[a]	5.40	7.80
	07/20/93		6.05	7.15
	10/15/93		7.04	6.16
	01/07/94		6.99	6.21
	04/13/94		6.20	7.00

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0072-0403, 1601 Webster Street Alameda, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	07/26/94		6.63	6.57
	10/06/94		7.75	5.45
	01/26/95		4.49	8.71
	04/20/95		5.28	7.92
	07/12/95		5.84	7.36
	10/12/95		6.68	6.52
	01/11/96		**6.29**	**6.91**
MW-3	04/08/93	12.80	5.48	7.32
	07/20/93		6.38	6.42
	10/15/93		7.53	5.27
	01/07/94		7.38	5.42
	04/13/94		6.50	6.30
	07/26/94		7.00	5.80
	10/06/94		8.10	4.70
	01/26/95		5.00	7.80
	04/20/95		5.24	7.56
	07/12/95		6.10	6.70
	10/12/95		6.98	5.82
	01/11/96		**6.48**	**6.32**
S-1	09/11/89	13.77	9.82	3.95
	04/11/90		8.41	5.36
	07/18/90		9.31	4.46
	10/18/90		10.43	3.34
	01/25/91		10.49	3.28
	04/11/91		7.68	6.09
	07/18/91		8.95	4.82
	10/17/91		10.62	3.15
	01/24/92		9.32	4.45
	04/23/92		7.27	6.50
	07/02/92		8.19	5.58
	10/02/92		9.95	3.82
	01/05/93		7.64	6.13
	04/08/93	13.74[a]	6.10	7.64
	07/20/93		7.18	6.56
	10/15/93		8.39	5.35
	01/07/94		8.19	5.55
	04/13/94		7.22	6.52
	07/26/94		7.82	5.92
	10/06/94		9.01	4.73
	01/26/95		5.65	8.09

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0072-0403, 1601 Webster Street Alameda, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	04/20/95		6.82	6.92
	07/12/95		6.74	7.00
	10/12/95		7.76	5.98
	01/11/96		**7.24**	**6.50**

Notes:

a = Top of casing resurveyed on March 30, 1993

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	c-1,2-DCE	1,2-DCA	TOG	DO (mg/l)
			← parts per billion (µg/L) →									
MW-1 (Annually, 2nd Qtr.)	04-11-90	8.22	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10,000	
	07-18-90	9.14	<50	---	<0.5	<0.5	<0.5	<0.5	3	<0.5	<5,000	
	10-18-90	10.37	<50	---	<0.5	<0.5	<0.5	<0.5	7.9	<0.5	<5,000	
	01-25-91	10.41	<50	---	<0.5	<0.5	<0.5	<0.5	5.6	<0.5	---	
	04-11-91	7.37	<50	---	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	---	
	07-18-91	8.86	<50	---	<0.5	<0.5	<0.5	<0.5	4.4	<0.5	---	
	10-17-91	10.47	<50	---	<0.5	<0.5	<0.5	<0.5	7.2	<0.5	---	
	01-24-92	9.18	<50	---	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	---	
	04-23-92	6.95	<50		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	
	07-02-92	8.01	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	
	10-02-92	9.81	<50	---	<0.5	<0.5	<0.5	<0.5	2	<0.5	---	
	01-05-93	7.26	<50	---	<0.5	<0.5	<0.5	<0.5	2	<0.5	---	
	04-08-93[a]	5.85	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	
	07-20-93[b]	6.83	<50	---	<0.5	<0.5	<0.5	<0.5	0.76	<0.5	---	
	10-15-93	8.07	<50	---	<0.5	<0.5	<0.5	<0.5	0.71	<0.5	---	
	01-07-94	7.82	<50	---	<0.5	<0.5	<0.5	<0.5	3.1	0.85	---	5.5
	04-13-94	6.91	<50	---	<0.5	<0.5	<0.5	<0.5	3.6	0.95	---	---
	07-26-94	7.51	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	2.8
	10-06-94[c]	8.71	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	4.0
	04/20/95	5.50	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	---
MW-2 (Quarterly)	04-11-90	7.69	580	430	20	1.2	4.9	73	<0.5	1.1	<10,000	
	07-18-90	8.56	1,400	---	110	71	310	310	<0.5	0.7	<5,000	
	10-18-90	9.76	1,900	1,300[d]	110	89	470	400	<0.5	0.9	<5,000	
	01-25-91	9.78	8,100	---	430	480	1,200	2,600	<0.5	0.8	---	
	04-11-91	6.87	2,600	---	130	250	150	330	<0.5	<0.5	---	
	07-15-91	8.27	1,300	---	100	84	59	120	<0.5	0.8	---	
	10-17-91	9.89	2,100	---	180	150	260	520	<0.5	0.6	---	
	01-24-92	8.60	7,100	---	450	960	450	1,600	110	<0.5	---	
	04-23-92	6.48	16,000	---	320	650	740	2,600	<2.5	<2.5	---	
	07-02-92	7.37	33,000	---	2,500	2,000	3,700	9,600	<50	<50	---	
	10-02-92	9.20	7,000	---	960	570	650	1,200	<50	<50	---	
	01-05-93	6.80	8,900	---	550	600	500	1,900	<2	<2	---	

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	c-1,2-DCE	1,2-DCA	TOG	DO (mg/l)
			← parts per billion (µg/L) →									
	04-08-93	5.40	13,000	---	670	900	580	2,900	0.68	<0.5	---	
	04-08-93^{dup}	5.40	13,000	---	830	1,100	740	3,700	0.64	<0.5	---	
	07-20-93	6.05	10,000	---	1,200	1,100	630	4,000	0.87	<0.5	---	
	07-20-93^{dup}	6.05	12,000	---	1,200	1,100	600	3,800	0.80	<0.5	---	
	10-15-93	7.04	24,000	---	1,400	1,200	3,400	5,200	<0.5	<0.5	---	
	10-15-93^{dup}	7.04	19,000	---	1,200	1,000	2,800	4,400	<0.5	<0.5	---	
	01-07-94	6.99	27,000	---	1,300	1,900	2,700	7,900	<10	<10	---	
	01-07-94^{dup}	6.99	33,000	---	1,100	1,700	2,300	6,900	<10	<10	---	
	04-13-94	6.20	16,000	---	460	820	93	2,700	<25	<25	---	3.6
	04-13-94^{dup}	6.20	18,000	---	500	880	100	3,000	<25	<25	---	---
	07-26-94	6.63	25,000	---	1,600	1,500	1,500	6,800	<0.4	<0.4	---	3.2
	07-26-94^{dup}	6.63	28,000	---	1,700	1,600	1,600	7,300	<0.4	<0.4	---	
	10-06-94	7.75	15,000	---	850	1,000	650	4,000	<0.4	<0.4	---	2.4
	10-06-94^{dup}	7.75	17,000	---	1000	1,200	630	4,500	<0.4	<0.4	---	1.6
	01-26-95	4.49	3,200	---	63	300	14	1,000	<0.4	<0.4	---	
	01-26-95 ^{dup}	4.49	3,100	---	31	140	13	820	<0.4	<0.4	---	
	04/20/95	5.28	<50	---	4.4	1.3	<0.5	3.3	<0.4	<0.4	---	---
	04/20/95^{dup}	5.28	<50	---	0.5	0.6	<0.5	3.3	<0.4	<0.4	---	---
	07/12/95	5.84	<50	---	1.1	<0.5	1.1	<0.5	---	---	---	10.4
	07/12/95 ^{dup}	5.84	<50	---	0.9	<0.5	0.8	<0.5	---	---	---	10.4
	10/12/95	6.68	370	---	20	8.2	3.0	92	<0.5	<0.4	---	6.4
	01/11/96	**6.29**	**90**	**---**	**3.8**	**3.5**	**<0.5**	**3.0**	**0.6**	**<0.4**	**---**	**5.8**
MW-3 (Quarterly)	02-25-93	5.37	58	140	<0.5	2.5	<0.5	6.4	<0.5	1.5	<5,000	
	04-08-93	5.48	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	
	07-20-93[e]	6.38	<50	---	1.2	<0.5	<0.5	<0.5	<0.5	2.8	---	
	10-15-93[f]	7.53	60	---	<0.5	<0.5	<0.5	<0.5	<0.5	0.55	---	
	01-07-94	7.38	74	---	<0.5	<0.5	<0.5	0.76	<0.5	0.91	---	4.6
	04-13-94	6.50	<50	---	<0.5	<0.5	<0.5	<0.5	<1.3	<1.3	---	---
	07-26-94	7.00	750[g]	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	1.7
	10-06-94	8.10	1,900[g]	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	3.0

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	c-1,2-DCE	1,2-DCA	TOG	DO (mg/l)
			← parts per billion (µg/L) →									
	01-26-95	5.00	580[g]	---	<0.5	<0.5	<0.5	1.3	<0.4	<0.4	---	1.3
	04/20/95	5.24	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	---
	07/12/95	6.10	50	---	4.2	<0.5	2.9	0.9	---	---	---	7.2
	10/12/95	6.98	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	7.1
	10/12/95	6.98	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	7.1
	01/11/96	**6.48**	**50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.4**	**---**	**6.4**
	01/11/96[dup]	**6.48**	**50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.4**	**---**	**---**
S-1	09-04-87[h]		---	---	<5	<5	<5	<5	<0.5	<0.5	---	
(Annually,	09-11-89[i]	9.82	<50	<100	<0.5	<1	<1	<3	<0.5	<0.5	<1,000	
1st Qtr.)	04-11-90	8.41	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10,000	
	07-18-90	9.31	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5,000	
	10-18-90	10.43	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5,000	
	01-25-91	10.49	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	04-11-91	7.68	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	07-18-91	8.95	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	10-17-91	10.62	<50	---	<0.5	<0.5	<0.5	<5	---	---	---	
	01-24-92	9.32	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	04-23-92	7.27	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	07-02-92	8.19	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	10-02-92	9.95	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	01-05-93	7.64	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	04-08-93	6.10	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	07-20-93	7.18	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	10-15-93	8.39	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	
	01-07-94	8.19	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	6.8
	04-13-94	7.22	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	07-26-94	7.82	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	2.6
	10-06-94	9.01	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	6.0
	04/20/95	6.82	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	c-1,2-DCE	1,2-DCA	TOG	DO (mg/l)
			← parts per billion (µg/L) →									
Trip	07-18-90		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
Blank	10-18-90		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	01-25-91		<50	---	<0.5	<0.5	<0.5	0.8	---	---	---	
	04-11-91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	07-18-91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	10-17-91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	01-24-92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	04-23-92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	07-02-92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	10-02-92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	01-05-93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	04-08-93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	07-20-93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	10-15-93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	01-07-94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	04-13-94		<50	---	<0.5	<0.5	<0.5[j]	<0.5	---	---	---	
	07-26-94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	10-06-94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	01-26-95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	04/20/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	07/12/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
	10/12/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	
DTSC MCLs			NE	NE	1	680	100[k]	1,750	6.0	0.5	NE	

