Weiss Associates Environmental and Geologic Services

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

August 19, 1996

Susan Hugo
Alameda County Department
of Environmental Health
1131 Harbor Bay Parkway
Suite 250
Alameda, CA 94502

Re: **Second Quarter 1996**
Shell Service Station
WIC #204-2495-0101
1800 Powell Street
Emeryville, California
WA Job #81-0794-206

Dear Ms. Hugo:

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 ground water samples from the site wells (Figures 1 and 2). BTS' report describing these activities and the analytical report for the ground water samples are included as Attachment A.

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

Shanna K. Mundsack
Technical Assistant

Jerry McHugh, P.E.
Principal Engineer

Attachments: A - BTS' Ground Water Monitoring Report

cc: R. Jeff Granberry, Shell Oil Company, P.O. Box 4023, Concord, California 94524

GSG/JWC:all
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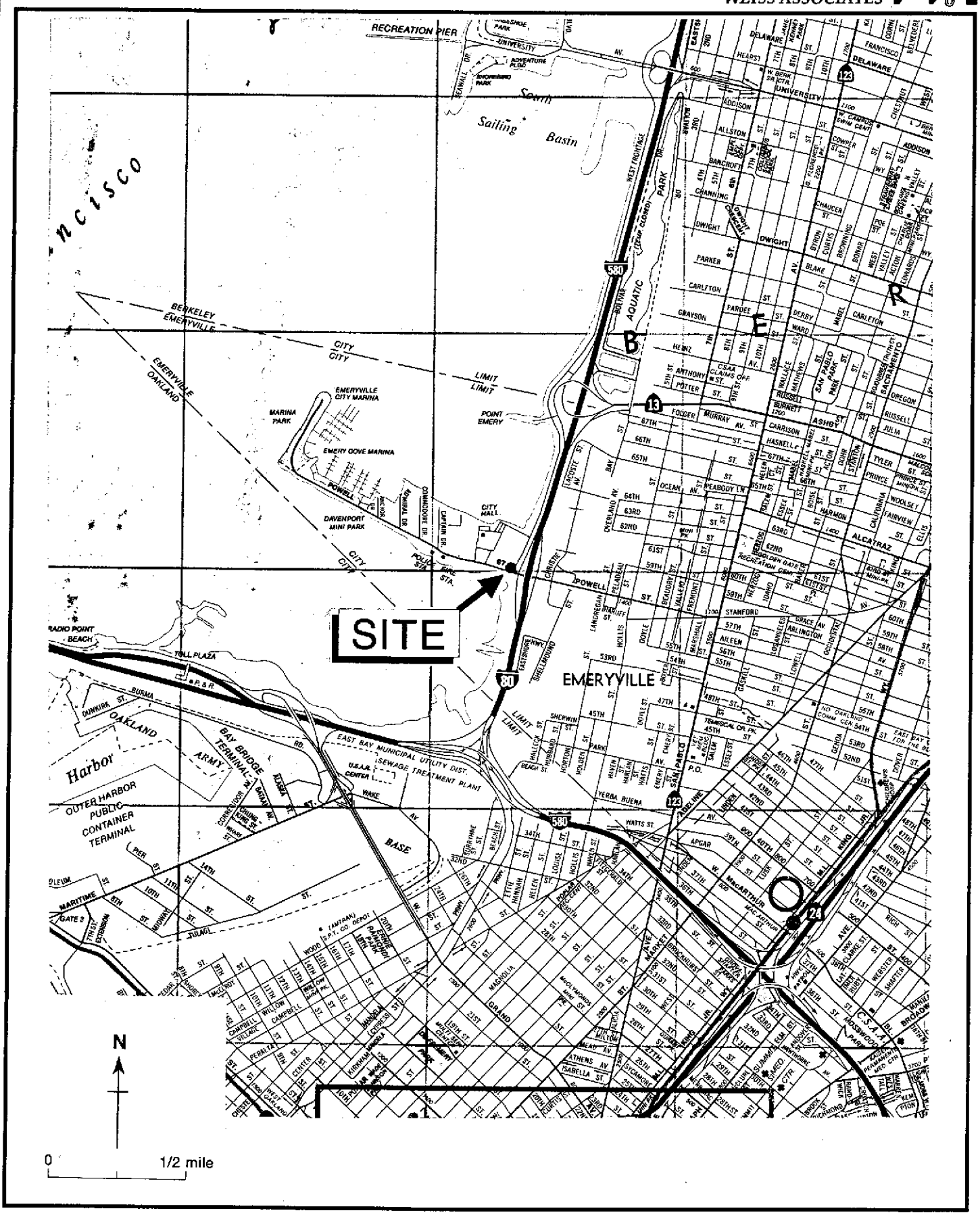

Figure 1. Site Location Map - Shell Service Station WIC# 204-2495-01, 1800 Powell Street, Emeryville, California

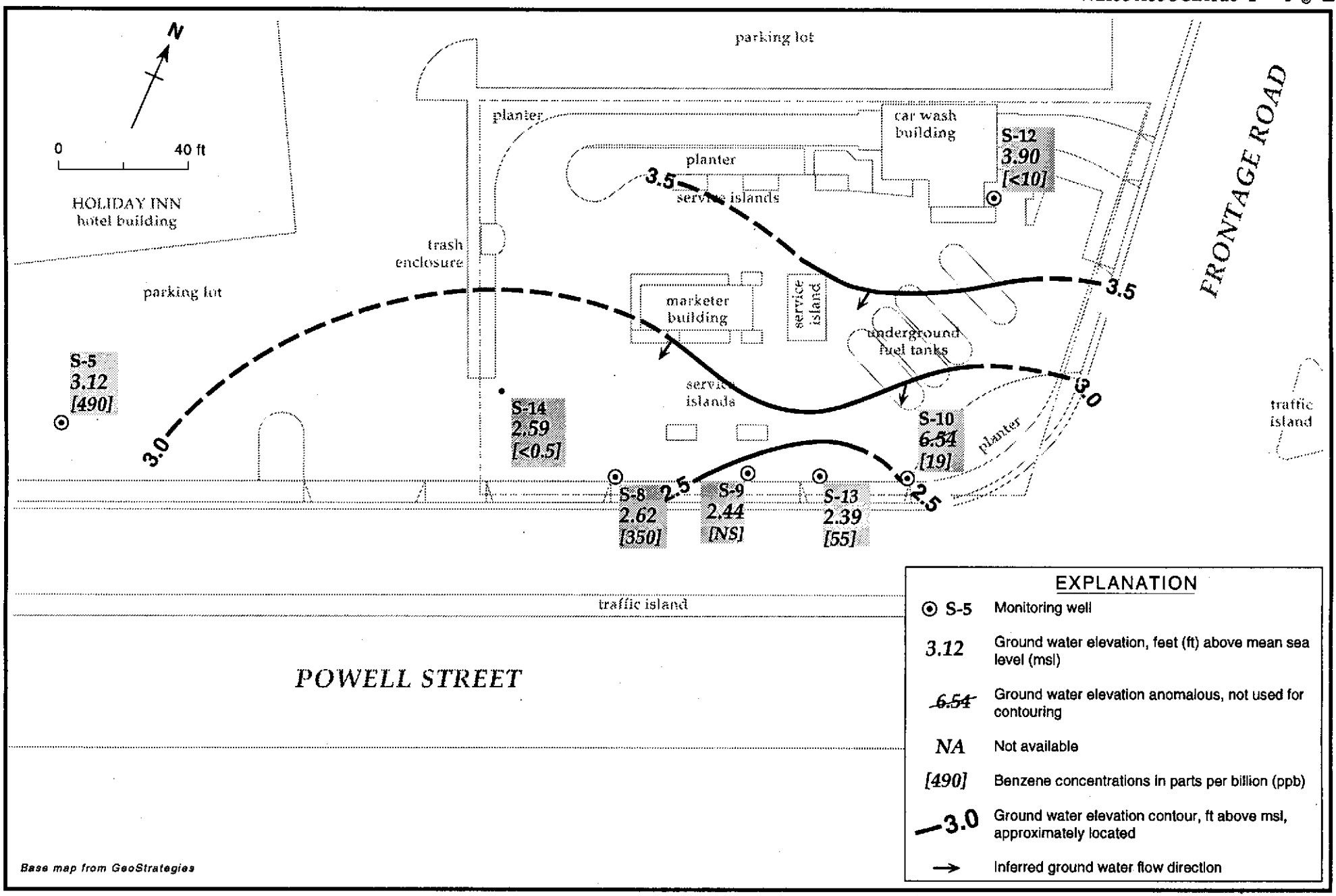

Figure 2. Monitoring Well Locations, Ground Water Elevation Contours, and Benzene Concentrations in Ground Water - May 22, 1996 - Shell Service Station - WIC# 204-2495-0107, 1800 Powell Street, Emeryville, California

