Weiss Associates Environmental and Geologic Services

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

April 9, 1996

Jennifer Eberle
Alameda County Department
of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Re: **First Quarter 1996**
ACDEH STID #1107
Shell Service Station
WIC #204-6001-0109
29 Wildwood Avenue
Piedmont, California
WA Job #81-0463-206

Dear Ms. Eberle:

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:

- Blaine Tech Services, Inc. (BTS) San Jose, California measured ground water depths and collected water samples from the site wells (Figures 1 and 2). 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, respectively), contoured ground water elevations and plotted benzene concentrations in ground water (Figure 2).

Anticipated Second Quarter 1996 Activities:

- WA will submit a Calwater report for the second quarter 1996.

Please call if you have any questions.

Sincerely,
Weiss Associates

Grady Glasser
Technical Assistant

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

Attachments: A - BTS' Ground Water Monitoring Report
B - Sampling Frequency Modifications

cc: Jeff Granberry, Shell Oil Products Company, P.O. Box 4023 Concord, California 94524
John Jang, Regional Water Quality Control Board - San Francisco Bay, 2101 Webster Street, Suite 500, Oakland, California 94612

GSG/JWC:all
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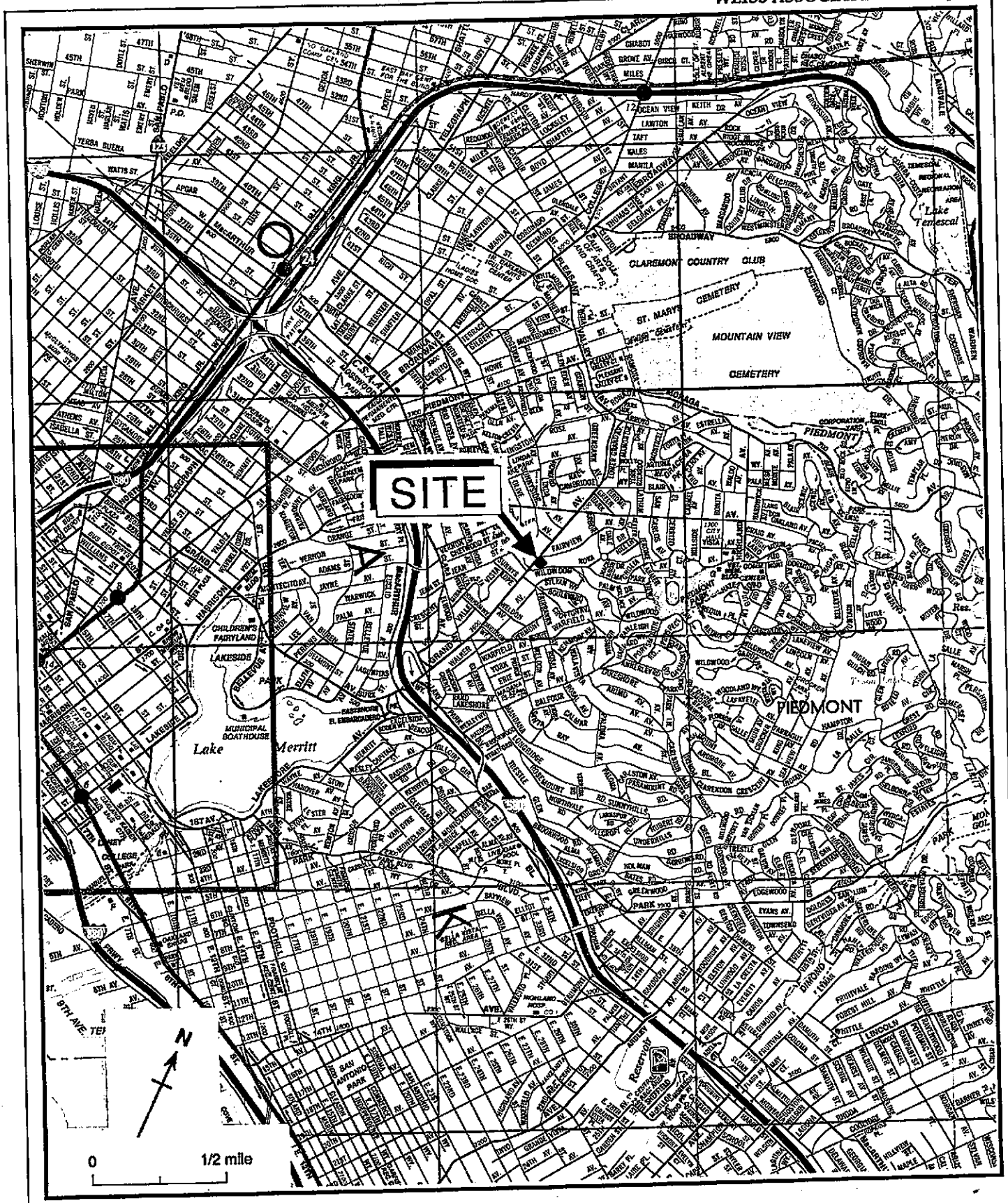

Figure 1. Site Location Map - Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California