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, 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
B = Benzene by EPA Method 602, 624, or 8020
E = Ethylbenzene by EPA Method 602, 624, or 8020
T = Toluene by EPA Method 602, 624, or 8020
X = Xylenes by EPA Method 602, 624, or 8020
c-1,2-DCE = cis-1,2-dichloroethene by EPA Method 601 or 624
1,2-DCA = 1,2-dichloroethane by EPA Method 601 or 624
TOG = Total non-polar oil and grease by American Public Health Association Standard Method 503E
<n = Not detected at detection limit of n ppb
DTSC MCL = California Department of Toxic Substances Control maximum contaminant level for drinking water
NE = Not established
--- = Not analyzed/measured
dup = Duplicate sample
DO = Dissolved Oxygen in mg/L

Notes:

a = Chloroform detected at 0.0071 ppm by EPA Method 8010
b = Chloroform detected at 1.1 ppb by EPA Method 8010
c = Trichloroethylene detected at 1.7ppb.
d = Compounds detected and calculated as diesel appear to be the less volatile constituents of gasoline
e = Chloroform detected at 1.5 ppb by EPA Method 8010
f = Chloroform detected at 3.6 ppb by Method 8010
g = The result for Gasoline in and unknown hydrocarbon which consists of a single peak.
h = 0.12 ppm acetone detected by EPA Method 624; no other volatile organic compounds detected
i = Metals detected by EPA Method 6010; 0.020 ppm chromium, 0.060 ppm lead and 0.030 ppm zinc; no cadmium detected above detection limit of 0.010 ppm; no PCBs or semi-volatile compounds detected by EPA Method 625
j = 0.54 ppb Toluene detected in equipment blank
k = DTSC recommended action level for drinking water; MCL not established

Table 3. Ground Water Oxygenation at Shell Service Station WIC # 204-0072-0403, 1601 Webster Street, Alameda, California

Well ID	Date	Dissolved Oxygena (mg/l)	Flow Rate (scfm)
MW-1	01/07/94	5.5	0
	07/26/94	2.8	0
	10/06/94	4	0
	01/26/95	---[b]	0
	04/10/95	6.2	0
	05/11/95	6.2	0
	06/14/95	4.4	0
	07/07/95	3.5	0
	07/12/95	---[b]	0
	08/16/95	3.4	0
	09/12/95	2	0
	10/12/95	---[b]	0
	01/11/96	---[b]	**0**
MW-2	01/07/94	3.6	0
	07/26/94	3.2	0
	10/06/94	2.4	0
	01/26/95	1.6	0
	04/10/95	10	0.75
	05/11/95	10	0.67
	06/14/95	10.1	0.33
	07/07/95	10.7	0.17
	07/12/95	10.4	---
	08/16/95	6.9	---
	09/12/95	9.2	0.17
	10/12/95	6.4	NR
	01/11/96	**5.8**	**0**
MW-3	01/07/94	4.6	0
	07/26/94	1.7	0
	10/06/94	3	0
	01/26/95	1.3	0
	04/10/95	2	0
	05/11/95	4.6	0
	06/14/95	2.1	0
	07/07/95	1.3	0
	07/12/95	7.2	0
	08/16/95	---	0

Table 3. Ground Water Oxygenation at Shell Service Station WIC # 204-0072-0403, 1601 Webster Street, Alameda, California

Well ID	Date	Dissolved Oxygena (mg/l)	Flow Rate (scfm)
	09/12/95	0.6	0
	10/12/95	7.1	0
	01/11/96	**6.4**	**0**
S-1	01/07/94	6.8	0
	07/26/94	2.6	0
	10/06/94	6	0
	01/26/95	---[b]	0
	04/10/95	7.8	0
	05/11/95	6.4	0
	06/14/95	5.4	0
	07/07/95	5.2	0
	07/12/95	---[b]	0
	08/16/95	6.1	0
	09/12/95	2.7	0
	10/12/95	---[b]	0
	01/11/96	**---[b]**	**0**

Notes:

a = Ground water oxygenation started on 3/2/95
b = --- Not measured
NR = Not recorded because system was off.

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

January 31, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-0072-0403
1601 Webster Street
Alameda, California

1st Quarter 1996

Quarterly Groundwater Monitoring Report 960111-D-2

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. Copies of our Sampling Report along with the laboratory's Certified Analytical Report are forwarded to the consultant overseeing work at this site. Submission of the assembled documents to interested regulatory agencies will be made by the designated consultant.

Groundwater monitoring at this site was performed in accordance with Standard Operating Procedures provided to the interested regulatory agencies. If you have any questions about the work performed at this site please call me at (408) 995-5535 ext. 201.

Yours truly,

Francis Thie

attachments: Table of Well Gauging Data
Chain of Custody
Field Data Sheets
Certified Analytical Report

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

(Any professional evaluations or recommendations will be made by the consultant under separate cover.)

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	1/11/96	TOC	–	NONE	–	–	6.95	20.68
MW-2	1/11/96	TOC	–	NONE	–	–	6.29	19.12
MW-3 *	1/11/96	TOC	–	NONE	–	–	6.48	19.36
S-1	1/11/96	TOC	–	NONE	–	–	7.24	19.74

* Sample DUP was a duplicate sample taken from well MW-3.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960111-DZ

Date: 1-11-96
Page 1 of 1

Site Address: 1601 Webster Street, Alameda

WIC#: 204-0072-0403

Shell Engineer: ~~Dan Kirk~~ R. Jeff Granberry — Phone No.: (510) 675-6168 Fax #: 675-6160

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: MIKE D.

Printed Name: MIKE DILLOUGHERTY

LAB: NET

CHECK ONE (1) BOX ONLY — CT/DI

- Quarterly Monitoring [X] 6461
- Site Investigation [ ] 6441
- Soil Closure/Disposal [ ] 6442
- Water Closure/Disposal [ ] 6443
- Soil/Air Rem. or Sys. O & M [ ] 6452
- Water Rem. or Sys. O & M [ ] 6453
- 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	EPA 601		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-2	1-11			W		6						X	X							
MW-3	1-11					6						X	X							
EB	1-11					6						X	X							
DUP	1-11					6						X	X							

CUSTODY SEALED
Date 1/12/96 Time 930 Initials
SEAL INTACT?
Yes ✓ No Initials

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
	MIKE DILLOUGHERTY	1-12-96	1115		B. Smart	1-12-96	1115
	B. Smart	1-12-96	1900		PAM GREENE	1-13-96	08:00
		Date:	Time:			Date:	Time:

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

VIA: NCS

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: 01/25/1996
NET Client Acct. No: 1821
NET Job No: 96.00153
Received: 01/13/1996

Client Reference Information

Shell 1601 Webster St., Alameda, CA/960111-D2

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. All positive results have been confirmed as required. 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 free to call me at (707) 541-2305.

Submitted by:

Ginger Brinlee

Ginger Brinlee
Project Coordinator

Enclosure(s)

Ref: Shell 1601 Webster St., Alameda, CA/960111-D2

SAMPLE DESCRIPTION: MW-2
Date Taken: 01/11/1996
Time Taken:
NET Sample No: 258854

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/23/1996	3490
Purgeable TPH	90		50	ug/L	5030/M8015		01/23/1996	3490
Carbon Range: C6 to C12	--						01/23/1996	3490
8020 (GC, Liquid)	--						01/23/1996	3490
Benzene	3.8		0.5	ug/L	8020		01/23/1996	3490
Toluene	ND		0.5	ug/L	8020		01/23/1996	3490
Ethylbenzene	3.5		0.5	ug/L	8020		01/23/1996	3490
Xylenes (Total)	3.0		0.5	ug/L	8020		01/23/1996	3490
SURROGATE RESULTS	--						01/23/1996	3490
Bromofluorobenzene (SURR)	94			% Rec.	8020		01/23/1996	3490

SAMPLE DESCRIPTION: MW-3
Date Taken: 01/11/1996
Time Taken:
NET Sample No: 258855

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/23/1996	3490
Purgeable TPH	50		50	ug/L	5030/M8015		01/23/1996	3490
Carbon Range: C6 to C12	--						01/23/1996	3490
8020 (GC, Liquid)	--						01/23/1996	3490
Benzene	ND		0.5	ug/L	8020		01/23/1996	3490
Toluene	ND		0.5	ug/L	8020		01/23/1996	3490
Ethylbenzene	ND		0.5	ug/L	8020		01/23/1996	3490
Xylenes (Total)	ND		0.5	ug/L	8020		01/23/1996	3490
SURROGATE RESULTS	--						01/23/1996	3490
Bromofluorobenzene (SURR)	92			% Rec.	8020		01/23/1996	3490

Ref: Shell 1601 Webster St., Alameda, CA/960111-D2

SAMPLE DESCRIPTION: MW-2
Date Taken: 01/11/1996
Time Taken:
NET Sample No: 258854