ATTACHMENT A

BTS' GROUND WATER MONITORING REPORT

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California

Well ID	Sampling Date	Top-of-Box Elevation (ft msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft msl)	TDS (ppm)	TPH-G	TPH-D	B	T	E	X	MTBE
							← parts per billion (µg/L) →						
S-5	10/26/84	11.72	---	---	---	---	3,000	---	660	20	20	70	---
	02/09/85		---	---	---	---	2,800	---	740	20	20	140	---
	04/27/85		---	---	---	---	4,300	---	750	10	20	<30	---
	07/06/85		---	---	---	---	1,500	---	300	8.0	7.0	9.0	---
	10/24/85		---	---	---	---	2,100	---	760	10	40	50	---
	01/03/86		---	---	---	---	1,300	---	520	9.0	8.0	10	---
	07/05/86		8.36	---	3.36	---	1,400	---	500	10	4.0	<10	---
	10/18/86		---	---	---	---	4,200	---	1,100	9.0	14	7.0	---
	01/13/87		---	---	---	---	4,500	6,100	1,100	15	30	25	---
	07/07/87		9.15	---	2.57	---	3,200	---	1,000	16	9.0	12	---
	10/10/87		9.67	---	2.05	---	1,700	---	16	5.7	5.2	8.9	---
	02/11/88		9.00	---	2.72	---	1,300	---	300	5.0	<5	<5	---
	05/10/88		8.61	---	3.11	---	1,900	---	490	<0.5	<5	<5	---
	08/31/88		9.61	---	2.11	---	6,700	---	760	26	<25	<25	---
	12/03/88		9.47	---	2.25	---	2,900	---	890	5.3	7.3	13	---
	02/16/89		8.29	---	3.43	---	1,300	---	280	3.0	3.4	9.4	---
	08/10/89		9.30	---	2.42	---	1,700	---	530	5.5	<5	5.8	---
	11/11/89		9.42	---	2.30	---	---	---	---	---	---	---	---
	02/21/94		7.95	---	3.77	---	1,000	---	250	<5	<5	<5	---
	02/21/94[dup]		7.95	---	3.77	---	1,300	---	220	<5	<5	11	---
	05/16/94		8.00	---	3.72	---	1,200	---	230	<5	<5	<5	---
	08/09/94[a]		---	---	---	---	---	---	---	---	---	---	---
	11/09/94		8.32	---	3.40	---	1,600	---	220	3.2	1.8	5.0	---
	11/09/94[dup]		8.32	---	---	---	1,600	---	250	3.3	1.9	5.9	---
	02/22/95[a]		---	---	---	---	---	---	---	---	---	---	---
	05/02/95[a]		---	---	---	---	---	---	---	---	---	---	---
	05/10/95		---	---	---	---	910	---	170	1.5	1.3	5.2	---
	08/24/95		8.78	---	2.94	---	620	---	210	<0.5	1.2	5.3	---
	12/08/95		9.78	---	1.94	---	1,600	---	510	3.3	1.5	6.6	---
	12/08/95[dup]		9.78	---	1.94	---	1,600	---	530	1.8	1.1	5.4	---

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Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California (continued)

Well ID	Sampling Date	Top-of-Box Elevation (ft msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft msl)	TDS (ppm)	TPH-G	TPH-D	B	T	E	X	MTBE
							← parts per billion (µg/L) →						
	02/29/96		7.64	---	4.08	---	1,900	---	470	5.8	<5.0	<5.0	46
	02/29/96[dup]		7.64	---	4.08	---	1,700	---	440	5.4	<5.0	<5.0	40
	05/22/96		**8.60**	**—**	**3.12**	**—**	**1,200**	**—**	**490**	**<10**	**<10**	**<10**	**<50**
S-6[b]	04/27/85		---	---	---	---	6,500	---	2,400	30	50	210	---
	07/06/85		---	---	---	---	3,700	---	1,700	34	55	200	---
	10/24/85		---	---	---	---	<50	---	23	<0.5	<5	10	---
S-7[b]	10/26/84		---	---	---	---	50	---	1.1	<1	<1	4	---
	02/09/85		---	---	---	---		---	0.90	<1	<1	<3	---
	04/27/85		---	---	---	---	<50	---	<1	<1	<1	<3	---
	07/06/85		---	---	---	---	70	---	2.2	<1	<1	<3	---
	10/24/85		---	---	---	---	6,200	---	2,200	130	190	660	---
S-8	10/26/84	12.76	---	---	---	---	1,000	---	610	9.0	1.0	42	---
	02/09/85		---	---	---	---	500	---	160	5.0	<2	17	---
	04/27/85		---	---	---	---	2,700	---	1500	20	10	40	---
	07/06/85		---	---	---	---	440	---	180	5.0	2.0	12	---
	10/24/85		---	---	---	---	2,000	---	1,100	17	5.0	70	---
	01/03/86		---	---	---	---	1,900	---	1,300	20	<10	70	---
	07/05/86		9.50	---	3.26	---	1,600	---	920	30	<10	60	---
	10/18/86		---	---	---	---	1,400	---	640	<10	<10	30	---
	01/13/87		---	---	---	---	670	760	190	5.8	<0.5	19	---
	04/22/87		---	---	---	---	2,400	---	740	54	5.7	59	---
	07/07/87		10.45	---	2.31	---	1,100	---	450	15	<2.5	42	---
	10/10/87		10.83	---	1.93	---	340	---	4.0	0.60	<0.5	17	---
	02/11/88		10.44	---	2.32	---	<1,000	---	260	<10	<10	11	---
	05/10/88		10.17	---	2.59	---	1,800	---	700	14	<5	46	---
	08/31/88[SPH]		10.81	---	1.95	---	---	---	---	---	---	---	---
	12/03/88		10.81	---	1.95	---	960	---	250	4.3	<2.5	14	---

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California (continued)

Well ID	Sampling Date	Top-of-Box Elevation (ft msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft msl)	TDS (ppm)	TPH-G	TPH-D	B	T	E	X	MTBE
							← parts per billion (µg/L) →						
	02/16/89		9.65	---	3.11	---	2,700	---	800	35	10	83	---
	05/28/89		10.46	---	2.3	---	960	---	710	25	84	80	---
	08/10/89		10.59	---	2.17	---	1,300	---	630	17	<5	46	---
	11/11/89		10.29	---	2.47	---	910	---	180	8	<2.5	15	---
	02/21/94		9.52	---	3.24	2,910	3,200	---	480	52	<5	130	---
	05/16/94		9.49	---	3.27	---	1,000	---	220	7.3	<5	28	---
	05/16/94[dup]		9.49	---	3.27	---	1,000	---	280	10	<5	29	---
	08/09/94		10.37	---	2.39	4,500	400	---	27	6.6	<0.5	18	---
	11/09/94		9.58	---	3.18	4,600	650	---	170	5.3	<0.5	17	---
	02/22/95		9.02	---	3.74	---	650	---	210	10	1.2	22	---
	05/02/95		8.45	---	4.31	---	1,000	---	280	17	1.4	32	---
	08/24/95		10.02	---	2.74	---	480	---	180	11	1.0	19	---
	08/24/95[dup]		10.02	---	2.74	---	700	---	180	6.5	<0.5	17	---
	12/08/95		10.65	---	2.11	---	740	---	230	6.9	0.7	15	---
	02/29/96		9.10	---	3.66	---	740	---	260	8.1	<5.0	19	58
	05/22/96		**10.14**	**---**	**2.62**	**---**	**1,200**	**---**	**350**	**10**	**<5.0**	**23**	**74**
S-9	10/26/84[SPH]	12.75	---	---	---	---	---	---	---	---	---	---	---
	02/09/85[SPH]		---	1.30	---	---	---	---	---	---	---	---	---
	04/27/85[SPH]		---	1.25	---	---	---	---	---	---	---	---	---
	07/06/85[SPH]		---	1.20	---	---	---	---	---	---	---	---	---
	10/24/85[SPH]		---	---	---	---	---	---	---	---	---	---	---
	01/03/86[SPH]		---	---	---	---	---	---	---	---	---	---	---
	04/11/86[SPH]		---	---	---	---	---	---	---	---	---	---	---
	07/05/86[SPH]		9.67	---	3.08	---	---	---	---	---	---	---	---
	10/18/86[SPH]		---	---	---	---	---	---	---	---	---	---	---
	01/13/87[SPH]		---	---	---	---	---	---	---	---	---	---	---
	04/22/87[SPH]		---	---	---	---	---	---	---	---	---	---	---
	07/07/87[SPH]		---	---	---	---	---	---	---	---	---	---	---
	10/10/87[SPH]		22.30	---	-9.55	---	---	---	---	---	---	---	---

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California (continued)

Well ID	Sampling Date	Top-of-Box Elevation (ft msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft msl)	TDS (ppm)	TPH-G	TPH-D	B	T	E	X	MTBE
							← parts per billion (µg/L) →						
	02/24/94[SPH]		---	---	---	---	---	---	---	---	---	---	---
	05/16/94[SPH]		---	1.5	---	---	---	---	---	---	---	---	---
	08/09/94[SPH]		11.80	2.0	---	---	---	---	---	---	---	---	---
	11/09/94[SPH]		---	---	---	---	---	---	---	---	---	---	---
	02/22/95[SPH]		11.40	2.38	---	---	---	---	---	---	---	---	---
	05/02/95[SPH]		11.83	2.12	---	---	---	---	---	---	---	---	---
	12/08/95		11.92	1.06	---	---	---	---	---	---	---	---	---
	02/29/96		12.10	2.79	2.88	---	---	---	---	---	---	---	---
	05/22/96		**11.71**	**1.75**	**2.44**	---	---	---	---	---	---	---	---
S-10	10/26/84	12.58	---	---	---	---	700,000	---	37,000	100,000	20,000	110,000	---
	02/09/85		---	---	---	---	6,500	---	480	700	100	1,800	---
	04/27/85		---	---	---	---	13,000	---	1,300	500	600	3,700	---
	07/06/85		---	---	---	---	14,000	---	1,300	310	270	2,400	---
	10/24/85		---	---	---	---	4,200	---	580	34	4	440	---
	01/03/86		---	---	---	---	1,700	---	360	10	7.8	170	---
	04/11/86[SPH]		---	0.01	---	---	---	---	---	---	---	---	---
	07/05/86[SPH]		9.16	0.01	3.42	---	---	---	---	---	---	---	---
	10/18/86[SPH]		---	0.03	---	---	---	---	---	---	---	---	---
	01/13/87[SPH]		---	0.03	---	---	---	---	---	---	---	---	---
	04/22/87[SPH]		---	0.01	---	---	---	---	---	---	---	---	---
	07/07/87[SPH]		9.41	0.03	3.17	---	---	---	---	---	---	---	---
	10/10/87[SPH]		7.77	---	4.81	---	---	---	---	---	---	---	---
	02/11/88		6.41	---	6.17	---	1,200	---	470	16	<5	14	---
	05/10/88		9.04	---	3.54	---	1,100	---	100	6	4	19	---
	08/31/88[SPH]		9.38	0.01	3.20	---	---	---	---	---	---	---	---
	12/03/88[SPH]		6.89	---	5.69	---	---	---	---	---	---	---	---
	02/16/89		7.34	---	5.24	---	530	---	89	8.5	1.6	4.5	---
	05/28/89		6.60	---	5.98	---	240	---	65	3.8	2.2	8.6	---
	08/10/89		9.09	---	3.49	---	250	---	23	4.1	<1	6.4	---

