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. charact. 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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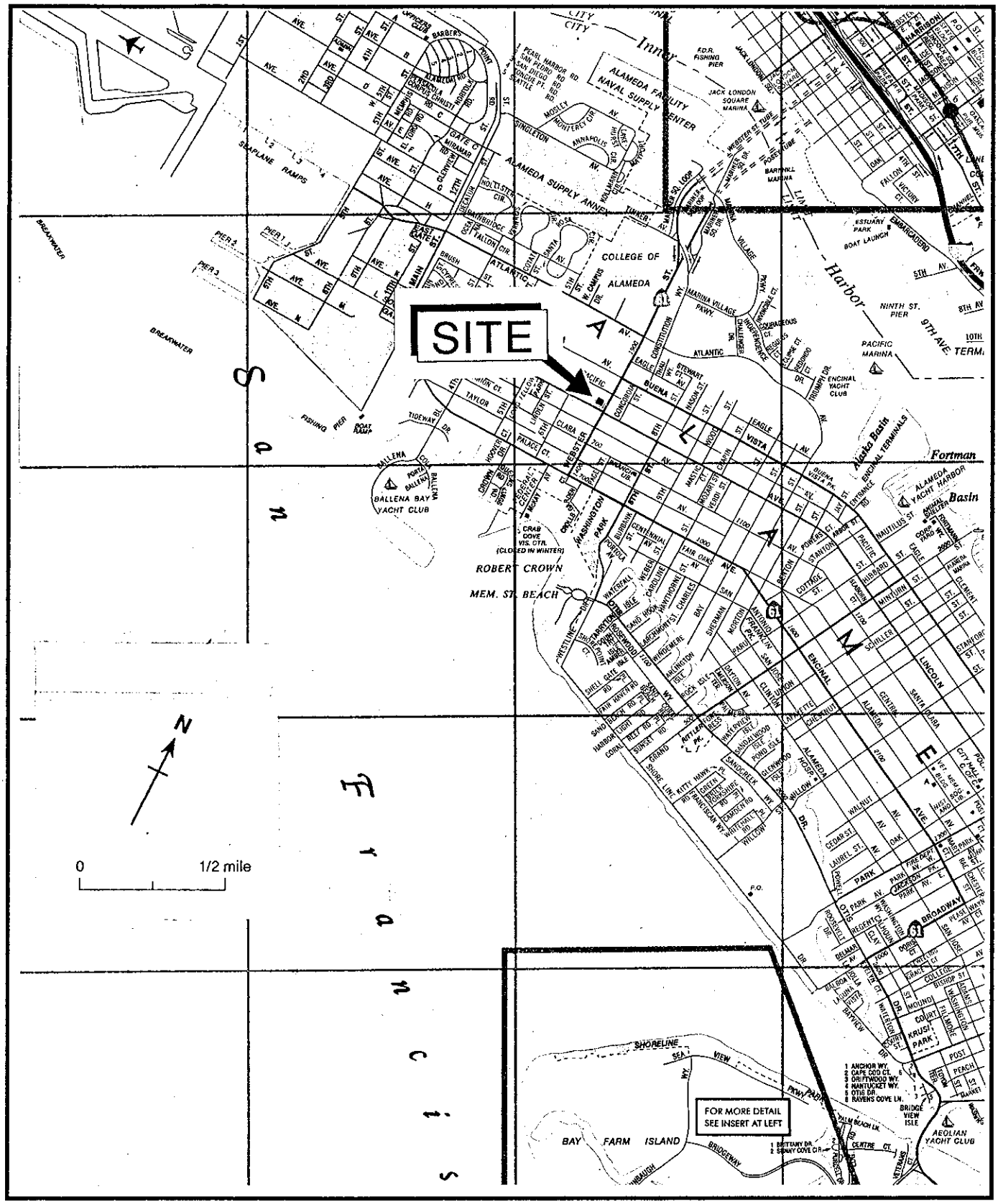

Figure 1. Site Location Map - Shell Service Station, WIC# 204-0072-0403, 1601 Webster Street, Alameda, CA