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 601 (GC,Liquid)								
DILUTION FACTOR*	1						01/22/1996	943
Bromodichloromethane	ND		0.4	ug/L	601		01/22/1996	943
Bromoform	ND		0.4	ug/L	601		01/22/1996	943
Bromomethane	ND		0.4	ug/L	601		01/22/1996	943
Carbon tetrachloride	ND		0.4	ug/L	601		01/22/1996	943
Chlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
Chloroethane	ND		0.4	ug/L	601		01/22/1996	943
2-Chloroethylvinyl ether	ND		1.0	ug/L	601		01/22/1996	943
Chloroform	ND		0.4	ug/L	601		01/22/1996	943
Chloromethane	ND		0.4	ug/L	601		01/22/1996	943
Dibromochloromethane	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
1,3-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
1,4-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
Dichlorodifluoromethane	ND		0.4	ug/L	601		01/22/1996	943
1,1-Dichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,1-Dichloroethene	ND		0.4	ug/L	601		01/22/1996	943
cis-1,2-Dichloroethene	0.6		0.5	ug/L	601		01/22/1996	943
trans-1,2-Dichloroethene	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichloropropane	ND		0.4	ug/L	601		01/22/1996	943
cis-1,3-Dichloropropene	ND		0.4	ug/L	601		01/22/1996	943
trans-1,3-Dichloropropene	ND		0.4	ug/L	601		01/22/1996	943
Methylene chloride	ND		10	ug/L	601		01/22/1996	943
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	601		01/22/1996	943
Tetrachloroethene	ND		0.4	ug/L	601		01/22/1996	943
1,1,1-Trichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,1,2-Trichloroethane	ND		0.4	ug/L	601		01/22/1996	943
Trichloroethene	ND		0.4	ug/L	601		01/22/1996	943
Trichlorofluoromethane	ND		0.4	ug/L	601		01/22/1996	943
Vinyl chloride	ND		0.4	ug/L	601		01/22/1996	943
SURROGATE RESULTS	--						01/22/1996	943
1,4-Difluorobenzene (SURR)	97			% Rec.	601		01/22/1996	943
1,4-Dichlorobutane (SURR)	99			% Rec.	601		01/22/1996	943
Bromochloromethane (SURR)	NA			% Rec.	601		01/25/1996	1

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00153

Date: 01/25/1996
ELAP Cert: 1386
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Ref: Shell 1601 Webster St., Alameda, CA/960111-D2

SAMPLE DESCRIPTION: MW-3
Date Taken: 01/11/1996
Time Taken:
NET Sample No: 258855

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 601 (GC,Liquid)								
DILUTION FACTOR*	1						01/22/1996	943
Bromodichloromethane	ND		0.4	ug/L	601		01/22/1996	943
Bromoform	ND		0.4	ug/L	601		01/22/1996	943
Bromomethane	ND		0.4	ug/L	601		01/22/1996	943
Carbon tetrachloride	ND		0.4	ug/L	601		01/22/1996	943
Chlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
Chloroethane	ND		0.4	ug/L	601		01/22/1996	943
2-Chloroethylvinyl ether	ND		1.0	ug/L	601		01/22/1996	943
Chloroform	ND		0.4	ug/L	601		01/22/1996	943
Chloromethane	ND		0.4	ug/L	601		01/22/1996	943
Dibromochloromethane	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
1,3-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
1,4-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
Dichlorodifluoromethane	ND		0.4	ug/L	601		01/22/1996	943
1,1-Dichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,1-Dichloroethene	ND		0.4	ug/L	601		01/22/1996	943
cis-1,2-Dichloroethene	ND		0.5	ug/L	601		01/22/1996	943
trans-1,2-Dichloroethene	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichloropropane	ND		0.4	ug/L	601		01/22/1996	943
cis-1,3-Dichloropropene	ND		0.4	ug/L	601		01/22/1996	943
trans-1,3-Dichloropropene	ND		0.4	ug/L	601		01/22/1996	943
Methylene chloride	ND		10	ug/L	601		01/22/1996	943
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	601		01/22/1996	943
Tetrachloroethene	ND		0.4	ug/L	601		01/22/1996	943
1,1,1-Trichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,1,2-Trichloroethane	ND		0.4	ug/L	601		01/22/1996	943
Trichloroethene	ND		0.4	ug/L	601		01/22/1996	943
Trichlorofluoromethane	ND		0.4	ug/L	601		01/22/1996	943
Vinyl chloride	ND		0.4	ug/L	601		01/22/1996	943
SURROGATE RESULTS	--						01/22/1996	943
1,4-Difluorobenzene (SURR)	98			% Rec.	601		01/22/1996	943
1,4-Dichlorobutane (SURR)	102			% Rec.	601		01/22/1996	943
Bromochloromethane (SURR)	NA			% Rec.	601		01/25/1996	1

Ref: Shell 1601 Webster St., Alameda, CA/960111-D2

SAMPLE DESCRIPTION: EB
Date Taken: 01/11/1996
Time Taken:
NET Sample No: 258856

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/23/1996	3490
Purgeable TPH	ND		50	ug/L	5030/M8015		01/23/1996	3490
Carbon Range: C6 to C12	--						01/23/1996	3490
8020 (GC, Liquid)	--						01/23/1996	3490
Benzene	ND		0.5	ug/L	8020		01/23/1996	3490
Toluene	ND		0.5	ug/L	8020		01/23/1996	3490
Ethylbenzene	ND		0.5	ug/L	8020		01/23/1996	3490
Xylenes (Total)	ND		0.5	ug/L	8020		01/23/1996	3490
SURROGATE RESULTS	--						01/23/1996	3490
Bromofluorobenzene (SURR)	93			% Rec.	8020		01/23/1996	3490

SAMPLE DESCRIPTION: DUP
Date Taken: 01/11/1996
Time Taken:
NET Sample No: 258857

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/23/1996	3490
Purgeable TPH	50		50	ug/L	5030/M8015		01/23/1996	3490
Carbon Range: C6 to C12	--						01/23/1996	3490
8020 (GC, Liquid)	--						01/23/1996	3490
Benzene	ND		0.5	ug/L	8020		01/23/1996	3490
Toluene	ND		0.5	ug/L	8020		01/23/1996	3490
Ethylbenzene	ND		0.5	ug/L	8020		01/23/1996	3490
Xylenes (Total)	ND		0.5	ug/L	8020		01/23/1996	3490
SURROGATE RESULTS	--						01/23/1996	3490
Bromofluorobenzene (SURR)	96			% Rec.	8020		01/23/1996	3490

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00153

Date: 01/25/1996
ELAP Cert: 1386
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Ref: Shell 1601 Webster St., Alameda, CA/960111-D2

SAMPLE DESCRIPTION: EB
Date Taken: 01/11/1996
Time Taken:
NET Sample No: 258856

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 601 (GC,Liquid)							01/22/1996	943
DILUTION FACTOR*	1						01/22/1996	943
Bromodichloromethane	ND		0.4	ug/L	601		01/22/1996	943
Bromoform	ND		0.4	ug/L	601		01/22/1996	943
Bromomethane	ND		0.4	ug/L	601		01/22/1996	943
Carbon tetrachloride	ND		0.4	ug/L	601		01/22/1996	943
Chlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
Chloroethane	ND		0.4	ug/L	601		01/22/1996	943
2-Chloroethylvinyl ether	ND		1.0	ug/L	601		01/22/1996	943
Chloroform	ND		0.4	ug/L	601		01/22/1996	943
Chloromethane	ND		0.4	ug/L	601		01/22/1996	943
Dibromochloromethane	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
1,3-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
1,4-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
Dichlorodifluoromethane	ND		0.4	ug/L	601		01/22/1996	943
1,1-Dichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,1-Dichloroethene	ND		0.4	ug/L	601		01/22/1996	943
cis-1,2-Dichloroethene	ND		0.5	ug/L	601		01/22/1996	943
trans-1,2-Dichloroethene	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichloropropane	ND		0.4	ug/L	601		01/22/1996	943
cis-1,3-Dichloropropene	ND		0.4	ug/L	601		01/22/1996	943
trans-1,3-Dichloropropene	ND		0.4	ug/L	601		01/22/1996	943
Methylene chloride	ND		10	ug/L	601		01/22/1996	943
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	601		01/22/1996	943
Tetrachloroethene	ND		0.4	ug/L	601		01/22/1996	943
1,1,1-Trichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,1,2-Trichloroethane	ND		0.4	ug/L	601		01/22/1996	943
Trichloroethene	ND		0.4	ug/L	601		01/22/1996	943
Trichlorofluoromethane	ND		0.4	ug/L	601		01/22/1996	943
Vinyl chloride	ND		0.4	ug/L	601		01/22/1996	943
SURROGATE RESULTS	--						01/22/1996	943
1,4-Difluorobenzene (SURR)	90			% Rec.	601		01/22/1996	943
1,4-Dichlorobutane (SURR)	98			% Rec.	601		01/25/1996	1
Bromochloromethane (SURR)	NA			% Rec.	601			

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SAMPLE DESCRIPTION: DUP
Date Taken: 01/11/1996
Time Taken:
NET Sample No: 258857

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 601 (GC,Liquid)								
DILUTION FACTOR*	1						01/22/1996	943
Bromodichloromethane	ND		0.4	ug/L	601		01/22/1996	943
Bromoform	ND		0.4	ug/L	601		01/22/1996	943
Bromomethane	ND		0.4	ug/L	601		01/22/1996	943
Carbon tetrachloride	ND		0.4	ug/L	601		01/22/1996	943
Chlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
Chloroethane	ND		0.4	ug/L	601		01/22/1996	943
2-Chloroethylvinyl ether	ND		1.0	ug/L	601		01/22/1996	943
Chloroform	ND		0.4	ug/L	601		01/22/1996	943
Chloromethane	ND		0.4	ug/L	601		01/22/1996	943
Dibromochloromethane	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
1,3-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
1,4-Dichlorobenzene	ND		0.4	ug/L	601		01/22/1996	943
Dichlorodifluoromethane	ND		0.4	ug/L	601		01/22/1996	943
1,1-Dichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,1-Dichloroethene	ND		0.4	ug/L	601		01/22/1996	943
cis-1,2-Dichloroethene	ND		0.5	ug/L	601		01/22/1996	943
trans-1,2-Dichloroethene	ND		0.4	ug/L	601		01/22/1996	943
1,2-Dichloropropane	ND		0.4	ug/L	601		01/22/1996	943
cis-1,3-Dichloropropene	ND		0.4	ug/L	601		01/22/1996	943
trans-1,3-Dichloropropene	ND		0.4	ug/L	601		01/22/1996	943
Methylene chloride	ND		10	ug/L	601		01/22/1996	943
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	601		01/22/1996	943
Tetrachloroethene	ND		0.4	ug/L	601		01/22/1996	943
1,1,1-Trichloroethane	ND		0.4	ug/L	601		01/22/1996	943
1,1,2-Trichloroethane	ND		0.4	ug/L	601		01/22/1996	943
Trichloroethene	ND		0.4	ug/L	601		01/22/1996	943
Trichlorofluoromethane	ND		0.4	ug/L	601		01/22/1996	943
Vinyl chloride	ND		0.4	ug/L	601		01/22/1996	943
SURROGATE RESULTS	--						01/22/1996	943
1,4-Difluorobenzene (SURR)	96			% Rec.	601		01/22/1996	943
1,4-Dichlorobutane (SURR)	107			% Rec.	601		01/22/1996	943
Bromochloromethane (SURR)	NA			% Rec.	601		01/25/1996	1