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California (continued)

Well ID	Sampling Date	Top-of-Box Elevation (ft msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft msl)	TDS (ppm)	TPH-G	TPH-D	B	T	E	X	MTBE
							← parts per billion (µg/L) →						
	11/11/89		6.58	---	6.00	---	320	---	1.6	1.3	1.4	6.2	---
	02/21/94		8.32	---	4.26	---	1,400	---	190	9.9	<2.5	19	---
	05/16/94		8.35	---	4.23	---	300	---	45	8.6	6.2	19	---
	08/08/94		8.66	---	3.92	---	700	---	57	14	<0.5	9.3	---
	11/09/94		6.68	---	5.90	---	640	---	130	2.0	1.6	4.1	---
	02/22/95		9.12	---	3.46	---	500	---	65	5.9	1.0	8.2	---
	05/02/95		9.50	---	3.08	---	530	---	59	2.3	0.8	8.2	---
	08/24/95		10.06	---	2.52	---	350	---	35	4.6	<0.5	6.7	---
	12/08/95		10.08	---	2.50	---	690	---	28	4.6	0.9	8.6	---
	02/29/96		5.32	---	7.26	---	430	---	32	1.8	0.5	5.8	16
	05/22/96		**6.04**	**---**	**6.54**	**---**	**100**	**1,200**	**19**	**0.63**	**<0.5**	**1.4**	**5.3**
S-12	07/06/85	12.84	8.22	---	---	---	<250	2,200	0.71	<0.5	<0.5	<3.6	---
	11/16/85		---	---	---	---	<250	1,400	18	<2	<2	<5	---
	01/03/86		---	---	---	---	<250	---	24	2	<2	<5	---
	07/05/86		8.27	---	4.57	---	80	---	15	0.7	<0.5	2	---
	10/18/86		---	---	---	---	150	---	12	9	<0.5	3.6	---
	01/13/87		---	---	---	---	120	1,000	3.6	0.8	<0.5	2.9	---
	04/22/87		---	---	---	---	100	820	3.7	3.8	0.8	11	---
	07/07/87		9.5	---	3.34	---	70	---	2.5	0.8	<0.5	2.4	---
	10/10/87		9.9	---	2.94	---	220	2,500	2.1	0.7	<0.5	1.2	---
	02/11/88		9.43	---	3.41	---	110	2,500	0.8	<0.5	<0.5	1.3	---
	05/10/88		8.65	---	4.19	---	140	3,800[d]	0.8	0.8	<0.5	2.5	---
	08/31/88		9.86	---	2.98	---	190	2,600[d]	3	15	0.5	4.5	---
	12/03/88		9.93	---	2.91	---	180	3,900[d]	1.2	1	1	7.7	---
	02/16/89		8.08	---	4.76	---	350[e]	2,100[d]	0.6	<0.5	0.5	5.5	---
	05/28/89		9.08	---	3.76	---	290	2,200	2	1.6	4.4	6	---
	08/10/89		9.35	---	3.49	---	240	720	0.7	<0.5	<0.5	1.1	---
	11/11/89		9.28	---	3.56	---	210[e]	4,100	0.7	0.5	<0.5	3.4	---
	02/21/94		8.22	---	4.62	---	240[f]	2,200[g]	0.7	<0.5	<0.5	3.6	---

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California (continued)

Well ID	Sampling Date	Top-of-Box Elevation (ft msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft msl)	TDS (ppm)	TPH-G	TPH-D	B	T	E	X	MTBE
							← parts per billion (µg/L) →						
	05/16/94		8.92	---	3.92	---	96	2,200	1.5	<0.5	<0.5	2.0	---
	08/08/94		---	---	---	---	110[h]	3,500[i]	<0.5	<0.5	<0.5	<0.5	---
	11/09/94		7.56	---	5.28	---	80	5,400[i]	80	<0.5	<0.5	0.6	---
	02/22/95		7.98	---	4.86	---	110	2,900[i,j]	0.7	<0.5	<0.5	3.7	---
	02/22/95[dup]		7.98	---	4.86	---	110	3,400[i,j]	4.8	7.1	<0.5	2.1	---
	05/02/95		8.44	---	4.40	---	140	2,800	2.4	1.1	0.8	4.3	---
	08/24/95		9.00	---	3.84	---	200	1,600	19	12	5.6	24	---
	12/08/95		9.62	---	3.22	---	170	2,700	2.2	0.7	0.9	3.6	---
	02/29/96		7.64	---	5.20	---	1,700	2,200	<5.0	<5.0	<5.0	<5.0	5,600
	05/22/96		**8.94**	**---**	**3.90**	**---**	**<1,000**	**5,700**	**<10**	**<10**	**<10**	**<10**	**2,400**
S-13	07/06/85	12.59	9.26	---	---	---	700	3,600	200	<5	<5	45	---
	11/16/85		---	---	---	---	1,900	2,000	700	160	70	340	---
	01/03/86		---	---	---	---	2,800	---	1,400	130	10	500	---
	07/05/86		9.47	---	3.12	---	3,100	---	1,800	60	40	270	---
	10/23/86		---	---	---	---	3,400	---	1,500	28	28	250	---
	01/13/87		---	---	---	---	1,900	900	830	15	<10	99	---
	04/22/87		---	---	---	---	2,900[e]	770[j]	1,100	20	30	140	---
	07/07/87		10.38	---	2.21	---	1,500	---	880	10	6	160	---
	10/10/87		10.78	---	1.81	---	480	2,400	830	15	<0.5	120	---
	02/11/88		10.48	---	2.11	---	1,300	1,300	510	<10	<10	86	---
	05/10/88		9.48	---	3.11	---	1,000	1,300[d]	470	<0.5	<5	50	---
	08/31/88[SPH]		10.74	---	1.85	---	---	---	---	---	---	---	---
	12/03/88		10.3	---	2.29	---	900	2,400[d]	290	4.6	<2.5	20	---
	02/16/89		7.6	---	4.99	---	840[e]	1,200[d]	310	3.5	<2.5	27	---
	05/28/89[c]		10.6	---	1.99	---	2,100	4,600	1,100	19	50	350	---
	08/10/89[c]		10.58	---	2.01	---	900	2,300	230	16	6.9	65	---
	11/11/89		9.84	---	2.75	---	2,800	2,800	200	15	8.6	58	---
	02/21/94		9.26	---	3.33	---	700	1,800[f]	200	<5	<5	45	---
	05/16/94		9.62	---	2.97	---	650	1,700	180	2.5	<2.5	21	---

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California (continued)

Well ID	Sampling Date	Top-of-Box Elevation (ft msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft msl)	TDS (ppm)	TPH-G	TPH-D	B	T	E	X	MTBE
							← parts per billion (µg/L) →						
	08/08/94		10.32	---	2.27	---	470	2,600[i]	12	1.5	0.5	14	---
	11/09/94[a]		---	---	---	---	---	---	---	---	---	---	---
	02/22/95		8.92	---	3.67	---	550	2,400[i,j]	190	4.0	<0.5	17	---
	05/02/95		9.52	---	3.07	---	790	2,100	250	6.9	1.2	22	---
	08/24/95		10.02	---	2.57	---	330	1,500	93	<0.5	<0.5	2.0	---
	12/08/95		10.75	---	1.84	---	440	2,400	110	2.2	0.8	23	---
	02/29/96		9.02	---	3.57	---	560	2,500	130	<5.0	<5.0	30	30
	05/22/96		**10.20**	**---**	**2.39**	**---**	**430**	**3,700**	**55**	**1.6**	**310**	**27**	**<5.0**
S-14	11/16/85	12.69	---	---	---	---	<250	400	3	<2	<2	<5	---
	01/03/86		---	---	---	---	<250	---	3	2	<2	<5	---
	04/22/87		---	---	---	---	1,200	18,000	7.4	2.7	15	110	---
	07/07/87		10.32	---	2.37	---	190	---	6.5	0.6	1.9	26	---
	10/10/87		10.77	---	1.92	---	4,900	21,000	7	1.2	<0.5	25	---
	02/11/88		10.4	---	2.29	---	370	12,000[e]	4.6	<2.5	<2.5	26	---
	05/10/88		9.66	---	3.03	---	660	2,200[d]	2.9	<2.5	<2.5	24	---
	08/31/88		10.74	---	1.95	---	700	7,900	3.2	<2.5	<2.5	15	---
	12/03/88		10.69	---	2.00	---	210	11,000[d]	<0.5	<0.5	0.8	6.8	---
	02/16/89		9.69	---	3.00	---	130[e]	5,700[d]	<0.5	<0.5	<0.5	4.4	---
	05/28/89		10.42	---	2.27	---	770	5,200	<0.5	<0.5	<0.5	4.5	---
	08/10/89		10.54	---	2.15	---	920	8,800	<1	<1	1.6	17	---
	11/11/89		9.91	---	2.78	---	710	28,000	20	57	25	69	---
	02/21/94		9.3	---	3.09	---	2,800	3,600	<5	<5	<5	14	---
	02/21/94		9.30	---	3.39	---	2,300[f]	3,600[g]	<5.0	<5	<5	14	---
	05/16/94		9.54	---	3.15	---	310	6,700	<2.5	<2.5	<2.5	3.1	---
	08/08/94		10.29	---	2.4	---	480[k]	2,900	<0.5	0.6	<0.5	0.8	---
	08/08/94[dup]		10.29	---	2.4	---	590[k]	2,900	<0.5	0.6	<0.5	1.5	---
	11/09/94		9.52	---	3.07	---	170[k]	6,400[l]	0.7	<0.5	<0.5	2.7	---
	02/22/95		9.18	---	3.51	---	550	7,000[i,j]	<0.5	<0.5	<0.5	1.6	---
	05/02/95		9.49	---	3.2	---	210	2,300	1.0	0.9	1.1	6.3	---

