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September 15, 1996

Mr. R. Jeff Granberry
Shell Oil Products Company
P.O. Box 4023
Concord, California 94524

RE: **Quarterly Monitoring Report - Third Quarter 1996**
Shell Service Station
2800 Telegraph Avenue
Oakland, California
WIC #204-5508-2303

Dear Mr. Granberry:

This Quarterly Monitoring Report describes the recently completed activities associated with ground water monitoring and sampling at the referenced site (Plates 1 and 2). This report was prepared to meet quarterly reporting guidelines issued by the Regional Water Quality Control Board and the Alameda County Health Care Services Agency.

This document presents the results of activities performed in the third quarter of 1996.

Quarterly Monitoring & Sampling Summary

- Blaine Tech Services, Inc. (Blaine) of San Jose, California measured ground water levels in Wells S-1, S-4 through S-11, and SR-1 on August 2, 1996.

- Ground water samples collected from Wells S-1, and S-4 through S-11 were transported to Sequoia Analytical (Sequoia) of Redwood City, California. A duplicate sample and an equipment blank were prepared and analyzed for quality control purposes.

- Enviros, Inc. (Enviros) evaluated water-level measurement data and chemical analytical results and prepared this report, which includes the Blaine Quarterly Ground Water Monitoring Report and a ground water contour/benzene concentration map.

- Ground water flow is primarily to the southwest at an approximate hydraulic gradient of 0.02. A ground water contour/benzene concentration map is presented on Plate 2.

- TPPH concentrations in ground water samples ranged from not detected (ND) to 1,600 ppb. Benzene concentrations ranged from ND to 150 ppb. A ground water contour/benzene concentration map was prepared and is presented on Plate 2.

Enviros, Inc. 270 Perkins Street P O Box 259 Sonoma, California 95476-0259 Tel 707 / 935-4850 Fax 707 / 935-6649

Quarterly Sampling

Monitoring Wells S-1, and S-4 through S-11 were sampled and analyzed for Total Purgeable Petroleum Hydrocarbons quantified as Gasoline (TPPH) according to EPA Method 8015 (Modified) and benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl-tertiary-butyl-ether (MTBE) according to EPA Method 8020. Well S-7 was also tested for MTBE by EPA Method 8260. Additionally, a duplicate sample and an equipment blank were prepared and analyzed for quality control purposes.

Field monitoring data and chemical analytical data are summarized in Table 1. The Blaine Quarterly Ground Water Monitoring Report is presented in Appendix A.

Monitoring, sampling, and reporting will continue on the established schedule for the next quarter.

If you have any questions regarding the contents of this document, please call.

Sincerely,

Enviros, Inc.

Greg L. Vaughan for
Staff Engineer

Diane M. Lundquist, P.E.
Senior Engineer
C46725

Attachments:

Table 1. Well Concentrations

Plate 1. Vicinity Map
Plate 2. Ground Water Contour/Benzene Concentration Map

Appendix A

Blaine Quarterly Ground Water Monitoring Report

cc: Ms. Susan L. Hugo, Alameda County Health Care Services Agency

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
2800 Telegraph Avenue
Oakland, California
WIC #204-5508-2303

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
S-1		**Top casing elevation (ft): 35.31**								
04-May-92	9.50	25.81	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Aug-92	10.85	24.46	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
09-Nov-92	10.34	24.97	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
23-Feb-93	7.60	27.71	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
07-Jun-93	8.63	26.68	0.00	<50	2.8	1.3	0.7	3.0	NA	
13-Aug-93	9.20	26.11	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Nov-93	10.58	24.73	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Feb-94	8.41	26.90	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
03-May-94	9.09	26.22	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
01-Aug-94	8.81	26.50	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Nov-94	9.32	25.99	0.00	NA	NA	NA	NA	NA	NA	
03-Feb-95	6.98	28.33	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-95	9.35	25.96	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
02-Feb-96	7.45	27.86	0.00	NA	NA	NA	NA	NA	NA	
04-May-96	8.91	26.40	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-96	9.33	25.98	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	
S-2		**Top casing elevation (ft): 33.91**								
04-May-92	9.44	24.47	0.00	1600	190	6.0	240	54	NA	
10-Aug-92	10.73	23.18	0.00	<50	4.1	<0.5	<0.5	<0.5	NA	
11-Sep-92	NA	NA	NA	84	19	0.7	2.2	4.3	NA	
09-Nov-92	10.29	23.62	0.00	NA	NA	NA	NA	NA	NA	
23-Feb-93	9.04	24.87	0.00	16000	1600	480	850	1800	NA	
07-Jun-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Destroyed 4/8/93