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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
5030/8015-M/8020 (Shell)								
Purgeable TPH	100.0	0.50	0.50		mg/L	01/22/1996	lss	3490
Benzene	92.0	4.60	5.00		ug/L	01/22/1996	lss	3490
Toluene	94.0	4.70	5.00		ug/L	01/22/1996	lss	3490
Ethylbenzene	92.4	4.62	5.00		ug/L	01/22/1996	lss	3490
Xylenes (Total)	92.7	13.9	15.0		ug/L	01/22/1996	lss	3490
Bromofluorobenzene (SURR)	95.0	95	100		% Rec.	01/22/1996	lss	3490

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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 601 (GC,Liquid)								
Bromodichloromethane	103.0	20.6	20.0		ug/L	01/15/1996	plh	943
Bromoform	115.5	23.1	20.0		ug/L	01/15/1996	plh	943
Bromomethane	98.5	19.7	20.0		ug/L	01/15/1996	plh	943
Carbon tetrachloride	126.5	25.3	20.0		ug/L	01/15/1996	plh	943
Chlorobenzene	114.5	22.9	20.0		ug/L	01/15/1996	plh	943
Chloroethane	96.0	19.2	20.0		ug/L	01/15/1996	plh	943
2-Chloroethylvinyl ether	131.0	26.2	20.0		ug/L	01/15/1996	plh	943
Chloroform	122.0	24.4	20.0		ug/L	01/15/1996	plh	943
Chloromethane	85.0	17.0	20.0		ug/L	01/15/1996	plh	943
Dibromochloromethane	118.0	23.6	20.0		ug/L	01/15/1996	plh	943
1,2-Dichlorobenzene	115.0	23.0	20.0		ug/L	01/15/1996	plh	943
1,3-Dichlorobenzene	117.0	23.4	20.0		ug/L	01/15/1996	plh	943
1,4-Dichlorobenzene	110.5	22.1	20.0		ug/L	01/15/1996	plh	943
Dichlorodifluoromethane	72.5	14.5	20.0		ug/L	01/15/1996	plh	943
1,1-Dichloroethane	109.5	21.9	20.0		ug/L	01/15/1996	plh	943
1,2-Dichloroethane	122.0	24.4	20.0		ug/L	01/15/1996	plh	943
1,1-Dichloroethene	117.0	23.4	20.0		ug/L	01/15/1996	plh	943
cis-1,2-Dichloroethene	128.0	25.6	20.0		ug/L	01/15/1996	plh	943
trans-1,2-Dichloroethene	116.0	23.2	20.0		ug/L	01/15/1996	plh	943
1,2-Dichloropropane	123.5	24.7	20.0		ug/L	01/15/1996	plh	943
cis-1,3-Dichloropropene	125.0	25.0	20.0		ug/L	01/15/1996	plh	943
trans-1,3-Dichloropropene	126.5	25.3	20.0		ug/L	01/15/1996	plh	943
Methylene chloride	110.0	22.0	20.0		ug/L	01/15/1996	plh	943
1,1,2,2-Tetrachloroethane	118.5	23.7	20.0		ug/L	01/15/1996	plh	943
Tetrachloroethene	117.0	23.4	20.0		ug/L	01/15/1996	plh	943
1,1,1-Trichloroethane	124.5	24.9	20.0		ug/L	01/15/1996	plh	943
1,1,2-Trichloroethane	110.5	22.1	20.0		ug/L	01/15/1996	plh	943
Trichloroethene	108.5	21.7	20.0		ug/L	01/15/1996	plh	943
Trichlorofluoromethane	105.5	21.1	20.0		ug/L	01/15/1996	plh	943
Vinyl chloride	87.0	17.4	20.0		ug/L	01/15/1996	plh	943
1,4-Difluorobenzene (SURR)	104.0	104	100		% Rec.	01/15/1996	plh	943
1,4-Dichlorobutane (SURR)	112.0	112	100		% Rec.	01/15/1996	plh	943

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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 601 (GC,Liquid)								
Bromodichloromethane	106.0	21.2	20.0		ug/L	01/22/1996	plh	943
Bromoform	98.5	19.7	20.0		ug/L	01/22/1996	plh	943
Bromomethane	86.5	17.3	20.0		ug/L	01/22/1996	plh	943
Carbon tetrachloride	103.5	20.7	20.0		ug/L	01/22/1996	plh	943
Chlorobenzene	101.5	20.3	20.0		ug/L	01/22/1996	plh	943
Chloroethane	84.0	16.8	20.0		ug/L	01/22/1996	plh	943
2-Chloroethylvinyl ether	112.0	22.4	20.0		ug/L	01/22/1996	plh	943
Chloroform	103.0	20.6	20.0		ug/L	01/22/1996	plh	943
Chloromethane	73.5	14.7	20.0		ug/L	01/22/1996	plh	943
Dibromochloromethane	106.0	21.2	20.0		ug/L	01/22/1996	plh	943
1,2-Dichlorobenzene	101.5	20.3	20.0		ug/L	01/22/1996	plh	943
1,3-Dichlorobenzene	102.5	20.5	20.0		ug/L	01/22/1996	plh	943
1,4-Dichlorobenzene	97.5	19.5	20.0		ug/L	01/22/1996	plh	943
Dichlorodifluoromethane	67.5	13.5	20.0		ug/L	01/22/1996	plh	943
1,1-Dichloroethane	102.0	20.4	20.0		ug/L	01/22/1996	plh	943
1,2-Dichloroethane	101.5	20.3	20.0		ug/L	01/22/1996	plh	943
1,1-Dichloroethene	102.0	20.4	20.0		ug/L	01/22/1996	plh	943
cis-1,2-Dichloroethene	103.0	20.6	20.0		ug/L	01/22/1996	plh	943
trans-1,2-Dichloroethene	102.5	20.5	20.0		ug/L	01/22/1996	plh	943
1,2-Dichloropropane	103.0	20.6	20.0		ug/L	01/22/1996	plh	943
cis-1,3-Dichloropropene	105.0	21.0	20.0		ug/L	01/22/1996	plh	943
trans-1,3-Dichloropropene	106.0	21.2	20.0		ug/L	01/22/1996	plh	943
Methylene chloride	99.0	19.8	20.0		ug/L	01/22/1996	plh	943
1,1,2,2-Tetrachloroethane	96.0	19.2	20.0		ug/L	01/22/1996	plh	943
Tetrachloroethene	104.0	20.8	20.0		ug/L	01/22/1996	plh	943
1,1,1-Trichloroethane	102.5	20.5	20.0		ug/L	01/22/1996	plh	943
1,1,2-Trichloroethane	99.0	19.8	20.0		ug/L	01/22/1996	plh	943
Trichloroethene	98.5	19.7	20.0		ug/L	01/22/1996	plh	943
Trichlorofluoromethane	87.5	17.5	20.0		ug/L	01/22/1996	plh	943
Vinyl chloride	75.0	15.0	20.0		ug/L	01/22/1996	plh	943
1,4-Difluorobenzene (SURR)	105.0	105	100		% Rec.	01/22/1996	plh	943
1,4-Dichlorobutane (SURR)	103.0	103	100		% Rec.	01/22/1996	plh	943

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METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
5030/8015-M/8020 (Shell)							
Purgeable TPH	ND	0.05		mg/L	01/22/1996	lss	3490
Benzene	ND	0.5		ug/L	01/22/1996	lss	3490
Toluene	ND	0.5		ug/L	01/22/1996	lss	3490
Ethylbenzene	ND	0.5		ug/L	01/22/1996	lss	3490
Xylenes (Total)	ND	0.5		ug/L	01/22/1996	lss	3490
Bromofluorobenzene (SURR)	87			% Rec.	01/22/1996	lss	3490

Ref: Shell 1601 Webster St., Alameda, CA/960111-D2

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 601 (GC,Liquid)							
Bromodichloromethane	ND	0.4		ug/L	01/15/1996	plh	943
Bromoform	ND	0.4		ug/L	01/15/1996	plh	943
Bromomethane	ND	0.4		ug/L	01/15/1996	plh	943
Carbon tetrachloride	ND	0.4		ug/L	01/15/1996	plh	943
Chlorobenzene	ND	0.4		ug/L	01/15/1996	plh	943
Chloroethane	ND	0.4		ug/L	01/15/1996	plh	943
2-Chloroethylvinyl ether	ND	1.0		ug/L	01/15/1996	plh	943
Chloroform	ND	0.4		ug/L	01/15/1996	plh	943
Chloromethane	ND	0.4		ug/L	01/15/1996	plh	943
Dibromochloromethane	ND	0.4		ug/L	01/15/1996	plh	943
1,2-Dichlorobenzene	ND	0.4		ug/L	01/15/1996	plh	943
1,3-Dichlorobenzene	ND	0.4		ug/L	01/15/1996	plh	943
1,4-Dichlorobenzene	ND	0.4		ug/L	01/15/1996	plh	943
Dichlorodifluoromethane	ND	0.4		ug/L	01/15/1996	plh	943
1,1-Dichloroethane	ND	0.4		ug/L	01/15/1996	plh	943
1,2-Dichloroethane	ND	0.4		ug/L	01/15/1996	plh	943
1,1-Dichloroethene	ND	0.4		ug/L	01/15/1996	plh	943
cis-1,2-Dichloroethene	ND	0.4		ug/L	01/15/1996	plh	943
trans-1,2-Dichloroethene	ND	0.4		ug/L	01/15/1996	plh	943
1,2-Dichloropropane	ND	0.4		ug/L	01/15/1996	plh	943
cis-1,3-Dichloropropene	ND	0.4		ug/L	01/15/1996	plh	943
trans-1,3-Dichloropropene	ND	0.4		ug/L	01/15/1996	plh	943
Methylene chloride	ND	10		ug/L	01/15/1996	plh	943
1,1,2,2-Tetrachloroethane	ND	0.4		ug/L	01/15/1996	plh	943
Tetrachloroethene	ND	0.4		ug/L	01/15/1996	plh	943
1,1,1-Trichloroethane	ND	0.4		ug/L	01/15/1996	plh	943
1,1,2-Trichloroethane	ND	0.4		ug/L	01/15/1996	plh	943
Trichloroethene	ND	0.4		ug/L	01/15/1996	plh	943
Trichlorofluoromethane	ND	0.4		ug/L	01/15/1996	plh	943
Vinyl chloride	ND	0.4		ug/L	01/15/1996	plh	943
1,4-Difluorobenzene (SURR)	100			% Rec.	01/15/1996	plh	943
1,4-Dichlorobutane (SURR)	100			% Rec.	01/15/1996	plh	943