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California (continued)

Well ID	Sampling Date	Top-of-Box Elevation (ft msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft msl)	TDS (ppm)	TPH-G	TPH-D	B	T	E	X	MTBE
							← parts per billion (µg/L) →						
	05/02/95[dup]		9.49	---	3.2	---	160	2,600	0.6	0.6	0.7	3.8	---
	08/24/95		9.94	---	2.75	---	180	3,700	0.5	<0.5	<0.5	1.3	---
	12/08/95		10.65	---	2.04	---	190	4,900	1.0	<0.5	0.6	4.6	---
	02/29/96		8.90	---	3.79	---	200	11,000	<0.5	<0.5	<0.5	2.0	3.0
	05/22/96		**10.10**	**—**	**2.59**	**—**	**93**	**3,800**	**<0.5**	**<0.5**	**<0.5**	**1.6**	**<2.5**
	05/22/96[dup]		**10.10**	**—**	**2.59**	**—**	**150**	**3,900**	**<0.5**	**<0.5**	**<0.5**	**1.8**	**<2.5**
Trip Blank	02/21/94		---	---	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	02/24/94		---	---	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	05/16/94		---	---	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	08/08/94		---	---	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	11/09/94		---	---	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	02/22/95		---	---	---	---	<50	---	<0.5	0.9	<0.5	<0.5	---
	05/02/95		---	---	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	05/10/95		---	---	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	12/08/95		---	---	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
DHS MCLs				---		---	NE	NE	1	100[c]	680	1,750	NE

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-2495-0101, 1800 Powell Street, Emeryville, California (continued)

Abbreviations:

ft msl = Feet above mean sea level
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 8020
T = Toluene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
X = Xylenes by EPA Method 8020
MTBE = Methyl tertiary butyl ether by EPA Method 8020
DHS MCLs = California Department of Health Services maximum contaminant levels for drinking water
NE = Not established
<n = Not detected at a detection limit of n ppb
dup = Duplicate sample
SPH = Separate-phase hydrocarbons present, often unable to measure thickness accurately
--- = Not analyzed/not measured

Notes:

a = Well inaccessible
b = Well abandoned on 11/09/85
c = DHS recommended action level; MCL not established
d = Compounds detected within the chromatographic range appear to be weathered diesel
e = Compounds detected within the chromatographic range of gasoline but not characteristic of the standard gasoline pattern.
f = The concentrations reported as gasoline for samples S-12 and S-14 are primarily due to the presence of a discrete peak
g = The concentrations reported as diesel for samples S-12, S-13 and S-14 are due to the presence of a combination of diesel and a heavier petroleum product of hydrocarbon range C18 - C36, possibly motor oil
h = The result for gasoline is an unknown hydrocarbon which consists of several peaks
i = The positive result appears to be a heavier hydrocarbon than diesel
j = Compounds detected within the chromatographic range of diesel appears to include gasoline compounds.
k = The positive result appears to be a heavier hydrocarbon than gasoline

BLAINE
TECH SERVICES INC.

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

June 24, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-2495-0101
1800 Powell Street
Emeryville, California

2nd Quarter 1996

Quarterly Groundwater Monitoring Report 960522-A-1

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)
S-5	5/22/96	TOB	--	NONE	--	--	8.60	12.44
S-8	5/22/96	TOB	--	NONE	--	--	10.14	18.54
S-9	5/22/96	TOB	FREE PRODUCT	9.96	1.75	2000	11.71	--
S-10	5/22/96	TOB	--	NONE	--	--	6.04	19.64
S-12	5/22/96	TOB	--	NONE	--	--	8.94	24.30
S-13	5/22/96	TOB	ODOR	NONE	--	--	10.20	20.04
S-14 *	5/22/96	TOB	--	NONE	--	--	10.10	23.70

* Sample DUP was a duplicate sample taken from well S-14.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960522-A1

Date: 5-22-96
Page: 1 of 1

Site Address: 1800 Powell Street, Emeryville

WIC #: 204-2495-0101

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: 960CH16

Sampled by: R. VALENTINE

Printed Name:

LAB: SEQ

CHECK ONE (1) BOX ONLY — C1/D1

- Quarterly Monitoring [X] 4441
- Site Investigation [ ] 4441
- Soil Closure/Disposal [ ] 4442
- Water Closure/Disposal [ ] 4443
- Soil/Air Rem. or Sys. O & M [ ] 4462
- Water Rem. or Sys. O & M [ ] 4463
- Other [ ]

TURN AROUND TIME

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

NOTE: Notify Lab as soon as Possible of 24/48 hr. 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	MTBE	8270	~~Asbestos~~ OIL & GREASE	Contaminants CAM 17 METALS	Preparation Used PESTICIDES BY 8080	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-5	5/22			X		3	X						X						01	
S-8				X		3	X						X						02	
S-10				X		5	X	X					X						03	
S-12				X		5	X	X					X						04	
S-13				X		15	X	X		X			X	X	X	X	X		05	
S-14				X		5	X	X					X						06	
EB				X		3	X						X						07	
DUP	↓			X		5	X	X					X						08	

	Printed Name	Date / Time	Received (signature)	Printed Name	Date / Time
Relinquished By (signature): Randy Valentine	RANDY VALENTINE	Date: 5-23-96 Time: 11:30	Received (signature):	Printed Name: Jim Howe	Date: 5-23 Time: 11:30
Relinquished By (signature):	Printed Name: Jim Howe	Date: 5-23-96 Time:	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: 5/23/96 Time: 1554

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

Shell Copy of Custody

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

aine Technical Services
5 Timothy Drive
an Jose, CA 95133
tention: Jim Keller

oject: Shell Emeryville 960522-A1

Enclosed are the results from samples received at Sequoia Analytical on May 23, 1996.
e requested analyses are listed below:

AMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
05H16 -01	LIQUID, S-5	05/22/96	MTBE_W Methyl t-Butyl Ethe
05H16 -01	LIQUID, S-5	05/22/96	TPHG W Purgeable TPH - Wat
05H16 -02	LIQUID, S-8	05/22/96	MTBE_W Methyl t-Butyl Ethe
05H16 -02	LIQUID, S-8	05/22/96	TPHG W Purgeable TPH - Wat
05H16 -03	LIQUID, S-10	05/22/96	MTBE_W Methyl t-Butyl Ethe
05H16 -03	LIQUID, S-10	05/22/96	TPHG W Purgeable TPH - Wat
05H16 -03	LIQUID, S-10	05/22/96	TPHD W Extractable TPH
05H16 -04	LIQUID, S-12	05/22/96	MTBE_W Methyl t-Butyl Ethe
05H16 -04	LIQUID, S-12	05/22/96	TPHG W Purgeable TPH - Wat
05H16 -04	LIQUID, S-12	05/22/96	TPHD W Extractable TPH
05H16 -05	LIQUID, S-13	05/22/96	MTBE_W Methyl t-Butyl Ethe
05H16 -05	LIQUID, S-13	05/22/96	TPHG W Purgeable TPH - Wat
05H16 -05	LIQUID, S-13	05/22/96	TPHD W Extractable TPH
05H16 -05	LIQUID, S-13	05/22/96	8240 Volatile Organic Co
05H16 -05	LIQUID, S-13	05/22/96	8270 SemiVolatile Organi
05H16 -05	LIQUID, S-13	05/22/96	8080 Organochlorine Pest
05H16 -05	LIQUID, S-13	05/22/96	TRPH (SM 5520 B&F Mod)
05H16 -05	LIQUID, S-13	05/22/96	ITTLCW Title 22: Metals, T
05H16 -06	LIQUID, S-14	05/22/96	MTBE_W Methyl t-Butyl Ethe
05H16 -06	LIQUID, S-14	05/22/96	TPHG W Purgeable TPH - Wat
05H16 -06	LIQUID, S-14	05/22/96	TPHD W Extractable TPH

Sequoia Analytical

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SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9605H16 -07	LIQUID, EB	05/22/96	MTBE_W Methyl t-Butyl Ethe
9605H16 -07	LIQUID, EB	05/22/96	TPHG W Purgeable TPH - Wat
9605H16 -08	LIQUID, DUP	05/22/96	MTBE_W Methyl t-Butyl Ethe
9605H16 -08	LIQUID, DUP	05/22/96	TPHG W Purgeable TPH - Wat
9605H16 -08	LIQUID, DUP	05/22/96	TPHD W Extractable TPH

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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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1

Lab Proj. ID: 9605H16

Sampled: 05/22/96
Received: 05/23/96
Analyzed: see below

Reported: 06/19/96

LABORATORY ANALYSIS

nalyte	Units	Date Analyzed	Detection Limit	Sample Results
ıb No: 9605H16-05 ımple Desc : **LIQUID,S-13**				
TRPH (SM 5520 B&F Mod)	mg/L	06/04/96	5.0	N.D.