TABLE 1

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Shell Oil Products Company
2800 Telegraph Avenue
Oakland, California
WIC #204-5508-2303

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
S-3		**Top casing elevation (ft): 33.56**								
04-May-92	9.22	24.34	0.00	NA	NA	NA	NA	NA	NA	
10-Aug-92	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Paved Over - Inaccessible
S-4		**Top casing elevation (ft): 34.08**								
04-May-92	9.96	24.12	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Aug-92	11.32	22.76	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
09-Nov-92	11.29	22.79	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
23-Feb-93	9.82	24.26	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
07-Jun-93	10.51	23.57	0.00	50	9.2	5.5	3.3	14	NA	
13-Aug-93	11.05	23.03	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Nov-93	11.34	22.74	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Feb-94	9.93	24.15	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
03-May-94	10.40	23.68	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
01-Aug-94	10.68	23.40	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Nov-94	9.44	24.64	NA	NA	NA	NA	NA	NA	NA	
03-Feb-95	9.18	24.90	NA	NA	NA	NA	NA	NA	NA	
02-Aug-95	10.62	23.46	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
02-Feb-96	9.23	24.85	0.00	NA	NA	NA	NA	NA	NA	
04-May-96	10.37	23.71	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-96	10.69	23.39	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	
S-5		**Top casing elevation (ft): 33.42**								
04-May-92	10.27	23.15	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Aug-92	10.68	22.74	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
09-Nov-92	10.69	22.73	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	

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WELL CONCENTRATIONS
Shell Oil Products Company
2800 Telegraph Avenue
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Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
23-Feb-93	9.45	23.97	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
07-Jun-93	10.23	23.19	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
13-Aug-93	10.58	22.84	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Nov-93	10.70	22.72	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Feb-94	9.75	23.67	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
03-May-94	10.19	23.23	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
01-Aug-94	10.30	23.12	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Nov-94	9.64	23.78	NA	NA	NA	NA	NA	NA	NA	
03-Feb-95	9.59	23.83	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
02-Aug-95	10.23	23.90	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
02-Feb-96	9.51	23.91	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
04-May-96	10.15	23.27	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-96	10.30	23.12	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	
S-6		**Top casing elevation (ft): 32.59**								
04-May-92	9.42	23.17	0.00	3100	640	22	23	97	NA	
10-Aug-92	10.40	22.19	0.00	3400	430	27	26	120	NA	
09-Nov-92	10.16	22.43	0.00	2000	320	15	15	100	NA	
23-Feb-93	7.60	24.99	0.00	14000	780	180	380	1300	NA	
07-Jun-93	8.90	23.69	0.00	3900	1400	56	83	210	NA	
13-Aug-93	9.39	23.20	0.00	4000 (a)	890	16	<0.5	41	NA	
18-Nov-93	10.32	22.27	0.00	80	5.0	<0.5	<0.5	<0.5	NA	
10-Feb-94	8.68	23.91	0.00	4100	370	23	21	90	NA	
03-May-94	9.20	23.39	0.00	4700	550	28	85	340	NA	
01-Aug-94	8.90	23.69	0.00	2900	370	11	11	43	NA	
08-Nov-94	8.32	23.69	0.00	NA	NA	NA	NA	NA	NA	

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Shell Oil Products Company
2800 Telegraph Avenue
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Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
03-Feb-95	8.04	23.69	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-95	9.26	23.19	0.00	1400	160	<5	<5	<5	NA	
02-Feb-96	7.90	24.69	0.00	NA	NA	NA	NA	NA	NA	
04-May-96	8.98	23.61	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-96	9.34	23.25	0.00	1600	150	9.2	13	23	17	
S-6 (DUP)										
01-Aug-94	NA	NA	NA	2600	340	8.8	7.7	33	NA	
02-Aug-95	NA	NA	NA	1400	170	<5	<5	<5	NA	
S-7		**Top casing elevation (ft): 33.33**								
04-May-92	11.21	22.12	0.00	180	1.6	<0.5	1.5	3.0	NA	
10-Aug-92	12.28	21.05	0.00	190	8.0	1.4	4.7	8.5	NA	
09-Nov-92	11.77	21.56	0.00	280	16	4.0	7.8	21	NA	
23-Feb-93	8.86	24.47	0.00	210	13	2.2	5.4	12	NA	
07-Jun-93	10.58	22.75	0.00	90	1.2	2.5	1.0	<0.5	NA	
13-Aug-93	11.34	21.99	0.00	140	4.0	0.8	<0.5	0.5	NA	
18-Nov-93	12.00	21.33	0.00	440	43	4.9	0.9	4.2	NA	
10-Feb-94	9.88	23.45	0.00	250 (a)	<0.5	<0.5	1.8	<0.5	NA	
03-May-94	10.75	22.58	0.00	130	<0.5	<0.5	<0.5	<0.5	NA	
01-Aug-94	11.05	22.28	0.00	250	4.8	<0.5	<0.5	<0.5	NA	
08-Nov-94	9.64	23.69	NA	NA	NA	NA	NA	NA	NA	
03-Feb-95	8.53	24.80	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
02-Aug-95	11.10	22.23	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
02-Feb-96	8.58	24.75	0.00	480	2.2	2.4	7.9	25	NA	