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METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 601 (GC,Liquid)							
Bromodichloromethane	ND	0.4		ug/L	01/22/1996	plh	943
Bromoform	ND	0.4		ug/L	01/22/1996	plh	943
Bromomethane	ND	0.4		ug/L	01/22/1996	plh	943
Carbon tetrachloride	ND	0.4		ug/L	01/22/1996	plh	943
Chlorobenzene	ND	0.4		ug/L	01/22/1996	plh	943
Chloroethane	ND	0.4		ug/L	01/22/1996	plh	943
2-Chloroethylvinyl ether	ND	1.0		ug/L	01/22/1996	plh	943
Chloroform	ND	0.4		ug/L	01/22/1996	plh	943
Chloromethane	ND	0.4		ug/L	01/22/1996	plh	943
Dibromochloromethane	ND	0.4		ug/L	01/22/1996	plh	943
1,2-Dichlorobenzene	ND	0.4		ug/L	01/22/1996	plh	943
1,3-Dichlorobenzene	ND	0.4		ug/L	01/22/1996	plh	943
1,4-Dichlorobenzene	ND	0.4		ug/L	01/22/1996	plh	943
Dichlorodifluoromethane	ND	0.4		ug/L	01/22/1996	plh	943
1,1-Dichloroethane	ND	0.4		ug/L	01/22/1996	plh	943
1,2-Dichloroethane	ND	0.4		ug/L	01/22/1996	plh	943
1,1-Dichloroethene	ND	0.4		ug/L	01/22/1996	plh	943
cis-1,2-Dichloroethene	ND	0.4		ug/L	01/22/1996	plh	943
trans-1,2-Dichloroethene	ND	0.4		ug/L	01/22/1996	plh	943
1,2-Dichloropropane	ND	0.4		ug/L	01/22/1996	plh	943
cis-1,3-Dichloropropene	ND	0.4		ug/L	01/22/1996	plh	943
trans-1,3-Dichloropropene	ND	0.4		ug/L	01/22/1996	plh	943
Methylene chloride	ND	10		ug/L	01/22/1996	plh	943
1,1,2,2-Tetrachloroethane	ND	0.4		ug/L	01/22/1996	plh	943
Tetrachloroethene	ND	0.4		ug/L	01/22/1996	plh	943
1,1,1-Trichloroethane	ND	0.4		ug/L	01/22/1996	plh	943
1,1,2-Trichloroethane	ND	0.4		ug/L	01/22/1996	plh	943
Trichloroethene	ND	0.4		ug/L	01/22/1996	plh	943
Trichlorofluoromethane	ND	0.4		ug/L	01/22/1996	plh	943
Vinyl chloride	ND	0.4		ug/L	01/22/1996	plh	943
1,4-Difluorobenzene (SURR)	91			% Rec.	01/22/1996	plh	943
1,4-Dichlorobutane (SURR)	91			% Rec.	01/22/1996	plh	943

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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.	Flags	Units	Date Analyzed	Run Batch	Sample Spiked
5030/8015-M/8020 (Shell)												258723
Purgeable TPH	100.0	96.0	4.0	0.50	ND	0.50	0.48		mg/L	01/22/1996	3490	258723
Benzene	101.0	95.1	5.9	7.20	ND	7.27	6.85		ug/L	01/22/1996	3490	258723
Toluene	100.4	95.0	5.4	24.2	ND	24.3	23.0		ug/L	01/22/1996	3490	258723

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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.	Flags	Units	Date Analyzed	Run Batch	Sample Spiked
METHOD 601 (GC,Liquid)												258389
Chlorobenzene	95.5	95.0	0.5	20.0	ND	19.1	19		ug/L	01/22/1996	943	258389
1,1-Dichloroethene	92.5	88.0	5.0	20.0	ND	18.5	17.6		ug/L	01/22/1996	943	258389
Trichloroethene	90.0	94.0	4.3	20.0	ND	18	18.8		ug/L	01/22/1996	943	258389

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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: 960111-D2 Log No: 9960
Cooler received on: 1/13/96 and checked on 1/13/96 by Em Greene
(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
Did all bottles arrive in good condition (unbroken)?..... YES NO Temp 0°
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:

*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

Weiss Associates Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608-2411 Fax: 510-547-5043 Phone: **510-450-6000**

Ltr. 7/24/96

Wait for next sampling event. Review site for adeq. char. act. if so, may be ready for closure

July 15, 1996

eva chu
Alameda County Department of
Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

96 JUL 19 PM 3:30
ENVIRONMENTAL PROTECTION

Re: **Second Quarter 1996**
Shell Service Station
WIC #204-0072-0403
1601 Webster Street
Alameda, California 94501
WA Job #81-0434-206

Dear Ms. chu:

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.

Activities This Quarter

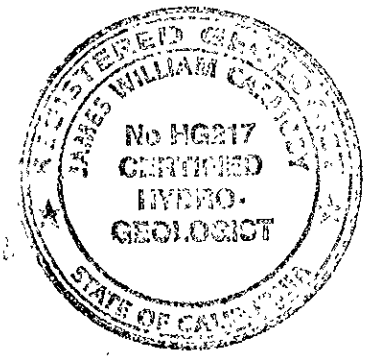
- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths and collected water samples from the site wells (Figures 1 and 2). BTS' report, describing these sampling activities and presenting the analytic results is included as Attachment A.

- Weiss Associates (WA) calculated ground water elevations (Table 1), compiled the analytic data (Table 2) and prepared a ground water elevation contour map (Figure 2)

Anticipated Activities Next Quarter

WA will submit a report presenting a summary of activities for the upcoming quarter. Please call if you have any questions.

Sincerely,
Weiss Associates



Grady Glasser
Technical Asst.

James W. Carmody, C.H.G.
Senior Project Hydrogeologist

Attachments: A - BTS Associates' Ground Water Monitoring Report

cc: R. Jeff Granberry, Shell Oil Products Company, P.O. Box 4023, Concord, California 94524
Brad Boschetto, Shell Oil Products Company, P.O. Box 4848, Anaheim, CA 92803

GSG/JWC:all
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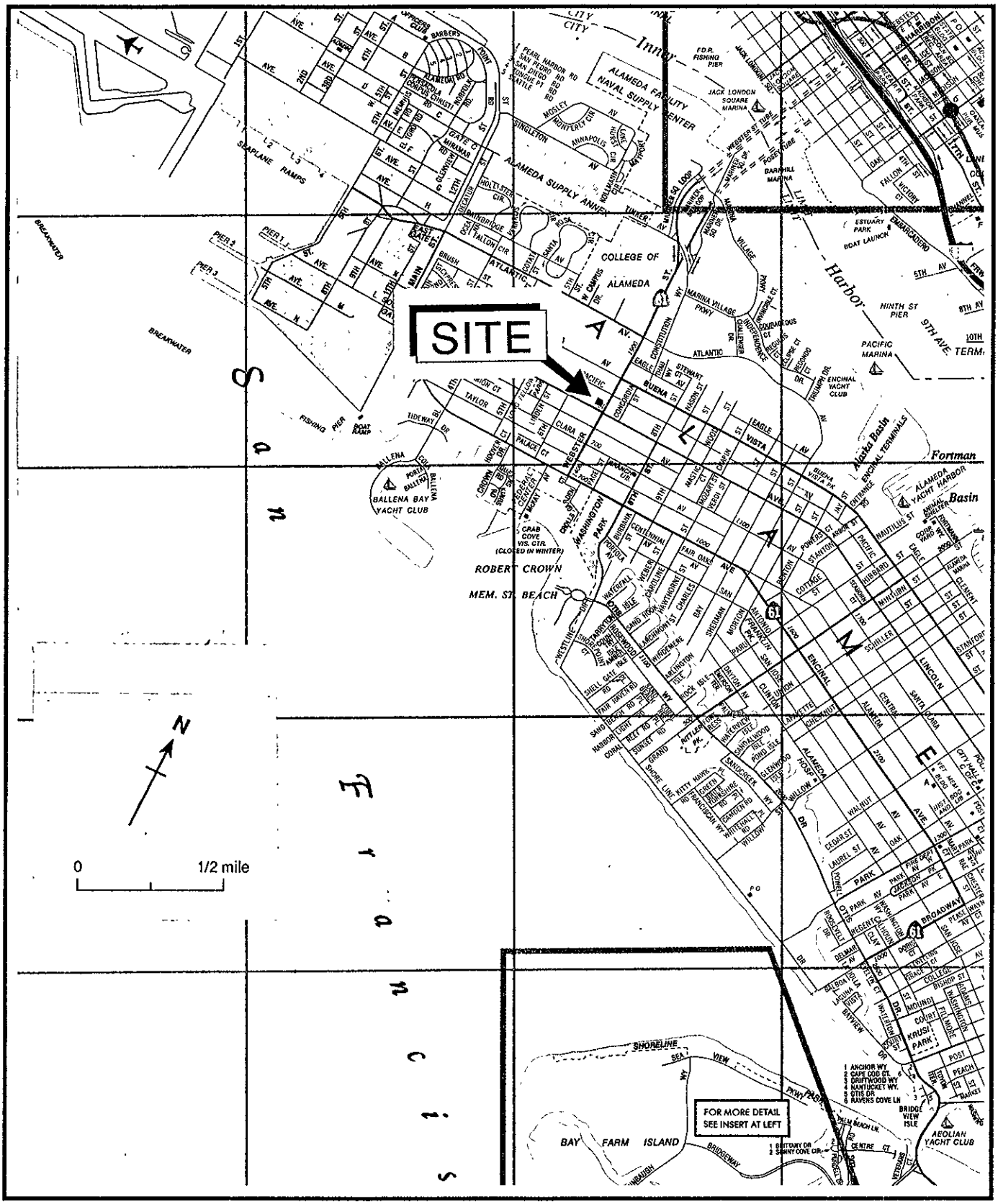

Figure 1. Site Location Map - Shell Service Station, WIC# 204-0072-0403, 1601 Webster Street, Alameda, CA