6/6/90

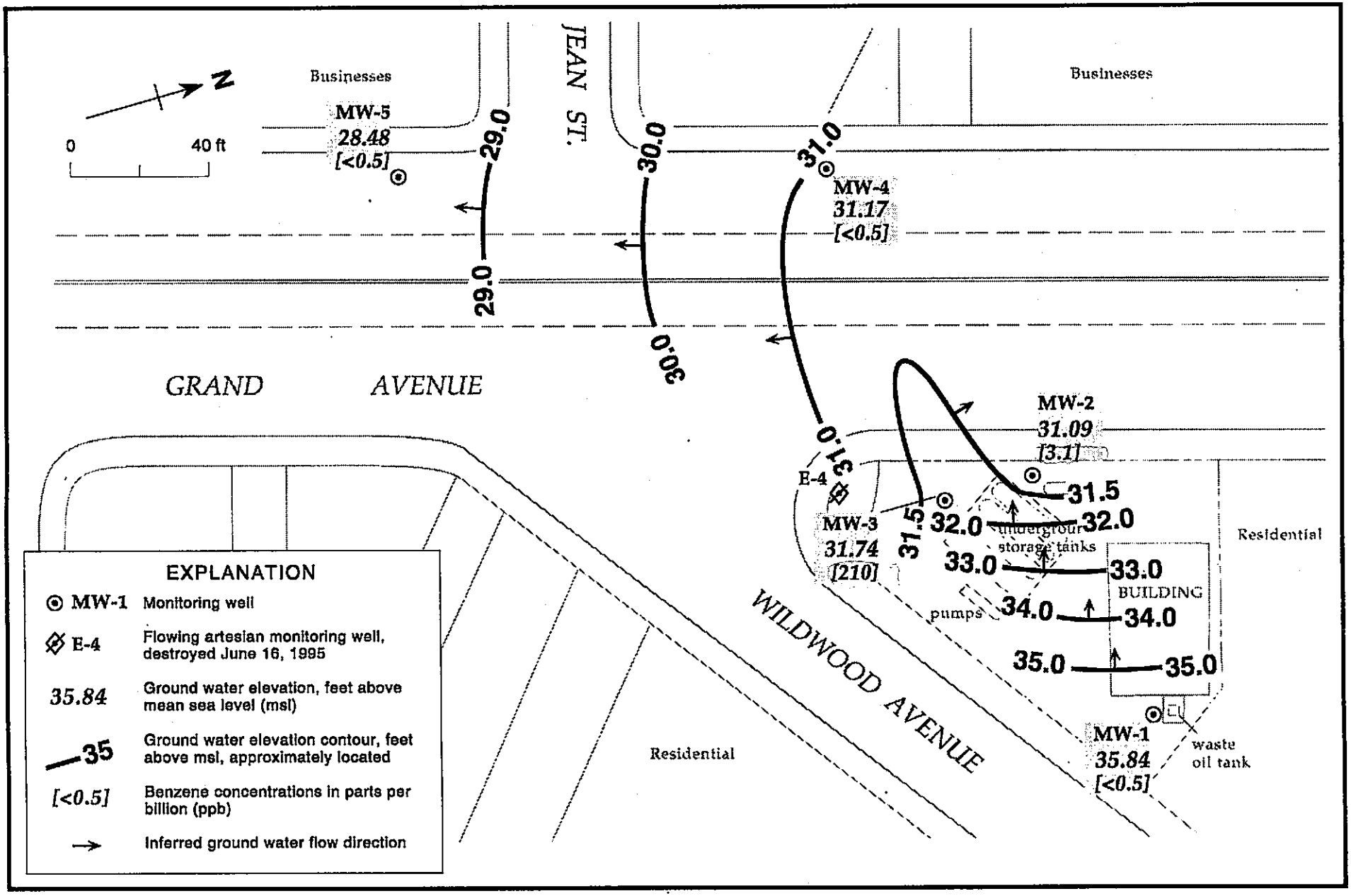

Figure 2. Monitoring Well Locations, Ground Water Elevation Contours and Benzene Concentrations in Ground Water - January 24, 1996 - Shell Service Station, WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	07/12/89	37.96	2.76	35.20
	01/30/90		3.10	34.86
	04/27/90		3.24	34.72
	07/31/90		4.26	33.70
	10/30/90		4.25	33.71
	01/31/91		3.66	34.30
	04/30/91		3.46	34.50
	07/30/91		4.14	33.82
	10/29/91		3.96	34.00
	01/20/92		3.59	34.37
	04/14/92		3.18	31.71
	07/21/92		4.17	33.79
	10/02/92		4.29	33.67
	01/20/93		2.32	35.64
	05/03/93		3.50	34.46
	06/28/93		3.76	34.20
	07/21/93		4.09	33.87
	10/19/93		3.58	34.38
	01/20/94		---	---
	04/12/94		3.60	34.36
	07/20/94		4.10	33.86
	10/06/94		4.30	33.66
	01/20/95		2.94	35.02
	07/06/95		3.68	34.28
	01/24/96		**2.12**	**35.84**
MW-2	07/12/89	34.89	3.66	31.23
	01/30/90		3.49	31.40
	04/27/90		3.79	31.10
	07/31/90		4.03	30.86
	10/30/90		4.21	30.68
	01/31/91		4.09	30.80
	04/30/91		3.95	30.94
	07/30/91		4.07	30.82
	10/29/91		4.11	30.78
	01/20/92		3.86	31.03
	04/14/92		3.66	34.30
	07/21/92		3.92	30.97
	10/02/92		4.45	30.44
	01/20/93		3.74	31.15
	05/03/93		3.77	31.12
	06/28/93		3.96	30.93
	07/21/93		4.39	30.50