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ect 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 Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-5	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-01	Reported: 06/19/96

QC Batch Number: GC052996BTEX21A
Instrument ID: GCHP21

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	50	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-8
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-02

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/30/96
Reported: 06/19/96

Batch Number: GC053096BTEX17A
rument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

nalyte	Detection Limit ug/L	Sample Results ug/L
ethyl t-Butyl Ether	25	74

rrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	98

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ect 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 Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-5	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8015 Mod	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-01	Reported: 06/19/96

QC Batch Number: GC052996BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**1000**	**1200**
Chromatogram Pattern:		
Discrete Peak		**....**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-8
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-02

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/30/96
Analyzed: 05/30/96
Reported: 06/19/96

Batch Number: GC053096BTEX17A
rument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

nalyte	Detection Limit ug/L	Sample Results ug/L
PH as Gas	500	1200
romatogram Pattern:		Gas

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	98

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ect 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 Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-10	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-03	Reported: 06/19/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	2.5	5.3

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	103

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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aine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
5 Timothy Drive	Sample Descript: S-10	Received: 05/23/96
n Jose, CA 95133	Matrix: LIQUID	Extracted: 05/30/96
	Analysis Method: EPA 8015 Mod	Analyzed: 05/30/96
ention: Jim Keller	Lab Number: 9605H16-03	Reported: 06/19/96

Batch Number: GC053096BTEX17A
rument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

alyte	Detection Limit ug/L	Sample Results ug/L
PH as Gas	50	100
romatogram Pattern:		Gas

rrogates	Control Limits %		% Recovery
fluorotoluene	70	130	103

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

QUOTA ANALYTICAL - ELAP #1210

gy Penner
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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-10	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/29/96
	Analysis Method: EPA 8015 Mod	Analyzed: 05/31/96
Attention: Jim Keller	Lab Number: 9605H16-03	Reported: 06/19/96

QC Batch Number: GC0529960HBPEXZ
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	1200
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	86

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

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Peggy Penner
Project Manager

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aine Technical Services
5 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-12
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-04

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/30/96
Reported: 06/19/96

Batch Number: GC053096BTEX17A
rument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

alyte	Detection Limit ug/L	Sample Results ug/L
ethyl t-Butyl Ether	50	2400

rrogates	Control Limits %		% Recovery
fluorotoluene	70	130	95

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-12	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/30/96
	Analysis Method: EPA 8015 Mod	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-04	Reported: 06/19/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

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

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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-12
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-04

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/31/96
Reported: 06/19/96

Batch Number: GC0529960HBPEXZ
rument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

alyte	Detection Limit ug/L	Sample Results ug/L
EPH as Diesel	500	5700
romatogram Pattern:		
nidentified HC		C9-C24

urrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	152 Q

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 06/19/96

QC Batch Number: GC052996BTEX20A
Instrument ID: GCHP20

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	5.0	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94

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

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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/29/96
Reported: 06/19/96

Batch Number: GC052996BTEX20A
rument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH)

nalyte	Detection Limit ug/L	Sample Results ug/L
PH as Gas	100	430
hromatogram Pattern:		Gas

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	94

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

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ect Manager

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/29/96
	Analysis Method: EPA 8015 Mod	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 06/19/96

QC Batch Number: GC0529960HBPEXZ
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**250**	**3700**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	167 Q

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

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laine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8240
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96
Analyzed: 05/31/96
Reported: 06/19/96

Batch Number: MS0531968240F2A
trument ID: F2

Volatile Organics (EPA 8240)

nalyte	Detection Limit ug/L	Sample Results ug/L
cetone	**10**	**15**
enzene	**2.0**	**86**
romodichloromethane	2.0	N.D.
romoform	2.0	N.D.
romomethane	2.0	N.D.
Butanone	10	N.D.
arbon disulfide	2.0	N.D.
arbon tetrachloride	2.0	N.D.
hlorobenzene	2.0	N.D.
hloroethane	2.0	N.D.
Chloroethyl vinyl ether	10	N.D.
hloroform	2.0	N.D.
hloromethane	2.0	N.D.
ibromochloromethane	2.0	N.D.
1-Dichloroethane	2.0	N.D.
2-Dichloroethane	2.0	N.D.
1-Dichloroethene	2.0	N.D.
s-1,2-Dichloroethene	2.0	N.D.
ans-1,2-Dichloroethene	2.0	N.D.
2-Dichloropropane	2.0	N.D.
s-1,3-Dichloropropene	2.0	N.D.
ans-1,3-Dichloropropene	2.0	N.D.
hylbenzene	**2.0**	**5.8**
Hexanone	10	N.D.
ethylene chloride	5.0	N.D.
Methyl-2-pentanone	10	N.D.
yrene	2.0	N.D.
1,2,2-Tetrachloroethane	2.0	N.D.
trachloroethene	2.0	N.D.
oluene	**2.0**	**3.1**
1,1-Trichloroethane	2.0	N.D.
1,2-Trichloroethane	2.0	N.D.
lchloroethene	2.0	N.D.
ichlorofluoromethane	2.0	N.D.
nyl acetate	5.0	N.D.
nyl chloride	2.0	N.D.
otal Xylenes	**2.0**	**51**

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8240	Analyzed: 05/31/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 06/19/96

QC Batch Number: MS0531968240F2A
Instrument ID: F2

Analyte	Detection Limit ug/L		Sample Results ug/L
Surrogates	**Control Limits %**		**% Recovery**
1,2-Dichloroethane-d4	76	114	104
Toluene-d8	88	110	105
4-Bromofluorobenzene	86	115	104

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

SEQUOIA ANALYTICAL - ELAP #1210

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laine Technical Services
35 Timothy Drive
an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/30/96
Reported: 06/19/96

: Batch Number: MS0529968270EXA
trument ID: F4

Semivolatile Organics (EPA 8270)

nalyte	Detection Limit ug/L	Sample Results ug/L
cenaphthene	25	N.D.
cenaphthylene	25	N.D.
nthracene	25	N.D.
enzoic Acid	50	N.D.
enzo(a)anthracene	25	N.D.
enzo(b)fluoranthene	25	N.D.
enzo(k)fluoranthene	25	N.D.
enzo(g,h,i)perylene	25	N.D.
enzo(a)pyrene	25	N.D.
enzyl alcohol	25	N.D.
is(2-chloroethoxy)methane	25	N.D.
is(2-chloroethyl)ether	25	N.D.
is(2-chloroisopropyl)ether	25	N.D.
is(2-ethylhexyl)phthalate	50	N.D.
-Bromophenyl phenyl ether	25	N.D.
utyl benzyl phthalate	25	N.D.
-Chloroaniline	50	N.D.
-Chloronaphthalene	25	N.D.
Chloro-3-methylphenol	25	N.D.
-Chlorophenol	25	N.D.
Chlorophenyl phenyl ether	25	N.D.
hrysene	25	N.D.
ibenzo(a,h)anthracene	25	N.D.
ibenzofuran	25	N.D.
i-n-butyl phthalate	50	N.D.
2-Dichlorobenzene	25	N.D.
3-Dichlorobenzene	25	N.D.
4-Dichlorobenzene	25	N.D.
3-Dichlorobenzidine	50	N.D.
4-Dichlorophenol	25	N.D.
ethyl phthalate	25	N.D.
4-Dimethylphenol	25	N.D.
methyl phthalate	25	N.D.
6-Dinitro-2-methylphenol	50	N.D.
4-Dinitrophenol	50	N.D.
4-Dinitrotoluene	25	N.D.
6-Dinitrotoluene	25	N.D.

QUOIA ANALYTICAL

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/30/96
Reported: 06/19/96

QC Batch Number: MS0529968270EXA
Instrument ID: F4

Analyte	Detection Limit ug/L	Sample Results ug/L
Di-n-octyl phthalate	25	N.D.
Fluoranthene	25	N.D.
Fluorene	25	N.D.
Hexachlorobenzene	25	N.D.
Hexachlorobutadiene	25	N.D.
Hexachlorocyclopentadiene	50	N.D.
Hexachloroethane	25	N.D.
Indeno(1,2,3-cd)pyrene	25	N.D.
Isophorone	25	N.D.
2-Methylnaphthalene	25	N.D.
2-Methylphenol	25	N.D.
4-Methylphenol	25	N.D.
Naphthalene	25	N.D.
2-Nitroaniline	50	N.D.
3-Nitroaniline	50	N.D.
4-Nitroaniline	50	N.D.
Nitrobenzene	25	N.D.
2-Nitrophenol	25	N.D.
4-Nitrophenol	50	N.D.
n-Nitrosodiphenylamine	25	N.D.
n-Nitroso-di-n-propylamine	25	N.D.
Pentachlorophenol	**50**	**180**
Phenanthrene	25	N.D.
Phenol	25	N.D.
Pyrene	25	N.D.
1,2,4-Trichlorobenzene	25	N.D.
2,4,5-Trichlorophenol	50	N.D.
2,4,6-Trichlorophenol	25	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	43
Phenol-d5	10	110	29
Nitrobenzene-d5	35	114	68
2-Fluorobiphenyl	43	116	88
2,4,6-Tribromophenol	10	123	97
p-Terphenyl-d14	33	141	83

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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laine Technical Services
35 Timothy Drive
an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8080,R-1
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 06/03/96
Reported: 06/19/96

Batch Number: GC0528968080EXA
trument ID: GCHP10

Organochlorine Pesticides and PCBs by EPA 8080 (Modified)

nalyte	Detection Limit ug/L	Sample Results ug/L
drin	0.025	N.D.
pha-BHC	0.025	N.D.
eta-BHC	0.025	N.D.
elta-BHC	0.025	N.D.
amma-BHC (Lindane)	0.025	N.D.
hlordane	0.50	N.D.
4'-DDD	0.15	N.D.
4'-DDE	0.050	N.D.
4'-DDT	0.15	N.D.
ieldrin	0.050	N.D.
ndosulfan I	0.050	N.D.
ndosulfan II	0.050	N.D.
ndosulfan sulfate	0.15	N.D.
ndrin	0.050	N.D.
ndrin aldehyde	0.15	N.D.
eptachlor	0.025	N.D.
eptachlor epoxide	0.025	N.D.
ethoxychlor	0.50	N.D.
oxaphene	2.0	N.D.
CB-1016	0.50	N.D.
CB-1221	2.0	N.D.
CB-1232	0.50	N.D.
CB-1242	0.50	N.D.
CB-1248	0.50	N.D.
CB-1254	0.50	N.D.
CB-1260	0.50	N.D.
irex	0.10	N.D.

urrogates	Control Limits %		% Recovery
ibutylchlorendate	50	150	102
etrachloro-m-xylene	50	150	91