8/20/90

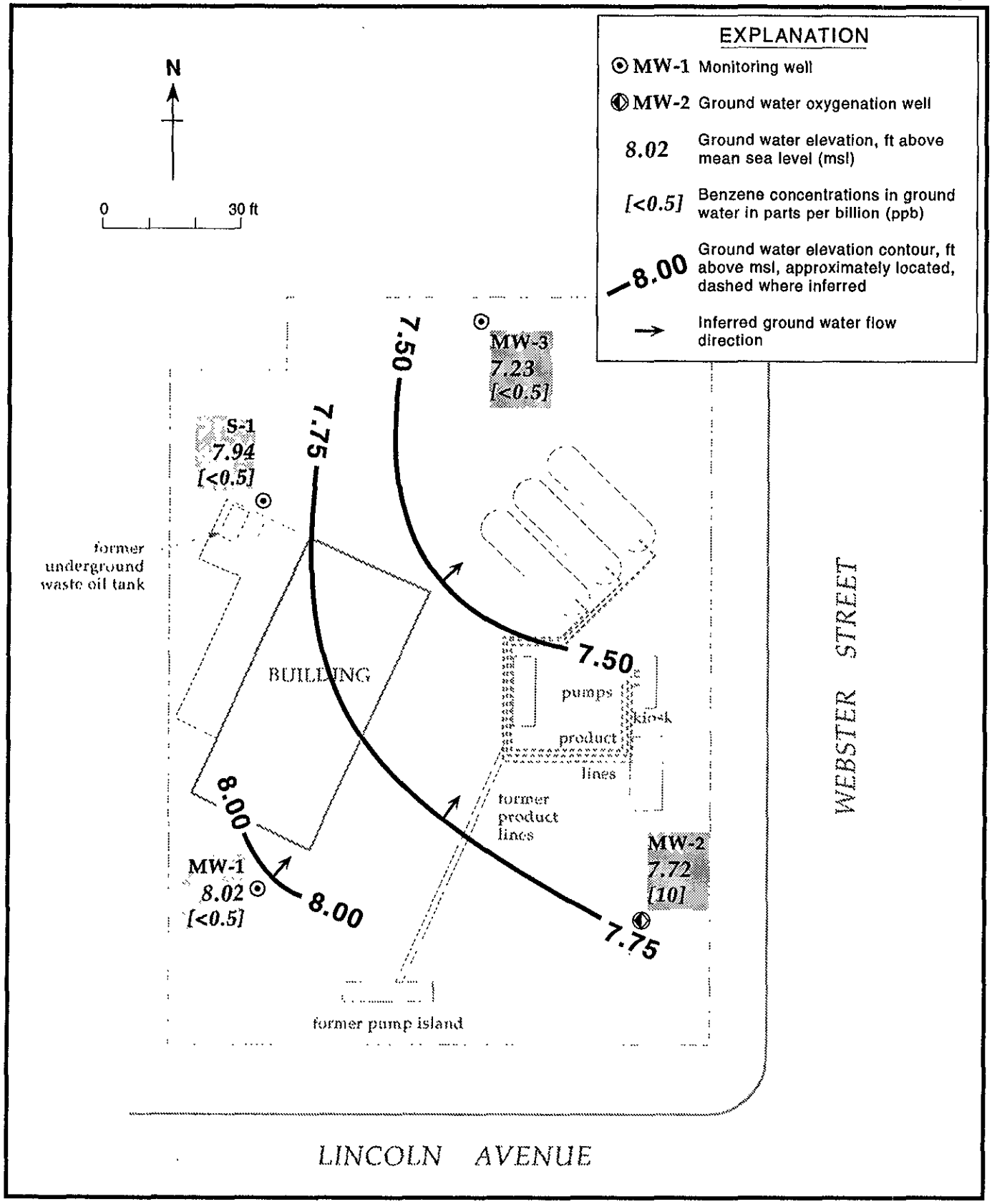

Figure 2. Monitoring Well Locations, Ground Water Elevation Contours and Benzene Concentrations in Ground Water - April 10, 1996 - Shell Service Station WIC #204-0072-0403, 1601 Webster Street, Alameda, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0072-0403, 1601 Webster Street Alameda, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	04/11/90	13.80	8.22	5.58
	07/18/90		9.14	4.66
	10/18/90		10.37	3.43
	01/25/91		10.41	3.39
	04/11/91		7.37	6.43
	07/18/91		8.86	4.94
	10/17/91		10.47	3.33
	01/24/92		9.18	4.62
	04/23/92		6.95	6.85
	07/22/92		8.01	5.79
	10/02/92		9.81	3.99
	01/05/93		7.26	6.54
	04/08/93	13.80[a]	5.85	7.95
	07/20/93		6.83	6.97
	10/15/93		8.07	5.73
	01/07/94		7.82	5.98
	04/13/94		6.91	6.89
	07/26/94		7.51	6.29
	10/06/94		8.71	5.09
	01/26/95		5.43	8.37
	04/20/95		5.50	8.30
	07/12/95		6.48	7.32
	10/12/95		7.44	6.36
	01/11/96		6.95	6.85
	04/10/96		**5.78**	**8.02**
MW-2	04/11/90	13.20	7.69	5.51
	07/18/90		8.56	4.64
	10/18/90		9.76	3.44
	01/25/91		9.78	3.42
	04/11/91		6.87	6.33
	07/18/91		8.27	4.93
	10/17/91		9.89	3.31
	01/24/92		8.60	4.60
	04/23/92		6.48	6.72
	07/02/92		7.37	5.83
	10/02/92		9.20	4.00
	01/05/93		6.80	6.40
	04/08/93	13.20[a]	5.40	7.80
	07/20/93		6.05	7.15
	10/15/93		7.04	6.16
	01/07/94		6.99	6.21
	04/13/94		6.20	7.00

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0072-0403, 1601 Webster Street Alameda, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	07/26/94		6.63	6.57
	10/06/94		7.75	5.45
	01/26/95		4.49	8.71
	04/20/95		5.28	7.92
	07/12/95		5.84	7.36
	10/12/95		6.68	6.52
	01/11/96		6.29	6.91
	04/10/96		**5.48**	**7.72**
MW-3	04/08/93	12.80	5.48	7.32
	07/20/93		6.38	6.42
	10/15/93		7.53	5.27
	01/07/94		7.38	5.42
	04/13/94		6.50	6.30
	07/26/94		7.00	5.80
	10/06/94		8.10	4.70
	01/26/95		5.00	7.80
	04/20/95		5.24	7.56
	07/12/95		6.10	6.70
	10/12/95		6.98	5.82
	01/11/96		6.48	6.32
	04/10/96		**5.57**	**7.23**
S-1	09/11/89	13.77	9.82	3.95
	04/11/90		8.41	5.36
	07/18/90		9.31	4.46
	10/18/90		10.43	3.34
	01/25/91		10.49	3.28
	04/11/91		7.68	6.09
	07/18/91		8.95	4.82
	10/17/91		10.62	3.15
	01/24/92		9.32	4.45
	04/23/92		7.27	6.50
	07/02/92		8.19	5.58
	10/02/92		9.95	3.82
	01/05/93		7.64	6.13
	04/08/93	13.74[a]	6.10	7.64
	07/20/93		7.18	6.56
	10/15/93		8.39	5.35
	01/07/94		8.19	5.55
	04/13/94		7.22	6.52
	07/26/94		7.82	5.92
	10/06/94		9.01	4.73

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0072-0403, 1601 Webster Street Alameda, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	01/26/95		5.65	8.09
	04/20/95		6.82	6.92
	07/12/95		6.74	7.00
	10/12/95		7.76	5.98
	01/11/96		7.24	6.50
	04/10/96		**5.80**	**7.94**

Notes:

a = Top of casing resurveyed on March 30, 1993

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	c-1,2-DCE	1,2-DCA	TOG	DO (mg/l)	MTBE
			← parts per billion (µg/L) →										
MW-1	04-11-90	8.22	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10,000		
(Annually,	07-18-90	9.14	<50	---	<0.5	<0.5	<0.5	<0.5	3	<0.5	<5,000		
2nd Qtr.)	10-18-90	10.37	<50	---	<0.5	<0.5	<0.5	<0.5	7.9	<0.5	<5,000		
	01-25-91	10.41	<50	---	<0.5	<0.5	<0.5	<0.5	5.6	<0.5	---		
	04-11-91	7.37	<50	---	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	---		
	07-18-91	8.86	<50	---	<0.5	<0.5	<0.5	<0.5	4.4	<0.5	---		
	10-17-91	10.47	<50	---	<0.5	<0.5	<0.5	<0.5	7.2	<0.5	---		
	01-24-92	9.18	<50	---	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	---		
	04-23-92	6.95	<50		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	07-02-92	8.01	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	10-02-92	9.81	<50	---	<0.5	<0.5	<0.5	<0.5	2	<0.5	---		
	01-05-93	7.26	<50	---	<0.5	<0.5	<0.5	<0.5	2	<0.5	---		
	04-08-93[a]	5.85	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	07-20-93[b]	6.83	<50	---	<0.5	<0.5	<0.5	<0.5	0.76	<0.5	---		
	10-15-93	8.07	<50	---	<0.5	<0.5	<0.5	<0.5	0.71	<0.5	---		
	01-07-94	7.82	<50	---	<0.5	<0.5	<0.5	<0.5	3.1	0.85	---	5.5	
	04-13-94	6.91	<50	---	<0.5	<0.5	<0.5	<0.5	3.6	0.95	---	---	
	07-26-94	7.51	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	2.8	
	10-06-94[c]	8.71	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	4.0	
	04/20/95	5.50	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	---	
	04/10/96	**5.78**	**<50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**---**	**---**	**---**	**<2.5**
MW-2	04-11-90	7.69	580	430	20	1.2	4.9	73	<0.5	1.1	<10,000		
(Quarterly)	07-18-90	8.56	1,400	---	110	71	310	310	<0.5	0.7	<5,000		
	10-18-90	9.76	1,900	1,300[d]	110	89	470	400	<0.5	0.9	<5,000		
	01-25-91	9.78	8,100	---	430	480	1,200	2,600	<0.5	0.8	---		
	04-11-91	6.87	2,600	---	130	250	150	330	<0.5	<0.5	---		
	07-15-91	8.27	1,300	---	100	84	59	120	<0.5	0.8	---		
	10-17-91	9.89	2,100	---	180	150	260	520	<0.5	0.6	---		
	01-24-92	8.60	7,100	---	450	960	450	1,600	110	<0.5	---		
	04-23-92	6.48	16,000	---	320	650	740	2,600	<2.5	<2.5	---		
	07-02-92	7.37	33,000	---	2,500	2,000	3,700	9,600	<50	<50	---		
	10-02-92	9.20	7,000	---	960	570	650	1,200	<50	<50	---		