Table 1. Ground Water Elevations - Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	10/19/93		3.92	30.97
	01/20/94		4.45	30.44
	04/12/94		4.72	30.17
	07/20/94		5.32	29.57
	10/06/94		4.03	30.86
	01/20/95		3.89	31.00
	07/06/95		8.84	26.05
	01/24/96		**3.80**	**31.09**
MW-3	07/12/89	35.00	3.83	31.17
	01/30/90		3.24	31.76
	04/27/90		4.02	30.98
	07/31/90		4.31	30.69
	10/30/90		4.52	30.48
	01/31/91		4.33	30.67
	04/30/91		3.79	31.21
	07/30/91		4.37	30.63
	10/29/91		4.00	31.00
	01/20/92		3.87	31.13
	04/14/92		3.15	31.85
	07/21/92		4.17	30.83
	10/02/92		4.43	30.57
	01/20/93		2.20	32.80
	05/03/93		3.50	31.50
	06/28/93		4.08	30.92
	07/21/93		4.12	30.88
	10/19/93		4.20	30.80
	01/20/94		4.08	30.92
	04/12/94		3.70	31.30
	07/20/94		4.26	30.74
	10/06/94		4.31	30.69
	01/20/95		3.00	32.00
	07/06/95		3.75	31.25
	01/24/96		**3.26**	**31.74**
MW-4	01/30/90	33.73	4.50	29.23
	04/27/90		3.62	30.11
	07/31/90		4.19	29.54
	10/30/90		4.19	29.54
	01/31/91		4.49	29.24
	04/30/91		4.02	29.71
	07/30/91		4.39	29.34
	10/29/91		3.75	29.98

Table 1. Ground Water Elevations - Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	01/20/92		3.94	29.79
	04/14/92		3.71	30.02
	07/21/92		4.02	29.71
	10/02/92		4.13	29.60
	01/20/93		3.10	30.63
	05/03/93		3.70	30.03
	06/28/93		3.81	29.92
	07/21/93		3.81	29.92
	10/19/93		3.94	29.79
	01/20/94		4.00	29.73
	04/12/94		4.01	29.72
	07/20/94		3.91	29.82
	10/06/94		3.99	29.74
	01/20/95		3.56	30.17
	07/06/95		3.85	29.88
	01/24/96		**2.56**	**31.17**
MW-5	01/30/90	31.38	7.12	24.26
	04/27/90		4.19	27.19
	07/31/90		4.09	27.29
	10/30/90		4.39	26.99
	01/31/91		4.49	26.89
	04/30/91		4.27	27.11
	07/30/91		4.32	27.06
	10/29/91		3.79	27.59
	01/20/92		4.09	27.29
	04/14/92		4.12	27.26
	07/21/92		4.13	27.25
	10/02/92		4.30	27.08
	01/20/93		3.12	28.26
	05/03/93		4.07	27.31
	06/28/93		4.08	27.30
	07/21/93		4.05	27.33
	10/19/93		4.20	27.18
	01/20/94		4.40	26.98
	04/12/94		4.18	27.20
	07/20/94		4.06	27.32
	10/06/94		4.01	27.37
	01/20/95		3.49	27.89
	07/06/95		4.06	27.32
	01/24/96		**2.90**	**28.48**

Table 1. Ground Water Elevations - Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
E-4 (Well destroyed on 6/16/95)	07/12/89	34.63	a	>39.13
	01/30/90		b	>34.63
	04/27/90		b	>34.63
	07/31/90		b	>34.63
	10/30/90		b	>34.63
	01/31/91		b	>34.63
	04/30/91		b	>34.63
	07/30/91		b	>34.63
	10/29/91		b	>34.63
	01/20/92		b	>34.63
	04/14/92		b	>34.63
	07/21/92		b	>34.63
	10/02/92		b	>34.63
	01/20/93		b	>34.63
	05/03/93		b	>34.63
	06/28/93		b	>34.63
	07/21/93		b	>34.63
	10/19/93		b	>34.63
	01/20/94		b	>34.63
	04/12/94		b	>34.63
	07/20/94		b	>34.63
	10/06/94		b	>34.63
	01/20/95		b	>34.63

Notes:

a = Well E-4 is a flowing artesian well. The potentiometric surface was greater than 4.5 ft above the top of the well casing.
b = Well E-4 potentiometric surface was higher than the top of the well casing.