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Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
04-May-96	10.41	22.92	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-96	11.18	22.15	0.00	300	20	2.2	3.8	7.9	21	MTBE by EPA Method 8260: 11 ppb
S-7 (DUP)										
02-Aug-96	NA	NA	NA	340	22	2.2	4.4	8.9	20	
S-8		**Top casing elevation (ft): 31.97**								
04-May-92	10.29	21.68	0.00	1600	20	420	96	330	NA	
10-Aug-92	11.12	20.85	0.00	1500	19	37	60	250	NA	
09-Nov-92	10.71	21.26	0.00	710	5.7	24	28	120	NA	
23-Feb-93	6.04	25.93	0.00	3800	40	54	68	260	NA	
07-Jun-93	10.06	21.91	0.00	1200	13	19	65	150	NA	
13-Aug-93	10.56	21.41	0.00	1300	21	23	49	250	NA	
18-Nov-93	10.90	21.07	0.00	870	16	5.3	59	230	NA	
10-Feb-94	9.53	22.44	0.00	2400	11	55	120	530	NA	
03-May-94	10.06	21.91	0.00	3100	12	27	130	370	NA	
01-Aug-94	10.32	21.65	0.00	1500	20	18	39	190	NA	
08-Nov-94	9.25	22.72	0.00	2100	22	38	73	390	NA	
03-Feb-95	8.99	22.98	0.00	4800	67	39	130	300	NA	
04-May-95	9.22	22.75	0.00	2600	31	23	71	310	NA	
02-Aug-95	10.36	21.61	0.00	1700	10	9.1	48	210	NA	
02-Nov-95	10.72	21.25	0.00	1200	16	13	72	130	NA	
02-Feb-96	8.92	23.05	0.00	7100	29	140	360	1300	NA	
04-May-96	9.86	22.11	0.00	3500	13	27	110	400	<25	
02-Aug-96	10.30	21.67	0.00	850	9.6	7.4	30	160	11	

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S-8 (DUP)										
10-Feb-94	NA	NA	NA	2400	11	46	100	440	NA	
03-May-94	NA	NA	NA	3000	21	25	120	340	NA	
08-Nov-94	NA	NA	NA	2100	20	31	75	390	NA	
03-Feb-95	NA	NA	NA	3700	53	30	100	240	NA	
04-May-95	NA	NA	NA	3300	38	26	89	390	NA	
02-Aug-95	NA	NA	NA	1200	15	13	70	120	NA	
02-Feb-96	NA	NA	NA	7800	33	160	400	1500	NA	
04-May-96	NA	NA	NA	5100	19	37	190	690	<25	
S-9		**Top casing elevation (ft): 31.86**								
04-May-92	10.45	21.41	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Aug-92	11.52	20.34	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
09-Nov-92	11.02	20.84	0.00	<50	<0.5	<0.5	<0.5	0.7	NA	
23-Feb-93	8.00	23.86	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
07-Jun-93	10.07	21.79	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
13-Aug-93	10.92	20.94	0.00	140 (b)	<0.5	<0.5	<0.5	<0.5	NA	
18-Nov-93	11.19	20.67	0.00	170	<0.5	<0.5	<0.5	<0.5	NA	
10-Feb-94	9.16	22.70	0.00	140 (b)	<0.5	<0.5	<0.5	<0.5	NA	
03-May-94	10.03	21.83	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
01-Aug-94	10.52	21.34	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Nov-94	9.08	22.78	0.00	NA	NA	NA	NA	NA	NA	
03-Feb-95	8.37	23.49	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-95	9.35	22.51	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
02-Feb-96	7.53	24.33	0.00	NA	NA	NA	NA	NA	NA	