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Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	c-1,2-DCE	1,2-DCA	TOG	DO (mg/l)	MTBE
			← parts per billion (µg/L) →										
	01-05-93	6.80	8,900	---	550	600	500	1,900	<2	<2	---		
	04-08-93	5.40	13,000	---	670	900	580	2,900	0.68	<0.5	---		
	04-08-93[dup]	5.40	13,000	---	830	1,100	740	3,700	0.64	<0.5	---		
	07-20-93	6.05	10,000	---	1,200	1,100	630	4,000	0.87	<0.5	---		
	07-20-93[dup]	6.05	12,000	---	1,200	1,100	600	3,800	0.80	<0.5	---		
	10-15-93	7.04	24,000	---	1,400	1,200	3,400	5,200	<0.5	<0.5	---		
	10-15-93[dup]	7.04	19,000	---	1,200	1,000	2,800	4,400	<0.5	<0.5	---		
	01-07-94	6.99	27,000	---	1,300	1,900	2,700	7,900	<10	<10	---		
	01-07-94[dup]	6.99	33,000	---	1,100	1,700	2,300	6,900	<10	<10	---		
	04-13-94	6.20	16,000	---	460	820	93	2,700	<25	<25	---	3.6	
	04-13-94[dup]	6.20	18,000	---	500	880	100	3,000	<25	<25	---	---	
	07-26-94	6.63	25,000	---	1,600	1,500	1,500	6,800	<0.4	<0.4	---	3.2	
	07-26-94[dup]	6.63	28,000	---	1,700	1,600	1,600	7,300	<0.4	<0.4	---		
	10-06-94	7.75	15,000	---	850	1,000	650	4,000	<0.4	<0.4	---	2.4	
	10-06-94[dup]	7.75	17,000	---	1000	1,200	630	4,500	<0.4	<0.4	---	1.6	
	01-26-95	4.49	3,200	---	63	300	14	1,000	<0.4	<0.4	---		
	01-26-95 [dup]	4.49	3,100	---	31	140	13	820	<0.4	<0.4	---		
	04/20/95	5.28	<50	---	4.4	1.3	<0.5	3.3	<0.4	<0.4	---	---	
	04/20/95[dup]	5.28	<50	---	0.5	0.6	<0.5	3.3	<0.4	<0.4	---	---	
	07/12/95	5.84	<50	---	1.1	<0.5	1.1	<0.5	---	---	---	10.4	
	07/12/95 [dup]	5.84	<50	---	0.9	<0.5	0.8	<0.5	---	---	---	10.4	
	10/12/95	6.68	370	---	20	8.2	3.0	92	<0.5	<0.4	---	6.4	
	01/11/96	6.29	90	---	3.8	3.5	<0.5	3.0	0.6	<0.4	---	5.8	
	04/10/96	**5.48**	**61**	**---**	**9.9**	**3.6**	**<0.5**	**1.8**	**---**	**---**	**---**	**---**	**<2.5**
	04/10/96[dup]	**5.48**	**54**	**---**	**10**	**4.0**	**<0.5**	**1.7**	**---**	**---**	**---**	**---**	**<2.5**
MW-3 (Quarterly)	02-25-93	5.37	58	140	<0.5	2.5	<0.5	6.4	<0.5	1.5	<5,000		
	04-08-93	5.48	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	07-20-93[e]	6.38	<50	---	1.2	<0.5	<0.5	<0.5	<0.5	2.8	---		
	10-15-93[f]	7.53	60	---	<0.5	<0.5	<0.5	<0.5	<0.5	0.55	---		
	01-07-94	7.38	74	---	<0.5	<0.5	<0.5	0.76	<0.5	0.91	---	4.6	
	04-13-94	6.50	<50	---	<0.5	<0.5	<0.5	<0.5	<1.3	<1.3	---	---	

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	c-1,2-DCE	1,2-DCA	TOG	DO (mg/l)	MTBE
			← parts per billion (µg/L) →										
	07-26-94	7.00	750[g]	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	1.7	
	10-06-94	8.10	1,900[g]	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	3.0	
	01-26-95	5.00	580[g]	---	<0.5	<0.5	<0.5	1.3	<0.4	<0.4	---	1.3	
	04/20/95	5.24	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	---	
	07/12/95	6.10	50	---	4.2	<0.5	2.9	0.9	---	---	---	7.2	
	10/12/95	6.98	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	7.1	
	10/12/95	6.98	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	7.1	
	01/11/96	6.48	50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	6.4	
	01/11/96[dup]	6.48	50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	---	
	04/10/96	**5.57**	**200**	**---**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**---**	**---**	**---**	**---**	**670**
S-1	09-04-87[h]		---	---	<5	<5	<5	<5	<0.5	<0.5	---		
(Annually,	09-11-89[j]	9.82	<50	<100	<0.5	<1	<1	<3	<0.5	<0.5	<1,000		
1st Qtr.)	04-11-90	8.41	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10,000		
	07-18-90	9.31	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5,000		
	10-18-90	10.43	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5,000		
	01-25-91	10.49	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	04-11-91	7.68	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	07-18-91	8.95	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	10-17-91	10.62	<50	---	<0.5	<0.5	<0.5	<5	---	---	---		
	01-24-92	9.32	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	04-23-92	7.27	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	07-02-92	8.19	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	10-02-92	9.95	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	01-05-93	7.64	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	04-08-93	6.10	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	07-20-93	7.18	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	10-15-93	8.39	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	01-07-94	8.19	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	6.8	
	04-13-94	7.22	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	
	07-26-94	7.82	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	2.6	

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	c-1,2-DCE	1,2-DCA	TOG	DO (mg/l)	MTBE
			← parts per billion (µg/L) →										
	10-06-94	9.01	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	6.0	
	04/20/95	6.82	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	
	04/10/96	**5.80**	**<50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**---**	**---**	**---**	**<2.5**
Trip	07-18-90		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
Blank	10-18-90		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	01-25-91		<50	---	<0.5	<0.5	<0.5	0.8	---	---	---		
	04-11-91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	07-18-91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	10-17-91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	01-24-92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	04-23-92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	07-02-92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	10-02-92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	01-05-93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	04-08-93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	07-20-93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	10-15-93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	01-07-94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	04-13-94		<50	---	<0.5	<0.5	<0.5[j]	<0.5	---	---	---		
	07-26-94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	10-06-94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	01-26-95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	04/20/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	07/12/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
	10/12/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---		
DTSC MCLs			NE	NE	1	680	100[k]	1,750	6.0	0.5	NE		

Table 2. Analytic Results for Ground Water - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, 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
B = Benzene by EPA Method 602, 624, or 8020
E = Ethylbenzene by EPA Method 602, 624, or 8020
T = Toluene by EPA Method 602, 624, or 8020
X = Xylenes by EPA Method 602, 624, or 8020
c-1,2-DCE = cis-1,2-dichloroethene by EPA Method 601 or 624
1,2-DCA = 1,2-dichloroethane by EPA Method 601 or 624
TOG = Total non-polar oil and grease by American Public Health Association Standard Method 503E
<n = Not detected at detection limit of n ppb
DTSC MCL = California Department of Toxic Substances Control maximum contaminant level for drinking water
NE = Not established
--- = Not analyzed/measured
dup = Duplicate sample
DO = Dissolved Oxygen in mg/L

Notes:

a = Chloroform detected at 0.0071 ppm by EPA Method 8010
b = Chloroform detected at 1.1 ppb by EPA Method 8010
c = Trichloroethylene detected at 1.7ppb.
d = Compounds detected and calculated as diesel appear to be the less volatile constituents of gasoline
e = Chloroform detected at 1.5 ppb by EPA Method 8010
f = Chloroform detected at 3.6 ppb by Method 8010
g = The result for Gasoline in and unknown hydrocarbon which consists of a single peak.
h = 0.12 ppm acetone detected by EPA Method 624; no other volatile organic compounds detected
i = Metals detected by EPA Method 6010; 0.020 ppm chromium, 0.060 ppm lead and 0.030 ppm zinc; no cadmium detected above detection limit of 0.010 ppm; no PCBs or semi-volatile compounds detected by EPA Method 625
j = 0.54 ppb Toluene detected in equipment blank
k = DTSC recommended action level for drinking water; MCL not established

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

April 29, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-0072-0403
1601 Webster Street
Alameda, California

2nd Quarter 1996

Quarterly Groundwater Monitoring Report 960410-K-2

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. Copies of our Sampling Report along with the laboratory's Certified Analytical Report are forwarded to the consultant overseeing work at this site. Submission of the assembled documents to interested regulatory agencies will be made by the designated consultant.

Groundwater monitoring at this site was performed in accordance with Standard Operating Procedures provided to the interested regulatory agencies. If you have any questions about the work performed at this site please call me at (408) 995-5535 ext. 201.

Yours truly,

Francis Thie

attachments: Table of Well Gauging Data
Chain of Custody
Field Data Sheets
Certified Analytical Report

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

(Any professional evaluations or recommendations will be made by the consultant under separate cover.)