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Table 2. Analytic Results for Ground Water, Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	Dissolved Oxygen[a]
			<—— parts per billion (µg/L) ——>					
MW-1 (1st and 3rd Quarters)	07/12/89	2.76	<50	<0.5	<1	<1	<3	---
	01/30/90	3.10	<50	<0.5	<0.5	<0.5	<0.5	---
	04/27/90	3.24	<50	<0.5	<0.5	<0.5	<0.5	---
	07/31/90	4.26	<50	<0.5	<0.5	<0.5	<0.5	---
	10/30/90	4.25	<50	<0.5	<0.5	<0.5	<0.5	---
	01/31/91	3.66	<50	<0.5	<0.5	<0.5	<0.5	---
	04/30/91	3.46	<50	0.8	0.6	<0.5	1.2	---
	07/30/91	4.14	<50	<0.5	<0.5	<0.5	<0.5	---
	10/29/91	3.96	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/92	3.59	<30	<0.3	<0.3	<0.3	<0.3	---
	04/14/92	3.18	<50	<0.5	<0.5	<0.5	<0.5	---
	07/21/92	4.17	<50	<0.5	<0.5	<0.5	<0.5	---
	10/02/92	4.29	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/93	2.32	<50	<0.5	<0.5	<0.5	<0.5	---
	05/04/93	3.50	<50	<0.5	<0.5	<0.5	<0.5	1,930
	07/21/93	4.09	<50	<0.5	<0.5	<0.5	<0.5	4,640
	10/19/93	3.58	50	<0.5	<0.5	<0.5	<0.5	4,310
	01/20/94[b]	---	---	---	---	---	---	---
	04/12/94	3.60	<50	<0.5	<0.5	<0.5	<0.5	7,460
	07/20/94	4.10	<50	<0.5	<0.5	<0.5	<0.5	3,200
	10/06/94	4.30	<50	<0.5	<0.5	<0.5	<0.5	3,200
	01/20/95	2.94	<50	<0.5	<0.5	<0.5	<0.5	10,600
	07/06/95	3.68	<50	<0.5	<0.5	<0.5	<0.5	---
	01/24/96	**2.12**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**
MW-2 (1st and 3rd Quarters)	07/12/89	3.66	60	2.7	<1	<1	<3	---
	01/30/90	3.49	<50	6.6	0.54	<0.5	0.93	---
	04/27/90	3.79	60	2.1	<0.5	<0.5	<0.5	---
	07/31/90	4.03	70	1.5	<0.5	<0.5	<0.5	---

Table 2. Analytic Results for Ground Water, Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	Dissolved Oxygen[a]
			<—— parts per billion (µg/L) ——>					
	10/30/90	4.21	70	<0.5	<0.5	0.7	1.6	---
	01/31/91	4.09	80	<0.5	0.9	<0.5	1.9	---
	04/30/91	3.95	100	5.9	0.7	0.6	2.0	---
	07/30/91	4.07	<50	<0.5	<0.5	<0.7	<0.5	---
	10/29/91	4.11	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/92	3.86	<30	0.84	<0.41	<0.3	<0.48	---
	04/14/92	3.66	70	16	3.1	<0.5	2.1	---
	07/21/92	3.92	<50	<0.5	<0.5	<0.5	<0.5	---
	10/02/92	4.45	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/93	3.74	<50	3.8	0.52	<0.5	<0.5	---
	05/04/93	3.77	680[d]	2.8	<0.5	<0.5	<0.5	900
	07/21/93	4.39	<50	8.0	1.8	1.2	7.9	5,880
	10/19/93	3.92	<50	<0.5	<0.5	<0.5	<0.5	5,700
	01/20/94	4.45	<50	1.5	<0.5	<0.5	<0.5	3,200
	04/12/94	4.72	<50	2.9	<0.5	<0.5	<0.5	11,380
	07/20/94	5.32	<50	<0.5	<0.5	<0.5	<0.5	2,400
	10/06/94	4.03	<50	<0.5	<0.5	<0.5	<0.5	2,900
	01/20/95	3.89	290	28	<0.5	<0.5	<0.5	4,600
	07/06/95	3.84	120	3.0	<0.5	<0.5	<0.5	---
	01/24/96	**3.80**	**70**	**3.1**	**0.8**	**<0.5**	**1.5**	**---**
	01/24/96[dup]	**3.80**	**70**	**3.2**	**0.7**	**0.5**	**1.5**	**---**
MW-3 (1st and 3rd Quarters)	07/12/89	3.83	3,900	380	99	41	30	---
	01/30/90	3.24	5,500	440	79	35	130	---
	04/27/90	4.02	4,500	310	37	26	110	---
	07/31/90	4.31	3,500	210	8.4	17	62	---
	10/30/90	4.52	2,300	610	<0.5	<0.5	28	---
	01/31/91	4.33	4,100	300	19	20	81	---
	04/30/91	3.79	3,800	370	8.6	19	60	---