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

EQUOIA ANALYTICAL - ELAP #1210

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/30/96
	Analysis Method: Title 22	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 06/19/96

QC Batch Number: ME0530966010MDA
Instrument ID: MTJA-2

Inorganic Persistent and Bioaccumulative Toxic Substances : TTLC

Analyte	Max. Limit mg/L	Detection Limit mg/L	Sample Results mg/L
Antimony, Sb	**500**	**0.10**	**0.27**
Arsenic, As	**500**	**0.10**	**0.17**
Barium, Ba	**10000**	**0.10**	**0.86**
Beryllium, Be	75	0.010	N.D.
Cadmium, Cd	100	0.010	N.D.
Chromium, Cr	**2500**	**0.010**	**0.20**
Chromium, Cr (VI)	**500**	**0.050**	-
Cobalt, Co	8000	0.050	N.D.
Copper, Cu	**2500**	**0.010**	**0.16**
Lead, Pb	**1000**	**0.10**	**0.35**
Mercury, Hg	**20**	**0.00020**	**0.0022**
Molybdenum, Mo	3500	0.050	N.D.
Nickel, Ni	**2000**	**0.050**	**0.13**
Selenium, Se	100	0.10	N.D.
Silver, Ag	500	0.010	N.D.
Thallium, Tl	700	0.10	N.D.
Vanadium, V	**2400**	**0.050**	**0.14**
Zinc, Zn	**5000**	**0.010**	**1.5**
Asbestos, fibers/g	10000		- -
Fluoride salts	18000	1.0	- -

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
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an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-14
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-06

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/30/96
Reported: 06/19/96

Batch Number: GC053096BTEX17A
trument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

nalyte	Detection Limit ug/L	Sample Results ug/L
ethyl t-Butyl Ether	2.5	N.D.

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	88

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ject 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	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-14	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/30/96
	Analysis Method: EPA 8015 Mod	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-06	Reported: 06/19/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**93**
Chromatogram Pattern:		
Unidentified HC		**> C10**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	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

laine Technical Services
35 Timothy Drive
an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-14
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-06

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/31/96
Reported: 06/19/96

: Batch Number: GC0529960HBPEXZ
trument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

nalyte	Detection Limit ug/L	Sample Results ug/L
EPH as Diesel	500	3800
hromatogram Pattern:		
nidentified HC		C9-C24

urrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	206 Q

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

QUOIA ANALYTICAL - ELAP #1210

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ject Manager

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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 Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: EB	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-07	Reported: 06/19/96

QC Batch Number: GC052996BTEX20A
Instrument ID: CHP20

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	2.5	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

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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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: EB
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-07

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/29/96
Reported: 06/19/96

Batch Number: GC052996BTEX20A
rument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH)

nalyte	Detection Limit ug/L	Sample Results ug/L
PH as Gas	50	N.D.
romatogram Pattern:		

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	96

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ect Manager

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: DUP	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-08	Reported: 06/19/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	2.5	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	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

aine Technical Services
5 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: DUP
Matrix: LIQUID
Analysis Method: EPA 8015-Mod
Lab Number: 9605H16-08

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/30/96
Analyzed: 05/30/96
Reported: 06/19/96

Batch Number: GC053096BTEX17A
rument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

alyte	Detection Limit ug/L	Sample Results ug/L
PH as Gas	50	150
romatogram Pattern:		
nidentified HC		> C10

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	87

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: DUP	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/29/96
	Analysis Method: EPA 8015 Mod	Analyzed: 06/03/96
Attention: Jim Keller	Lab Number: 9605H16-08	Reported: 06/19/96

QC Batch Number: GC0529960HBPEXZ
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**250**	**3900**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	Q

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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laine Technical Services
35 Timothy Drive
an Jose, CA 95133
ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Lab Proj. ID: 9605H16

Received: 05/23/96
Reported: 06/19/96

LABORATORY NARRATIVE

8270 Note: Sample was diluted because of high late eluting compounds.

QUOIA ANALYTICAL

gy Penner
ject Manager

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.	Client Project ID:	Shell, Emeryville / 960522-A1	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9605H16 -05	Reported: Jun 21, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Total Recoverable Petroleum Hydrocarb.
QC Batch#:	OP0531965520EXA
Analy. Method:	SM 5520 BF-MOD
Prep. Method:	SPE

Analyst:	C. Alcayde
MS/MSD #:	BLK053196
Sample Conc.:	N.D.
Prepared Date:	5/31/96
Analyzed Date:	6/4/96
Instrument I.D.#:	Manual
Conc. Spiked:	10 mg/L
Result:	8.6
MS % Recovery:	86
Dup. Result:	7.7
MSD % Recov.:	77
RPD:	11
RPD Limit:	0-20

LCS #:	BLK060396
Prepared Date:	6/3/96
Analyzed Date:	6/4/96
Instrument I.D.#:	Manual
Conc. Spiked:	10 mg/L
LCS Result:	8.3
LCS % Recov.:	83

MS/MSD	75-125
LCS	80-120
Control Limits	

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

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

Client Project ID: Shell, Emeryville / 960522-A1
Matrix: Liquid
Work Order #: 9605H16-05
Reported: Jun 21, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel	Mercury
QC Batch#:	ME0530966010MDA	ME0530966010MDA	ME0530966010MDA	ME0530966010MDA	ME0531967470M4A
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 7470
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010	EPA 7470
Analyst:	R. Butler	R. Butler	R. Butler	R. Butler	T. Hua
MS/MSD #:	9605H1708	9605H1708	9605H1708	9605H1708	9605I8001
Sample Conc.:	N.D.	N.D.	N.D.	0.067	N.D.
Prepared Date:	5/30/96	5/30/96	5/30/96	5/30/96	5/31/96
Analyzed Date:	5/30/96	5/30/96	5/30/96	5/30/96	5/31/96
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2	MPE4
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L	0.0040 mg/L
Result:	0.97	0.91	0.94	0.99	0.0047
MS % Recovery:	97	91	94	92	118
Dup. Result:	0.99	0.92	0.95	0.99	0.0047
MSD % Recov.:	99	92	95	92	118
RPD:	2.0	1.1	1.1	0.0	0.0
RPD Limit:	0-20	0-20	0-20	0-20	0-20
LCS #:	BLK053096	BLK053096	BLK053096	BLK053096	BLK053196
Prepared Date:	5/30/96	5/30/96	5/30/96	5/30/96	5/31/96
Analyzed Date:	5/30/96	5/30/96	5/30/96	5/30/96	5/31/96
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2	MPE4
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L	0.0040 mg/L
LCS Result:	1.0	0.98	1.0	1.0	0.0039
LCS % Recov.:	100	98	100	100	98
MS/MSD LCS Control Limits	80-120	80-120	80-120	80-120	85-115

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

Client Project ID: Shell, Emeryville / 960522-A1
Matrix: Liquid
Work Order #: 9605H16-01

Reported: Jun 21, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC052996BTEX21A	GC052996BTEX21A	GC052996BTEX21A	GC052996BTEX21A
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 #:	9605D7712	9605D7712	9605D7712	9605D7712
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/29/96	5/29/96	5/29/96	5/29/96
Analyzed Date:	5/29/96	5/29/96	5/29/96	5/29/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.8	9.5	9.3	29
MS % Recovery:	98	95	93	97
Dup. Result:	9.5	9.2	8.7	27
MSD % Recov.:	95	92	87	90
RPD:	3.1	3.2	6.7	7.1
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK052996	BLK052996	BLK052996	BLK052996
Prepared Date:	5/29/96	5/29/96	5/29/96	5/29/96
Analyzed Date:	5/29/96	5/29/96	5/29/96	5/29/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	31
LCS % Recov.:	100	100	100	103
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Reggy Penner
Project Manager

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

Client Project ID: Shell, Emeryville / 960522-A1
Matrix: Liquid
Work Order #: 9605H16-02-04, 06, 08

Reported: Jun 21, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC053096BTEX17A	GC053096BTEX17A	GC053096BTEX17A	GC053096BTEX17A
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 #:	9605D7714	9605D7714	9605D7714	9605D7714
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/30/96	5/30/96	5/30/96	5/30/96
Analyzed Date:	5/30/96	5/30/96	5/30/96	5/30/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	30
MS % Recovery:	100	100	100	100
Dup. Result:	9.2	9.2	9.1	27
MSD % Recov.:	92	92	91	90
RPD:	8.3	8.3	9.4	11
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK053096	BLK053096	BLK053096	BLK053096
Prepared Date:	5/30/96	5/30/96	5/30/96	5/30/96
Analyzed Date:	5/30/96	5/30/96	5/30/96	5/30/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.8	9.7	29
LCS % Recov.:	97	98	97	97

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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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.	Client Project ID:	Shell, Emeryville / 960522-A1	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9605H16-05, 07	Reported: Jun 21, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC052996BTEX20A	GC052996BTEX20A	GC052996BTEX20A	GC052996BTEX20A
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 #:	9605D7712	9605D7712	9605D7712	9605D7712
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/29/96	5/29/96	5/29/96	5/29/96
Analyzed Date:	5/29/96	5/29/96	5/29/96	5/29/96
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.3	8.4	8.1	25
MS % Recovery:	83	84	81	83
Dup. Result:	8.9	8.9	8.8	26
MSD % Recov.:	89	89	88	87
RPD:	7.0	5.8	8.3	3.9
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK052996	BLK052996	BLK052996	BLK052996
Prepared Date:	5/29/96	5/29/96	5/29/96	5/29/96
Analyzed Date:	5/29/96	5/29/96	5/29/96	5/29/96
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.8	8.7	8.9	27
LCS % Recov.:	88	87	89	90