8/20/90

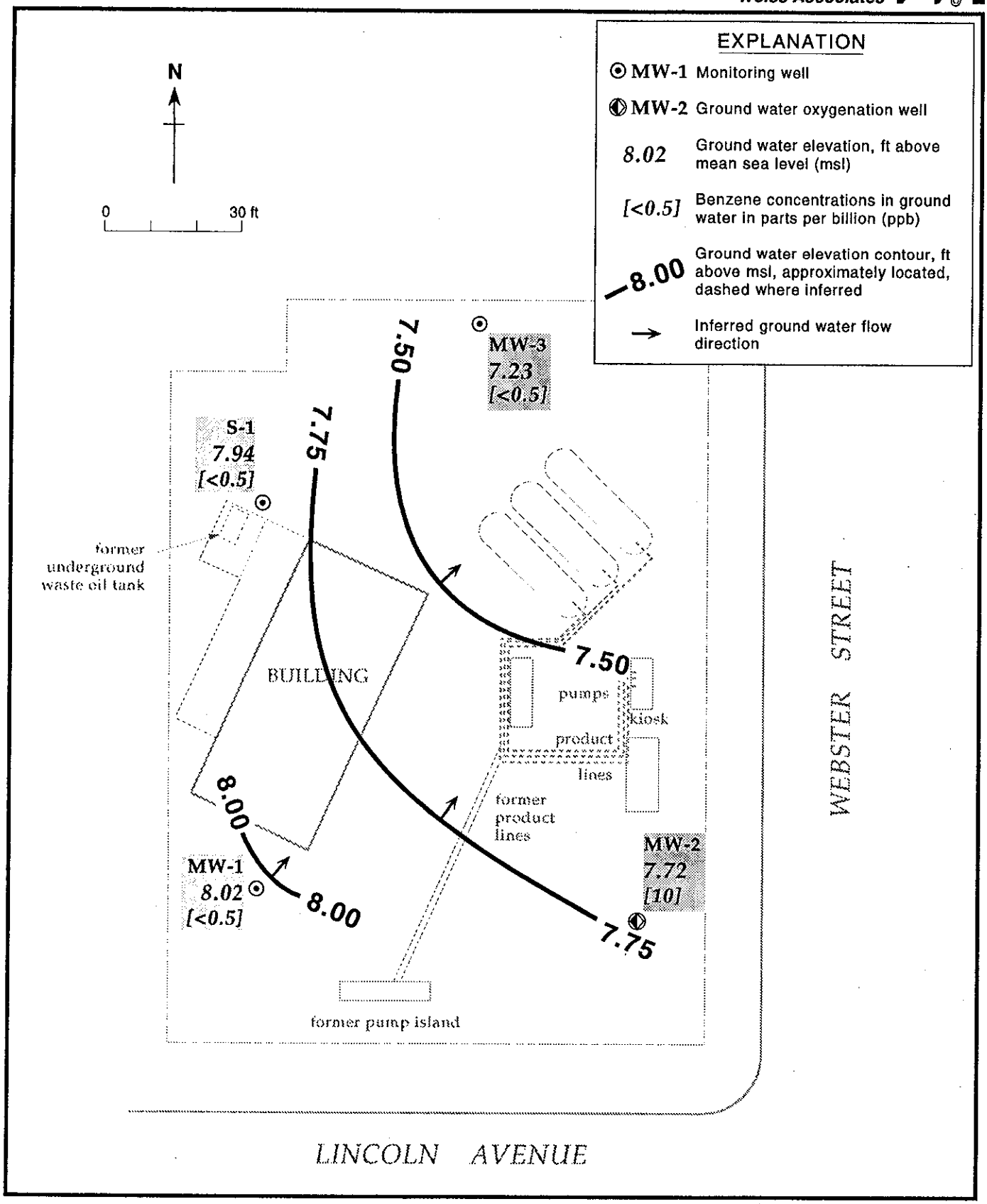

Figure 2. Monitoring Well Locations, Ground Water Elevation Contours and Benzene Concentrations in Ground Water - April 10, 1996 - Shell Service Station WIC #204-0072-0403, 1601 Webster Street, Alameda, California

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

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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	---		

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: 9604110KC2

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: Keith Brown

LAB: Seq

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

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

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

Analysis Required

Sample ID	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					9604853-01 A-F	
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	

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
[signature]	Keith Brown	Date: 4-11 Time: 1015	[signature]	M. Heid	Date: 4-11-96 Time: 1015
[signature]	M. Heid	Date: 4-11-96 Time: 1140	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	[signature]	Krause #3	Date: 4/11/96 Time: 1143

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

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

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: MW1	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 04/15/96
Attention: Jim Keller	Lab Number: 9604853-01	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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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: MW1	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/17/96
Attention: Jim Keller	Lab Number: 9604853-01	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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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: MW2
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9604853-02

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**	**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

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: 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
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Alameda, 960410-K2
Sample Descript: MW3
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9604853-03

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	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
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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: 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

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: S-1	Received: 04/11/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/17/96
Attention: Jim Keller	Lab Number: 9604853-04	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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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: EPA 601
Lab Number: 9604853-05

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**	**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

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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: 8015Mod/8020	Analyzed: 04/17/96
Attention: Jim Keller	Lab Number: 9604853-05	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	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: EPA 601	Analyzed: 04/16/96
Attention: Jim Keller	Lab Number: 9604853-06	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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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

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Blaine Tech Services, Inc.	Client Project ID:	Shell Alameda, 960410-K2	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	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