Table 2. Analytic Results for Ground Water, Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	Dissolved Oxygen[a]
			<—— parts per billion (µg/L) ——>					
	07/30/91	4.37	3,300	160	15	13	87	---
	10/29/91	4.00	1,000	35	2.9	2.8	8.1	---
	01/20/92	3.87	6,900	380	47	18	48	---
	04/14/92	3.15	6,000	480	41	38	55	---
	07/21/92	4.17	3,700	330	30	13	23	---
	10/02/92	4.43	4,200	260	13	10	12	---
	01/20/93	2.20	4,200	360	32	15	26	---
	01/20/93[dup]	2.20	3,900	370	32	15	26	---
	05/04/93	3.50	12,000	290	120	520	620	630
	07/21/93	4.12	2,000	170	<10	12	11	4,340
	07/21/93[dup]	4.12	2,000	170	<10	10	14	---
	10/19/93	4.20	2,000	240	<0.5	<0.5	<0.5	5,740
	01/20/94	4.08	4,200	280	<10	<10	<10	4,100
	01/20/94[dup]	4.08	3,800	250	<10	<10	<10	4,100
	04/12/94	3.70	4,700	380	<10	<10	<10	10,620
	04/12/94[dup]	3.70	3,400	370	<25	<25	<25	---
	07/20/94	4.26	5,100	320	15	77	34	2,300
	07/20/94[dup]	4.26	4,400	250	13	14	32	---
	10/06/94	4.31	4,300	280	4.0	9.7	15	2,300
	01/20/95	3.00	4,600	180	16	18	10	11,100
	01/20/95[dup]	3.00	4,300	170	15	12	7.2	---
	07/06/95	3.75	3,900	310	7.6	<0.5	13	---
	07/06/95[dup]	3.75	4,100	330	7.9	<0.5	2.4	---
	01/24/96	**3.26**	**2,000**	**260**	**14**	**14**	**12**	**---**
MW-4 (1st and 3rd Quarters)	01/31/90	4.50	<50	<0.5	<0.5	<0.5	<0.5	---
	04/27/90	3.62	130[c]	<0.5	<0.5	<0.5	<0.5	---
	07/31/90	4.19	<50	<0.5	<0.5	<0.5	<0.5	---
	10/30/90	4.19	<50	<0.5	<0.5	<0.5	<0.5	---

Table 2. Analytic Results for Ground Water, Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	Dissolved Oxygen[a]
			<——— parts per billion (µg/L) ———>					
	01/31/91	4.49	50[c]	<0.5	<0.5	<0.5	<0.5	---
	04/30/91	4.02	<50	<0.5	<0.5	<0.5	<0.5	---
	07/30/91	4.39	<50	<0.5	<0.5	<0.5	<0.5	---
	10/29/91	3.75	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/92	3.94	<30	<0.3	<0.3	<0.3	<0.3	---
	04/14/92	3.71	<50	<0.5	<0.5	<0.5	<0.5	---
	07/21/92	4.02	<50	<0.5	<0.5	<0.5	<0.5	---
	10/02/92	4.13	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/93	3.10	<50	<0.5	<0.5	<0.5	<0.5	---
	05/04/93	3.70	<50	<0.5	<0.5	<0.5	<0.5	1,740
	07/21/93	3.81	<50	0.56	<0.5	<0.5	<0.5	4,510
	10/10/93	3.94	<50	<0.5	<0.5	<0.5	<0.5	5,750
	01/20/94	4.00	<50	0.71	<0.5	<0.5	<0.5	4,400
	04/12/94	4.01	<50	<0.5	<0.5	<0.5	<0.5	7,290
	07/20/94	3.91	160	<0.5	<0.5	<0.5	<0.5	6,400
	10/11/94	3.99	410	<0.5	<0.5	<0.5	<0.5	5,000
	01/20/95	3.56	<50	<0.5	<0.5	<0.5	<0.5	4,900
	07/06/95	3.85	<50	<0.5	<0.5	<0.5	<0.5	---
	01/24/96	**2.56**	**<50**	**<0.5**	**0.6**	**<0.5**	**1.8**	**---**
MW-5 (1st and 3rd Quarters)	01/31/90	7.12	<50	<0.5	<0.5	<0.5	<0.5	---
	04/27/90	4.19	210c	<0.5	<0.5	<0.5	<0.5	---
	07/31/90	4.09	90	<0.5	<0.5	<0.5	<0.5	---
	10/30/90	4.39	100	0.8	0.6	0.7	1.4	---
	01/31/91	4.49	80c	<0.5	<0.5	<0.5	<0.5	---
	04/30/91	4.27	90	<0.5	<0.5	<0.5	<0.5	---
	07/30/91	4.37	90	<0.5	<0.5	<0.5	<0.5	---
	10/29/91	3.79	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/92	4.09	<30	<0.3	<0.3	<0.3	<0.3	---