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

SEQUOIA ANALYTICAL

Peggy Renner
Project Manager

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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.	Client Project ID:	Shell, Emeryville / 960522-A1	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9605H16-01-06, 08	Reported: Jun 21, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0529960HBPEXZ
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3520
Analyst:	N. Herrera
MS/MSD #:	9605G7706
Sample Conc.:	N.D.
Prepared Date:	5/29/96
Analyzed Date:	5/30/96
Instrument I.D.#:	GCHP4
Conc. Spiked:	1000 µg/L
Result:	840
MS % Recovery:	84
Dup. Result:	930
MSD % Recov.:	93
RPD:	10
RPD Limit:	0-50

LCS #:	BLK052996
Prepared Date:	5/29/96
Analyzed Date:	5/30/96
Instrument I.D.#:	GCHP4
Conc. Spiked:	1000 µg/L
LCS Result:	850
LCS % Recov.:	85

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Reggy 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, Emeryville / 960522-A1
Matrix: Liquid
Work Order #: 9605H16-05
Reported: Jun 21, 1996

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0531968240F2A	MS0531968240F2A	MS0531968240F2A	MS0531968240F2A	MS0531968240F2A
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:	N/A	N/A	N/A	N/A	N/A
Analyst:	L. Zhu	L. Zhu	L. Zhu	L. Zhu	L. Zhu
MS/MSD #:	9605H2301	9605H2301	9605H2301	9605H2301	9605H2301
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N/A	N/A	N/A	N/A	N/A
Analyzed Date:	5/31/96	5/31/96	5/31/96	5/31/96	5/31/96
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	49	47	53	52	50
MS % Recovery:	98	94	106	104	100
Dup. Result:	49	46	52	51	49
MSD % Recov.:	98	92	104	102	98
RPD:	0.0	2.2	1.9	1.9	2.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	VB053196	VB053196	VB053196	VB053196	VB053196
Prepared Date:	5/31/96	5/31/96	5/31/96	5/31/96	5/31/96
Analyzed Date:	5/31/96	5/31/96	5/31/96	5/31/96	5/31/96
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	49	47	51	49	48
LCS % Recov.:	98	94	102	98	96
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	65-135	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

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

Blaine Tech Services, Inc.	Client Project ID:	Shell, Emeryville / 960522-A1	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9605H16-05	Reported: Jun 21, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Heptachlor	Aldrin	Dieldrin
QC Batch#:	GC0528968080EXA	GC0528968080EXA	GC0528968080EXA
Analy. Method:	EPA 8080	EPA 8080	EPA 8080
Prep. Method:	EPA 3510	EPA 3510	EPA 3510
Analyst:	M. Mistry	M. Mistry	M. Mistry
MS/MSD #:	BLK052896	BLK052896	BLK052896
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	5/28/96	5/28/96	5/28/96
Analyzed Date:	6/6/96	6/6/96	6/6/96
Instrument I.D.#:	GCHP10	GCHP10	GCHP10
Conc. Spiked:	0.10 µg/L	0.10 µg/L	0.40 µg/L
Result:	0.062	0.054	0.23
MS % Recovery:	62	54	58
Dup. Result:	0.068	0.061	0.26
MSD % Recov.:	68	61	65
RPD:	9.2	12	12
RPD Limit:	0-50	0-50	0-50
LCS #:	BLK052996	BLK052996	BLK052996
Prepared Date:	5/29/96	5/29/96	5/29/96
Analyzed Date:	6/3/96	6/3/96	6/3/96
Instrument I.D.#:	GCHP10	GCHP10	GCHP10
Conc. Spiked:	0.10 µg/L	0.10 µg/L	0.40 µg/L
LCS Result:	0.081	0.073	0.34
LCS % Recov.:	81	73	85
MS/MSD LCS Control Limits	40-140	40-140	40-140

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

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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 Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-5	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-01	Reported: 07/18/96

QC Batch Number: GC052996BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	**10**	**490**
Toluene	10	N.D.
Ethyl benzene	10	N.D.
Xylenes (Total)	10	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

Shell 1800 Powell, Emeryville,

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

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Peggy Penner
Project Manager

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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-5
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-01

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/29/96
Reported: 07/18/96

Batch Number: GC052996BTEX21A
rument ID: GCHP21

Methyl t-Butyl Ether (MTBE)

nalyte	Detection Limit ug/L	Sample Results ug/L
ethyl t-Butyl Ether	50	N.D.

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	97

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ect Manager

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-5	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8015 Mod	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-01	Reported: 07/18/96

QC Batch Number: GC052996BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**1000**	**1200**
Chromatogram Pattern:		
Discrete Peak		....

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-8
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-02

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/30/96
Reported: 07/18/96

Batch Number: GC053096BTEX17A
rument ID: GCHP17

BTEX Distinction

nalyte	Detection Limit ug/L	Sample Results ug/L
enzene	5.0	350
oluene	5.0	10
hyl benzene	5.0	N.D.
/lenes (Total)	5.0	23

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	98

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-8	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-02	Reported: 07/18/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	25	74

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

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

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Peggy Penner
Project Manager

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laine Technical Services
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an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-8
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-02

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/30/96
Analyzed: 05/30/96
Reported: 07/18/96

Batch Number: GC053096BTEX17A
trument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

nalyte	Detection Limit ug/L	Sample Results ug/L
PPH as Gas	500	1200
hromatogram Pattern:		Gas

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	98

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

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gy Penner
ject Manager

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-10	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-03	Reported: 07/18/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	**0.50**	**19**
Toluene	**0.50**	**0.63**
Ethyl benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**1.4**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	103

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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laine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
35 Timothy Drive	Sample Descript: S-10	Received: 05/23/96
an Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/30/96
tention: Jim Keller	Lab Number: 9605H16-03	Reported: 07/18/96

Batch Number: GC053096BTEX17A
trument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

nalyte	Detection Limit ug/L	Sample Results ug/L
ethyl t-Butyl Ether	2.5	5.3

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	103

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

QUOIA ANALYTICAL - ELAP #1210

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ject Manager

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-10	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/30/96
	Analysis Method: EPA 8015 Mod	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-03	Reported: 07/18/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**100**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	103

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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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-10
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-03

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/31/96
Reported: 07/18/96

Batch Number: GC0529960HBPEXZ
rument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

alyte	Detection Limit ug/L	Sample Results ug/L
EPH as Diesel	50	1200
romatogram Pattern:		
nidentified HC		C9-C24

urrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	86

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ect Manager

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-12
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-04

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/30/96
Reported: 07/18/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	10	N.D.
Toluene	10	N.D.
Ethyl benzene	10	N.D.
Xylenes (Total)	10	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

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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laine Technical Services
85 Timothy Drive
an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-12
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-04

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/30/96
Reported: 07/18/96

Batch Number: GC053096BTEX17A
trument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

nalyte	Detection Limit ug/L	Sample Results ug/L
lethyl t-Butyl Ether	50	2400

urrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	95

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

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gy Penner
ject Manager

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-12	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/30/96
	Analysis Method: EPA 8015 Mod	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-04	Reported: 07/18/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

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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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-12
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-04

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/31/96
Reported: 07/18/96

Batch Number: GC0529960HBPEXZ
rument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

nalyte	Detection Limit ug/L	Sample Results ug/L
EPH as Diesel	500	5700
nromatogram Pattern:		
nidentified HC		C9-C24

urrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	152 Q

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ject Manager

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 07/18/96

QC Batch Number: GC052996BTEX20A
Instrument ID: GCHP20

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	**1.0**	**55**
Toluene	**1.0**	**1.6**
Ethyl benzene	**1.0**	**310**
Xylenes (Total)	**1.0**	**27**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94

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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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/29/96
Reported: 07/18/96

Batch Number: GC052996BTEX20A
rument ID: GCHP20

Methyl t-Butyl Ether (MTBE)

alyte	Detection Limit ug/L	Sample Results ug/L
ethyl t-Butyl Ether	5.0	N.D.

rrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	94

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8015 Mod	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 07/18/96

QC Batch Number: GC052996BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**100**	**430**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94

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

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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/30/96
Reported: 07/18/96

Batch Number: GC0529960HBPEXZ
rument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

alyte	Detection Limit ug/L	Sample Results ug/L
EPH as Diesel	250	3700
aromatogram Pattern:		
nidentified HC		C9-C24

urrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	167 Q

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8240	Analyzed: 05/31/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 07/18/96

QC Batch Number: MS0531968240F2A
Instrument ID: F2

Volatile Organics (EPA 8240)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acetone	**10**	**15**
Benzene	**2.0**	**86**
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
cis-1,2-Dichloroethene	2.0	N.D.
trans-1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis-1,3-Dichloropropene	2.0	N.D.
trans-1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	**2.0**	**5.8**
2-Hexanone	10	N.D.
Methylene chloride	5.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	**2.0**	**3.1**
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	5.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	**2.0**	**51**

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laine Technical Services
35 Timothy Drive
an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8240
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/31/96
Reported: 07/18/96

Batch Number: MS0531968240F2A
trument ID: F2

nalyte	Detection Limit ug/L		Sample Results ug/L
urrogates	**Control Limits %**		**% Recovery**
2-Dichloroethane-d4	76	114	104
oluene-d8	88	110	105
-Bromofluorobenzene	86	115	104

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/29/96
	Analysis Method: EPA 8270	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 07/18/96

QC Batch Number: MS0529968270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	25	N.D.
Acenaphthylene	25	N.D.
Anthracene	25	N.D.
Benzoic Acid	50	N.D.
Benzo(a)anthracene	25	N.D.
Benzo(b)fluoranthene	25	N.D.
Benzo(k)fluoranthene	25	N.D.
Benzo(g,h,i)perylene	25	N.D.
Benzo(a)pyrene	25	N.D.
Benzyl alcohol	25	N.D.
Bis(2-chloroethoxy)methane	25	N.D.
Bis(2-chloroethyl)ether	25	N.D.
Bis(2-chloroisopropyl)ether	25	N.D.
Bis(2-ethylhexyl)phthalate	50	N.D.
4-Bromophenyl phenyl ether	25	N.D.
Butyl benzyl phthalate	25	N.D.
4-Chloroaniline	50	N.D.
2-Chloronaphthalene	25	N.D.
4-Chloro-3-methylphenol	25	N.D.
2-Chlorophenol	25	N.D.
4-Chlorophenyl phenyl ether	25	N.D.
Chrysene	25	N.D.
Dibenzo(a,h)anthracene	25	N.D.
Dibenzofuran	25	N.D.
Di-n-butyl phthalate	50	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
3,3-Dichlorobenzidine	50	N.D.
2,4-Dichlorophenol	25	N.D.
Diethyl phthalate	25	N.D.
2,4-Dimethylphenol	25	N.D.
Dimethyl phthalate	25	N.D.
4,6-Dinitro-2-methylphenol	50	N.D.
2,4-Dinitrophenol	50	N.D.
2,4-Dinitrotoluene	25	N.D.
2,6-Dinitrotoluene	25	N.D.