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	4/10/96	TOC	--	NONE	--	--	5.78	20.73
MW-2 *	4/10/96	TOC	--	NONE	--	--	5.48	19.15
MW-3	4/10/96	TOC	--	NONE	--	--	5.57	19.37
S-1	4/10/96	TOC	--	NONE	--	--	5.80	19.30

* Sample DUP was a duplicate sample taken from well MW-2.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960410K2

Date: 4/10/96
Page 1 of 1

Site Address: 1601 Webster Street, Alameda

WIC#: 204-0072-0403

Shell Engineer: ~~Dan Kirk~~ R. Jeff Granberry — Phone No.: (510) 675-6168 Fax #: 675-6160

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: KCB

Printed Name: Kent Brown

LAB: Sq

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	EPA 601	MTBE	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW1	4/10			W		6						X	X	X					9604053-01	1AF
MW2	"			"		"						X	X	X					02	
MW3	"			"		"						X	X	X					03	
S-1	"			"		"						X	X	X					04	
DUP	"			"		"						X	X	X					05	
EB	"			"		"						X	X	X					06	

CHECK ONE (1) BOX ONLY — C1/D1

- Quarterly Monitoring [X] 6441
- Site Investigation [ ] 6441
- Soil Closure/Disposal [ ] 6442
- Water Closure/Disposal [ ] 6443
- Soil/Air Rem. or Sys. O & M [ ] 6452
- Water Rem. or Sys. O & M [ ] 6453
- Other [ ]

TURN AROUND TIME

- 24 hours [ ]
- 48 hours [ ]
- 15 days [X] (Normal)
- Other [ ] ____

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

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
	Kent Brown	4-11	1015		M. Herd	4-11-96	1015
	M. Herd	4-11-96	1140				

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

Shell Co. Chain of Custody

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Project: Shell, Alameda, 960410-K2

Enclosed are the results from samples received at Sequoia Analytical on April 11, 1996. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9604853 -01	LIQUID, MW1	04/10/96	601 Purgeable Halocarbons
9604853 -01	LIQUID, MW1	04/10/96	TPGBMW Purgeable TPH/BTEX
9604853 -02	LIQUID, MW2	04/10/96	601 Purgeable Halocarbons
9604853 -02	LIQUID, MW2	04/10/96	TPGBMW Purgeable TPH/BTEX
9604853 -03	LIQUID, MW3	04/10/96	601 Purgeable Halocarbons
9604853 -03	LIQUID, MW3	04/10/96	TPGBMW Purgeable TPH/BTEX
9604853 -04	LIQUID, S-1	04/10/96	601 Purgeable Halocarbons
9604853 -04	LIQUID, S-1	04/10/96	TPGBMW Purgeable TPH/BTEX
9604853 -05	LIQUID, DUP	04/10/96	601 Purgeable Halocarbons
9604853 -05	LIQUID, DUP	04/10/96	TPGBMW Purgeable TPH/BTEX
9604853 -06	LIQUID, EB	04/10/96	601 Purgeable Halocarbons
9604853 -06	LIQUID, EB	04/10/96	TPGBMW Purgeable TPH/BTEX

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Alameda, 960410-K2
Sample Descript: MW1
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9604853-01

Sampled: 04/10/96
Received: 04/11/96

Analyzed: 04/15/96
Reported: 04/24/96

QC Batch Number: GC041296060109A
Instrument ID: GCHP9

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	87

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Alameda, 960410-K2
Sample Descript: MW1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9604853-01

Sampled: 04/10/96
Received: 04/11/96

Analyzed: 04/17/96
Reported: 04/24/96

QC Batch Number: GC041796BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	123

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Technical Services	Client Proj. ID: Shell, Alameda, 960410-K2	Sampled: 04/10/96
985 Timothy Drive	Sample Descript: MW2	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 04/15/96
Attention: Jim Keller	Lab Number: 9604853-02	Reported: 04/24/96

QC Batch Number: GC041296060109A
Instrument ID: GCHP9

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	**0.50**	**0.80**
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: Shell, Alameda, 960410-K2	Sampled: 04/10/96
985 Timothy Drive	Sample Descript: MW2	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/17/96
Attention: Jim Keller	Lab Number: 9604853-02	Reported: 04/24/96

QC Batch Number: GC041796BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**61**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	**0.50**	**9.9**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**3.6**
Xylenes (Total)	**0.50**	**1.8**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	124

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Technical Services	Client Proj. ID: Shell, Alameda, 960410-K2	Sampled: 04/10/96
985 Timothy Drive	Sample Descript: MW3	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 04/16/96
Attention: Jim Keller	Lab Number: 9604853-03	Reported: 04/24/96

QC Batch Number: GC041296060109A
Instrument ID: GCHP9

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.2	N.D.
Bromoform	1.2	N.D.
Bromomethane	2.5	N.D.
Carbon Tetrachloride	1.2	N.D.
Chlorobenzene	1.2	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	1.2	N.D.
Chloromethane	2.5	N.D.
Dibromochloromethane	1.2	N.D.
1,2-Dichlorobenzene	1.2	N.D.
1,3-Dichlorobenzene	1.2	N.D.
1,4-Dichlorobenzene	1.2	N.D.
1,1-Dichloroethane	1.2	N.D.
1,2-Dichloroethane	1.2	N.D.
1,1-Dichloroethene	1.2	N.D.
cis-1,2-Dichloroethene	1.2	N.D.
trans-1,2-Dichloroethene	1.2	N.D.
1,2-Dichloropropane	1.2	N.D.
cis-1,3-Dichloropropene	1.2	N.D.
trans-1,3-Dichloropropene	1.2	N.D.
Methylene chloride	12	N.D.
1,1,2,2-Tetrachloroethane	1.2	N.D.
Tetrachloroethene	1.2	N.D.
1,1,1-Trichloroethane	1.2	N.D.
1,1,2-Trichloroethane	1.2	N.D.
Trichloroethene	1.2	N.D.
Trichlorofluoromethane	1.2	N.D.
Vinyl chloride	2.5	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: Shell, Alameda, 960410-K2	Sampled: 04/10/96
985 Timothy Drive	Sample Descript: MW3	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/19/96
Attention: Jim Keller	Lab Number: 9604853-03	Reported: 04/24/96

QC Batch Number: GC041996BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	N.D.
Methyl t-Butyl Ether	**10**	**670**
Benzene	2.0	N.D.
Toluene	2.0	N.D.
Ethyl Benzene	2.0	N.D.
Xylenes (Total)	2.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	78

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Alameda, 960410-K2
Sample Descript: S-1
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9604853-04

Sampled: 04/10/96
Received: 04/11/96

Analyzed: 04/16/96
Reported: 04/24/96

QC Batch Number: GC041296060109A
Instrument ID: GCHP9

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	93

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Alameda, 960410-K2
Sample Descript: S-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9604853-04

Sampled: 04/10/96
Received: 04/11/96

Analyzed: 04/17/96
Reported: 04/24/96

QC Batch Number: GC041796BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	114

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: Shell, Alameda, 960410-K2	Sampled: 04/10/96
985 Timothy Drive	Sample Descript: DUP	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 04/16/96
Attention: Jim Keller	Lab Number: 9604853-05	Reported: 04/24/96

QC Batch Number: GC041296060109A
Instrument ID: GCHP9

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	**0.50**	**0.79**
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	90

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Alameda, 960410-K2
Sample Descript: DUP
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9604853-05

Sampled: 04/10/96
Received: 04/11/96

Analyzed: 04/17/96
Reported: 04/24/96

QC Batch Number: GC041796BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**54**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	**0.50**	**10**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**4.0**
Xylenes (Total)	**0.50**	**1.7**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	113

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Perner
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Alameda, 960410-K2
Sample Descript: EB
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9604853-06

Sampled: 04/10/96
Received: 04/11/96

Analyzed: 04/16/96
Reported: 04/24/96

QC Batch Number: GC041296060109A
Instrument ID: GCHP9

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	84

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: Shell, Alameda, 960410-K2	Sampled: 04/10/96
985 Timothy Drive	Sample Descript: EB	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/17/96
Attention: Jim Keller	Lab Number: 9604853-06	Reported: 04/24/96

QC Batch Number: GC041796BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	110

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Client Project ID: Shell Alameda, 960410-K2
Matrix: Liquid
Work Order #: 9604853 -01 - 02, 04 - 06
Reported: Apr 25, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC041796BTEX21A	GC041796BTEX21A	GC041796BTEX21A	GC041796BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J.Woo	J.Woo	J.Woo	J.Woo
MS/MSD #:	G9604493-03B	G9604493-03B	G9604493-03B	G9604493-03B
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/17/96	4/17/96	4/17/96	4/17/96
Analyzed Date:	4/17/96	4/17/96	4/17/96	4/17/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
Result:	10	9.7	8.9	27
MS % Recovery:	100	97	89	90
Dup. Result:	10	10	9.7	29
MSD % Recov.:	100	100	97	97
RPD:	0.0	3.0	8.6	7.1
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	GBLK041796A	GBLK041796A	GBLK041796A	GBLK041796A
Prepared Date:	4/17/96	4/17/96	4/17/96	4/17/96
Analyzed Date:	4/17/96	4/17/96	4/17/96	4/17/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Result:	10	10	10	31
LCS % Recov.:	100	100	100	103
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

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

Sequoia Analytical

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

Client Project ID: Shell Alameda, 960410-K2
Matrix: Liquid
Work Order #: 9604853 -03

Reported: Apr 25, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC041996BTEX17A	GC041996BTEX17A	GC041996BTEX17A	GC041996BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J.Woo	J.Woo	J.Woo	J.Woo
MS/MSD #:	G9604857-03C	G9604857-03C	G9604857-03C	G9604857-03C
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/19/96	4/19/96	4/19/96	4/19/96
Analyzed Date:	4/19/96	4/19/96	4/19/96	4/19/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
Result:	9.4	9.3	9.2	27
MS % Recovery:	94	93	92	90
Dup. Result:	9.0	8.8	8.9	26
MSD % Recov.:	90	88	89	87
RPD:	4.3	5.5	3.3	3.8
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	GBLK041996A	GBLK041996A	GBLK041996A	GBLK041996A
Prepared Date:	4/19/96	4/19/96	4/19/96	4/19/96
Analyzed Date:	4/19/96	4/19/96	4/19/96	4/19/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Result:	9.0	9.0	9.0	27
LCS % Recov.:	90	90	90	90
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Renner
Project Manager

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

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

Sequoia Analytical

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

Client Project ID: Shell Alameda, 960410-K2
Matrix: Liquid
Work Order #: 9604853 -01 - 06
Reported: Apr 25, 1996

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC041296060109A	GC041296060109A	GC041296060109A
Analy. Method:	EPA 601	EPA 601	EPA 601
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Cargasacchi	M. Cargasacchi	. Cargasacchi
MS/MSD #:	9604768-09	9604768-09	9604768-09
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	4/12/96	4/12/96	4/12/96
Analyzed Date:	4/12/96	4/12/96	4/12/96
Instrument I.D.#:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	25 ug/L	25 ug/L	25 ug/L
Result:	25	24	26
MS % Recovery:	100	96	104
Dup. Result:	29	29	32
MSD % Recov.:	116	116	128
RPD:	15	19	21
RPD Limit:	0-50	0-50	0-50

LCS #:	VBLK041596BS	VBLK041596BS	VBLK041596BS
Prepared Date:	4/15/96	4/15/96	4/15/96
Analyzed Date:	4/15/96	4/15/96	4/15/96
Instrument I.D.#:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	25 ug/L	25 ug/L	25 ug/L
LCS Result:	23	24	23
LCS % Recov.:	92	96	92

MS/MSD LCS Control Limits	30-140	40-130	40-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

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