Table 2. Analytic Results for Ground Water, Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	Dissolved Oxygen[a]
			<——— parts per billion (µg/L) ———					——— >
	04/14/92	4.12	<50c	<0.5	<0.5	<0.5	<0.5	---
	07/21/92	4.13	74c	<0.5	<0.5	<0.5	<0.5	---
	10/02/92	4.30	76c	<0.5	<0.5	<0.5	<0.5	---
	01/20/93	3.12	72c	<0.5	<0.5	<0.5	<0.5	---
	05/04/93	4.07	70c	<0.5	<0.5	<0.5	<0.5	1,620
	05/04/93[dup]	4.07	80c	<0.5	<0.5	<0.5	<0.5	---
	07/21/93	4.05	<50	<0.5	<0.5	<0.5	<0.5	3,460
	10/19/93	4.20	51	<0.5	<0.5	<0.5	<0.5	3,820
	01/20/94	4.40	90	<0.5	<0.5	<0.5	<0.5	4,200
	04/12/94	4.18	67	<0.5	<0.5	<0.5	<0.5	---
	07/20/94	4.06	<50	<0.5	<0.5	<0.5	<0.5	3,200
	10/06/94	4.01	80	<0.5	<0.5	<0.5	<0.5	2,100
	10/06/94[dup]	4.01	60	<0.5	<0.5	<0.5	<0.5	---
	01/20/95	3.49	<50	<0.5	<0.5	<0.5	<0.5	3,200
	07/06/95	4.06	<50	<0.5	<0.5	<0.5	<0.5	---
	01/24/96	**2.90**	**70**	**<0.5**	**0.8**	**<0.5**	**2.9**	**---**
E-4	07/12/89	d	<50	<0.5	<1	<1	<3	---
(well destroyed	01/31/90	d	<50	<0.5	<0.5	<0.5	<0.5	---
on 6/16/95)	04/27/90	d	120[c]	<0.5	<0.5	<0.5	<0.5	---
	07/31/90	d	<50	<0.5	<0.5	<0.5	<0.5	---
	10/30/90	d	<50	<0.5	<0.5	<0.5	<0.5	---
	01/31/91	d	<50	<0.5	<0.5	<0.5	<0.5	---
	04/30/91	d	<50	<0.5	<0.5	<0.5	<0.5	---
	07/30/91	d	<50	<0.5	<0.5	0.6	<0.5	---
	10/29/91	d	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/92	d	<30	<0.3	<0.3	<0.3	<0.3	---
	04/14/92	d	<50	<0.5	<0.5	<0.5	<0.5	---
	07/21/92	d	<50	<0.5	<0.5	<0.5	<0.5	---

Table 2. Analytic Results for Ground Water, Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	Dissolved Oxygen[a]
			<—— parts per billion (µg/L) ——>					
	10/02/92	d	<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/93	d	<50	<0.5	<0.5	<0.5	<0.5	---
	05/04/93	d	<50	<0.5	<0.5	<0.5	<0.5	630
	07/21/93	d	<50	5.4	1.0	0.72	4.4	5,440
	10/19/93	d	<50	<0.5	<0.5	<0.5	<0.5	5,630
	01/20/94	d	<50	<0.5	<0.5	<0.5	<0.5	---
	04/12/94	d	<50	<0.5	<0.5	<0.5	<0.5	9,410
	07/20/94	d	<50	<0.5	<0.5	<0.5	<0.5	2,000
	10/06/94	d	<50	<0.5	<0.5	<0.5	<0.5	1,300
	01/20/95	d	<50	<0.5	<0.5	<0.5	<0.5	3,700
Trip Blank	07/12/89		<50	<0.5	<1	<1	<3	---
	01/31/90		<50	<0.5	<.5	<0.5	<0.5	---
	04/27/90		<50	<0.5	<0.5	<0.5	<0.5	---
	07/31/90		<50	<0.5	<0.5	<0.5	<0.5	---
	10/30/90		<50	<0.5	<0.5	<0.5	<0.5	---
	01/31/91		<50	<0.5	<0.5	<0.5	<0.5	---
	04/30/91		<50	<0.5	<0.5	<0.5	<0.5	---
	07/30/91		<50	<0.5	<0.5	<0.5	<0.5	---
	10/29/91		<50	<0.5	<0.5	<0.5	<0.5	---
	10/02/92		<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/93		<50	<0.5	<0.5	<0.5	<0.5	---
	05/03/93		<50	<0.5	<0.5	<0.5	<0.5	---
	07/21/93		<50	<0.5	<0.5	<0.5	<0.5	---
	10/19/93		<50	<0.5	<0.5	<0.5	<0.5	---
	01/20/94		<50	<0.5	<0.5	<0.5	<0.5	---
	04/12/94		<50	<0.5	<0.5	0.71	<0.5	---
	07/20/94		<50	<0.5	<0.5	<0.5	<0.5	---
	10/06/94		<50	<0.5	<0.5	<0.5	<0.5	---

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Table 2. Analytic Results for Ground Water, Shell Service Station WIC #204-6001-0109, 29 Wildwood Avenue, Piedmont, California (continued)

Well ID and Sampling Frequency	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	Dissolved Oxygen[a]
			<——— parts per billion (µg/L) ———>					
	01/20/95		<50	<0.5	<0.5	<0.5	<0.5	---
	07/06/95		<50	<0.5	<0.5	<0.5	<0.5	---
Bailer	04/27/90		110[c]	<0.5	<0.5	<0.5	<0.5	---
Blank	01/31/91		<5	<0.5	<0.5	<0.5	<0.5	---
	10/02/92		ND	ND	ND	ND	ND	---
DTSC MCLs			NE	1	680	100[f]	1,750	NA

Abbreviations:

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Modified EPA Method 8015
B = Benzene by EPA Method 602 or 8020
E = Ethylbenzene by EPA Method 602 or 8020
T = Toluene by EPA Method 602 or 8020
X = Xylenes by EPA Method 602 or 8020
HVOCs = Halogenated volatile organic compounds by EPA Method 601 or 624
--- = Not analyzed
NE = Not established
DTSC MCLs = California Department of Toxic Substances Control Maximum Contaminant Levels for drinking water
<n = Not detected above detection limit of n ppb

Notes:

a = Field measurement of dissolved oxygen concentration (ppb)
b = Well inaccessible, not sampled
c = Chromatogram contained discrete peaks; not representative of gasoline
d = Artesian well; potentiometric surface above top-of-casing elevation
e = Researched on later date due to inaccessibility from parked car
f = DTSC recommended action level for drinking water; MCL not established.