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aine Technical Services
5 Timothy Drive
n Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-13
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9605H16-05

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/30/96
Reported: 07/18/96

Batch Number: MS0529968270EXA
rument ID: F4

alyte	Detection Limit ug/L	Sample Results ug/L
-n-octyl phthalate	25	N.D.
uoranthene	25	N.D.
uorene	25	N.D.
exachlorobenzene	25	N.D.
exachlorobutadiene	25	N.D.
exachlorocyclopentadiene	50	N.D.
exachloroethane	25	N.D.
deno(1,2,3-cd)pyrene	25	N.D.
ophorone	25	N.D.
Methylnaphthalene	25	N.D.
Methylphenol	25	N.D.
Methylphenol	25	N.D.
aphthalene	25	N.D.
Nitroaniline	50	N.D.
Nitroaniline	50	N.D.
Nitroaniline	50	N.D.
trobenzene	25	N.D.
Nitrophenol	25	N.D.
Nitrophenol	50	N.D.
Nitrosodiphenylamine	25	N.D.
Nitroso-di-n-propylamine	25	N.D.
ntachlorophenol	**50**	**180**
enanthrene	25	N.D.
enol	25	N.D.
rene	25	N.D.
2,4-Trichlorobenzene	25	N.D.
4,5-Trichlorophenol	50	N.D.
4,6-Trichlorophenol	25	N.D.
rbazole		

rrogates	Control Limits %		% Recovery
Fluorophenol	21	110	43
enol-d5	10	110	29
trobenzene-d5	35	114	68
Fluorobiphenyl	43	116	88
4,6-Tribromophenol	10	123	97
Terphenyl-d14	33	141	83

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

QUOIA ANALYTICAL - ELAP #1210

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/29/96
	Analysis Method: EPA 8080,R-1	Analyzed: 06/03/96
Attention: Jim Keller	Lab Number: 9605H16-05	Reported: 07/18/96

QC Batch Number: GC0528968080EXA
Instrument ID: GCHP10

Organochlorine Pesticides and PCBs by EPA 8080 (Modified)

Analyte	Detection Limit ug/L	Sample Results ug/L
Aldrin	0.025	N.D.
alpha-BHC	0.025	N.D.
beta-BHC	0.025	N.D.
delta-BHC	0.025	N.D.
gamma-BHC (Lindane)	0.025	N.D.
Chlordane	0.50	N.D.
4,4'-DDD	0.15	N.D.
4,4'-DDE	0.050	N.D.
4,4'-DDT	0.15	N.D.
Dieldrin	0.050	N.D.
Endosulfan I	0.050	N.D.
Endosulfan II	0.050	N.D.
Endosulfan sulfate	0.15	N.D.
Endrin	0.050	N.D.
Endrin aldehyde	0.15	N.D.
Heptachlor	0.025	N.D.
Heptachlor epoxide	0.025	N.D.
Methoxychlor	0.50	N.D.
Toxaphene	2.0	N.D.
PCB-1016	0.50	N.D.
PCB-1221	2.0	N.D.
PCB-1232	0.50	N.D.
PCB-1242	0.50	N.D.
PCB-1248	0.50	N.D.
PCB-1254	0.50	N.D.
PCB-1260	0.50	N.D.
Mirex	0.10	N.D.

Surrogates	Control Limits %		% Recovery
Dibutylchlorendate	50	150	102
Tetrachloro-m-xylene	50	150	91

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

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aine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
5 Timothy Drive	Sample Descript: S-13	Received: 05/23/96
n Jose, CA 95133	Matrix: LIQUID	Extracted: 05/30/96
	Analysis Method: Title 22	Analyzed: 05/30/96
tention: Jim Keller	Lab Number: 9605H16-05	Reported: 07/18/96

Batch Number: ME0530966010MDA
rument ID: MTJA-2

Inorganic Persistent and Bioaccumulative Toxic Substances : TTLC

alyte	Max. Limit mg/L	Detection Limit mg/L	Sample Results mg/L
ntimony, Sb	**500**	**0.10**	**0.27**
senic, As	**500**	**0.10**	**0.17**
rium, Ba	**10000**	**0.10**	**0.86**
eryllium, Be	75	0.010	N.D.
dmium, Cd	100	0.010	N.D.
romium, Cr	**2500**	**0.010**	**0.20**
romium, Cr (VI)	**500**	**0.050**	-
obalt, Co	8000	0.050	N.D.
opper, Cu	**2500**	**0.010**	**0.16**
ead, Pb	**1000**	**0.10**	**0.35**
ercury, Hg	**20**	**0.00020**	**0.0022**
olybdenum, Mo	3500	0.050	N.D.
ckel, Ni	**2000**	**0.050**	**0.13**
elenium, Se	100	0.10	N.D.
ver, Ag	500	0.010	N.D.
allium, Tl	700	0.10	N.D.
nadium, V	**2400**	**0.050**	**0.14**
nc, Zn	**5000**	**0.010**	**1.5**
bestos, fibers/g	10000		--
uoride salts	18000	1.0	--

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-14	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-06	Reported: 07/18/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**1.6**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

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

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laine Technical Services
85 Timothy Drive
an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-14
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-06

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/30/96
Reported: 07/18/96

Batch Number: GC053096BTEX17A
trument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

nalyte	Detection Limit ug/L	Sample Results ug/L
ethyl t-Butyl Ether	2.5	N.D.

urrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	88

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: S-14	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/30/96
	Analysis Method: EPA 8015 Mod	Analyzed: 05/30/96
Attention: Jim Keller	Lab Number: 9605H16-06	Reported: 07/18/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**93**
Chromatogram Pattern:		
Unidentified HC		**> C10**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

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

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35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: S-14
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-06

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/29/96
Analyzed: 05/31/96
Reported: 07/18/96

Batch Number: GC0529960HBPEXZ
rument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

nalyte	Detection Limit ug/L	Sample Results ug/L
EPH as Diesel	500	3800
nromatogram Pattern:		
nidentified HC		C9-C24

urrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	206 Q

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

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: EB	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-07	Reported: 07/18/96

QC Batch Number: GC052996BTEX20A
Instrument ID: GCHP20

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
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an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: EB
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-07

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/29/96
Reported: 07/18/96

Batch Number: GC052996BTEX20A
trument ID: CHP20

Methyl t-Butyl Ether (MTBE)

nalyte	Detection Limit ug/L	Sample Results ug/L
ethyl t-Butyl Ether	2.5	N.D.

urrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	96

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

QUOIA ANALYTICAL - ELAP #1210

gy Penner
ject 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 Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: EB	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8015 Mod	Analyzed: 05/29/96
Attention: Jim Keller	Lab Number: 9605H16-07	Reported: 07/18/96

QC Batch Number: GC052996BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

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

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Peggy Penner
Project Manager

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aine Technical Services
35 Timothy Drive
an Jose, CA 95133

tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: DUP
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-08

Sampled: 05/22/96
Received: 05/23/96
Analyzed: 05/30/96
Reported: 07/18/96

Batch Number: GC053096BTEX17A
trument ID: GCHP17

BTEX Distinction

nalyte	Detection Limit ug/L	Sample Results ug/L
enzene	0.50	N.D.
oluene	0.50	N.D.
thyl benzene	0.50	N.D.
ylenes (Total)	**0.50**	**1.8**

urrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	87

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

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: DUP
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9605H16-08

Sampled: 05/22/96
Received: 05/23/96

Analyzed: 05/30/96
Reported: 07/18/96

QC Batch Number: GC053096BTEX17A
Instrument ID: GCHP17

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	2.5	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	87

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

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laine Technical Services
85 Timothy Drive
an Jose, CA 95133

ttention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Sample Descript: DUP
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9605H16-08

Sampled: 05/22/96
Received: 05/23/96
Extracted: 05/30/96
Analyzed: 05/30/96
Reported: 07/18/96

Batch Number: GC053096BTEX17A
trument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH)

nalyte	Detection Limit ug/L	Sample Results ug/L
PPH as Gas	**50**	**150**
hromatogram Pattern:		
nidentified HC		**> C10**

urrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	87

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

QUOIA ANALYTICAL - ELAP #1210

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Blaine Technical Services	Client Proj. ID: Shell Emeryville 960522-A1	Sampled: 05/22/96
985 Timothy Drive	Sample Descript: DUP	Received: 05/23/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 05/29/96
	Analysis Method: EPA 8015 Mod	Analyzed: 06/03/96
Attention: Jim Keller	Lab Number: 9605H16-08	Reported: 07/18/96

QC Batch Number: GC0529960HBPEXZ
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**250**	**3900**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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aine Technical Services
35 Timothy Drive
an Jose, CA 95133
tention: Jim Keller

Client Proj. ID: Shell Emeryville 960522-A1
Lab Proj. ID: 9605H16

Received: 05/23/96
Reported: 07/18/96

LABORATORY NARRATIVE

8270 Note: Sample was diluted because of high late eluting compounds.

BTEX Note: The BTEX were not confirmed by a second column. Therefore, they should be considered estimated.

QUOIA ANALYTICAL

gy Penner
ect Manager