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ATTACHMENT A

BLAINE TECH'S GROUND WATER MONITORING REPORT

BLAINE
TECH SERVICES INC.

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

February 9, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-6001-0109
29 Wildwood Ave.
Piedmont, California

1st Quarter 1996

Quarterly Groundwater Monitoring Report 960124-J-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	1/24/96	TOC	–	NONE	–	–	2.12	13.18
MW-2 *	1/24/96	TOC	–	NONE	–	–	3.80	11.50
MW-3	1/24/96	TOC	–	NONE	–	–	3.26	9.00
MW-4	1/24/96	TOC	–	NONE	–	–	2.56	12.76
MW-5	1/24/96	TOC	–	NONE	–	–	2.90	16.06

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

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: 01/31/1996
NET Client Acct. No: 1821
NET Job No: 96.00339
Received: 01/26/1996

Client Reference Information

Shell 29 Wildwood Ave., Piedmont, CA/960124-J2

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 Erinlee
Project Coordinator

Enclosure(s)

Ref: Shell 29 Wildwood Ave., Piedmont, CA/960124-J2

SAMPLE DESCRIPTION: MW-1
Date Taken: 01/24/1996
Time Taken:
NET Sample No: 259560

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/29/1996	3512
Purgeable TPH	ND		50	ug/L	5030/M8015		01/29/1996	3512
Carbon Range: C6 to C12	--						01/29/1996	3512
8020 (GC, Liquid)	--						01/29/1996	3512
Benzene	ND		0.5	ug/L	8020		01/29/1996	3512
Toluene	ND		0.5	ug/L	8020		01/29/1996	3512
Ethylbenzene	ND		0.5	ug/L	8020		01/29/1996	3512
Xylenes (Total)	ND		0.5	ug/L	8020		01/29/1996	3512
SURROGATE RESULTS	--						01/29/1996	3512
Bromofluorobenzene (SURR)	80			% Rec.	8020		01/29/1996	3512

SAMPLE DESCRIPTION: MW-2
Date Taken: 01/24/1996
Time Taken:
NET Sample No: 259561

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/29/1996	3512
Purgeable TPH	70		50	ug/L	5030/M8015		01/29/1996	3512
Carbon Range: C6 to C12	--						01/29/1996	3512
8020 (GC, Liquid)	--						01/29/1996	3512
Benzene	3.1		0.5	ug/L	8020		01/29/1996	3512
Toluene	ND		0.5	ug/L	8020		01/29/1996	3512
Ethylbenzene	0.8		0.5	ug/L	8020		01/29/1996	3512
Xylenes (Total)	1.5		0.5	ug/L	8020		01/29/1996	3512
SURROGATE RESULTS	--						01/29/1996	3512
Bromofluorobenzene (SURR)	91			% Rec.	8020		01/29/1996	3512

Ref: Shell 29 Wildwood Ave., Piedmont, CA/960124-J2

SAMPLE DESCRIPTION: MW-3
Date Taken: 01/24/1996
Time Taken:
NET Sample No: 259562

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	10						01/29/1996	3512
Purgeable TPH	5,000		500	ug/L	5030/M8015		01/29/1996	3512
Carbon Range: C6 to C12	--						01/29/1996	3512
8020 (GC, Liquid)	--						01/29/1996	3512
Benzene	210		5	ug/L	8020		01/29/1996	3512
Toluene	14		5	ug/L	8020		01/29/1996	3512
Ethylbenzene	14		5	ug/L	8020		01/29/1996	3512
Xylenes (Total)	12		5	ug/L	8020		01/29/1996	3512
SURROGATE RESULTS	--						01/29/1996	3512
Bromofluorobenzene (SURR)	91			% Rec.	8020		01/29/1996	3512

SAMPLE DESCRIPTION: MW-4
Date Taken: 01/24/1996
Time Taken:
NET Sample No: 259563

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/29/1996	3512
Purgeable TPH	ND		50	ug/L	5030/M8015		01/29/1996	3512
Carbon Range: C6 to C12	--						01/29/1996	3512
8020 (GC, Liquid)	--						01/29/1996	3512
Benzene	ND		0.5	ug/L	8020		01/29/1996	3512
Toluene	ND		0.5	ug/L	8020		01/29/1996	3512
Ethylbenzene	0.6		0.5	ug/L	8020		01/29/1996	3512
Xylenes (Total)	1.8		0.5	ug/L	8020		01/29/1996	3512
SURROGATE RESULTS	--						01/29/1996	3512
Bromofluorobenzene (SURR)	85			% Rec.	8020		01/29/1996	3512

Ref: Shell 29 Wildwood Ave., Piedmont, CA/960124-J2

SAMPLE DESCRIPTION: MW-5
Date Taken: 01/24/1996
Time Taken:
NET Sample No: 259564

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/29/1996	3512
Purgeable TPH	70		50	ug/L	5030/M8015		01/29/1996	3512
Carbon Range: C6 to C12	--						01/29/1996	3512
8020 (GC, Liquid)	--						01/29/1996	3512
Benzene	ND		0.5	ug/L	8020		01/29/1996	3512
Toluene	ND		0.5	ug/L	8020		01/29/1996	3512
Ethylbenzene	0.8		0.5	ug/L	8020		01/29/1996	3512
Xylenes (Total)	2.9		0.5	ug/L	8020		01/29/1996	3512
SURROGATE RESULTS	--						01/29/1996	3512
Bromofluorobenzene (SURR)	90			% Rec.	8020		01/29/1996	3512

SAMPLE DESCRIPTION: DUP
Date Taken: 01/24/1996
Time Taken:
NET Sample No: 259565

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/29/1996	3512
Purgeable TPH	70		50	ug/L	5030/M8015		01/29/1996	3512
Carbon Range: C6 to C12	--						01/29/1996	3512
8020 (GC, Liquid)	--						01/29/1996	3512
Benzene	3.2		0.5	ug/L	8020		01/29/1996	3512
Toluene	0.5		0.5	ug/L	8020		01/29/1996	3512
Ethylbenzene	0.7		0.5	ug/L	8020		01/29/1996	3512
Xylenes (Total)	1.5		0.5	ug/L	8020		01/29/1996	3512
SURROGATE RESULTS	--						01/29/1996	3512
Bromofluorobenzene (SURR)	101			% Rec.	8020		01/29/1996	3512

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00339

Date: 01/31/1996
ELAP Cert: 1386
Page: 5

Ref: Shell 29 Wildwood Ave., Piedmont, CA/960124-J2

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	106.0	0.53	0.50		mg/L	01/29/1996	aal	3512
Benzene	97.6	4.88	5.00		ug/L	01/29/1996	aal	3512
Toluene	99.8	4.99	5.00		ug/L	01/29/1996	aal	3512
Ethylbenzene	97.2	4.86	5.00		ug/L	01/29/1996	aal	3512
Xylenes (Total)	96.7	14.5	15.0		ug/L	01/29/1996	aal	3512
Bromofluorobenzene (SURR)	97.0	97	100		% Rec.	01/29/1996	aal	3512

Ref: Shell 29 Wildwood Ave., Piedmont, CA/960124-J2

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	01/29/1996	aal	3512
Benzene	ND	0.5		ug/L	01/29/1996	aal	3512
Toluene	ND	0.5		ug/L	01/29/1996	aal	3512
Ethylbenzene	ND	0.5		ug/L	01/29/1996	aal	3512
Xylenes (Total)	ND	0.5		ug/L	01/29/1996	aal	3512
Bromofluorobenzene (SURR)	95			% Rec.	01/29/1996	aal	3512

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00339

Date: 01/31/1996
ELAP Cert: 1386
Page: 7

Ref: Shell 29 Wildwood Ave., Piedmont, CA/960124-J2

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)												259548
Purgeable TPH	98.0	96.0	2.1	0.5	0.10	0.59	0.58		mg/L	01/29/1996	3512	259548
Benzene	92.9	86.2	7.5	7.37	2.8	9.65	9.15		ug/L	01/29/1996	3512	259548
Toluene	93.9	91.5	2.6	24.6	8.1	31.2	30.6		ug/L	01/29/1996	3512	259548

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960124-52

Date: 1-24-96
Page 1 of 1

Site Address: 29 Wildwood Avenue, Piedmont

WIC#: 204-6001-0109

Shell Engineer: Daniel T. 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 #: 293-8773

Comments:

Sampled by:

Printed Name: Matt James

LAB: NET

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	1/24			W		3						X						
MW-2						3						X						
MW-3						3						X						
MW-4						3						X						
MW-5						3						X						
Dup						3						X						

Analysis Required

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

- G.W. Monitoring [X] 4461 — 24 hours [ ]
- Site Investigation [ ] 4441 — 48 hours [ ]
- Soil Classify/Disposal [ ] 4442 — 16 days [X] (Normal)
- Water Classify/Disposal [ ] 4443 — Other [ ]
- Soil/Air Rem. or Sys. O & M [ ] 4452
- Water Rem. or Sys. O & M [ ] 4453
- Other [ ]

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

UST AGENCY:

CUSTODY SEALED
Date 1/25/96 Time 1400 Initials BS
SEAL INTACT?
Yes ✓ No ____ Initials

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
	Matt James	1-25	1630		J. Smart	1-25-96	1630
J. Smart	J. Smart	1-25-96	1400		PAM GREEN	1-26-96	0800

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

VIA: NCS

NET®

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.