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04-May-96	9.60	22.26	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-96	10.46	21.40	0.00	<50	<0.50	<0.50	<0.50	<0.50	12	
S-10		**Top casing elevation (ft): 32.95**								
04-May-92	8.54	24.41	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Aug-92	10.43	22.52	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
09-Nov-92	9.14	23.81	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
23-Feb-93	6.72	26.23	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
07-Jun-93	8.08	24.87	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
13-Aug-93	8.83	24.12	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Nov-93	9.46	23.49	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Feb-94	7.41	25.54	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
03-May-94	8.16	24.79	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
01-Aug-94	8.29	24.66	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Nov-94	7.02	25.93	0.00	NA	NA	NA	NA	NA	NA	
03-Feb-95	6.79	26.16	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-95	8.30	24.65	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
02-Feb-96	6.49	26.46	0.00	NA	NA	NA	NA	NA	NA	
04-May-96	7.55	25.40	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-96	9.25	23.70	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	
S-11		**Top casing elevation (ft): 30.78**								
04-May-92	9.99	20.79	0.00	1500	55	32	57	190	NA	
10-Aug-92	10.92	19.86	0.00	750	29	13	43	120	NA	
09-Nov-92	10.44	20.34	0.00	4100	32	62	120	1100	NA	
23-Feb-93	7.30	23.48	0.00	760	15	13	37	140	NA	

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07-Jun-93	9.51	21.27	0.00	1700	40	16	100	360	NA	
13-Aug-93	10.39	20.39	0.00	60	0.9	<0.5	0.8	1.2	NA	
18-Nov-93	10.64	20.14	0.00	150	7.8	1.0	9.0	12	NA	
10-Feb-94	8.50	22.28	0.00	4400	53	19	160	390	NA	
03-May-94	9.42	21.36	0.00	65	1.5	<0.5	0.53	0.59	NA	
01-Aug-94	10.12	20.66	0.00	240	18	6.7	6.9	18	NA	
08-Nov-94	8.84	21.94	0.00	490	14	5.2	15	47	NA	
03-Feb-95	7.12	23.66	0.00	380	4.1	0.9	1.4	5.1	NA	
04-May-95	7.96	22.82	0.00	110	1.3	<0.5	1.1	1.8	NA	
02-Aug-95	9.88	20.90	0.00	230	22	11	13	35	NA	
02-Nov-95	10.10	20.68	0.00	200	26	10	10	30	NA	
02-Feb-96	7.33	23.45	0.00	110	2.9	1.0	2.6	6.5	NA	
04-May-96	8.62	22.16	0.00	<50	0.70	0.54	0.82	2.6	7.5	
02-Aug-96	9.85	20.93	0.00	200	11	4.6	12	38	10	
S-11 (DUP)										
07-Jun-93	NA	NA	NA	1600	51	16	83	300	NA	
13-Aug-93	NA	NA	NA	70	2.1	<0.5	0.9	2.1	NA	
SR-1		**Top casing elevation (ft):** not surveyed								
04-May-92	9.02	NA	0.00	NA	NA	NA	NA	NA	NA	
10-Aug-92	10.29	NA	0.00	NA	NA	NA	NA	NA	NA	
09-Nov-92	10.92	NA	0.00	NA	NA	NA	NA	NA	NA	
22-Feb-93	6.64	NA	0.00	NA	NA	NA	NA	NA	NA	
07-Jun-93	7.36	NA	0.00	NA	NA	NA	NA	NA	NA	
13-Aug-93	7.96	NA	0.00	NA	NA	NA	NA	NA	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
2800 Telegraph Avenue
Oakland, California
WIC #204-5508-2303

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
18-Nov-93	10.02	NA	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
10-Feb-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	
03-May-94	8.28	NA	0.00	NA	NA	NA	NA	NA	NA	
01-Aug-94	7.98	NA	0.00	NA	NA	NA	NA	NA	NA	
08-Nov-94	7.75	NA	0.00	NA	NA	NA	NA	NA	NA	
03-Feb-95	7.20	NA	0.00	NA	NA	NA	NA	NA	NA	
04-May-95	4.10	NA	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-95	5.31	NA	0.00	NA	NA	NA	NA	NA	NA	
02-Nov-95	10.62	NA	0.00	NA	NA	NA	NA	NA	NA	
02-Feb-96	7.30	NA	0.00	90 (d)	6.1	6.7	2.8	8.5	NA	
04-May-96	8.10	NA	0.00	NA	NA	NA	NA	NA	NA	
02-Aug-96	8.10	NA	0.00	NA	NA	NA	NA	NA	NA	
SR-1 (DUP)										
18-Nov-93	NA	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	

Abbreviations:

TPPH = Total Purgeable Petroleum Hydrocarbons carbon range C6 to C12 by Modified EPA Method 8015
(previously reported as Total Petroleum Hydrocarbons as Gasoline)

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020

MTBE = methyl-tertiary-butyl ethel by EPA Method 8020

<x = Not detected at detection limit of x

NA = Not analyzed or not available

(DUP) = Duplicate sample

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
2800 Telegraph Avenue
Oakland, California
WIC #204-5508-2303

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments

Notes:

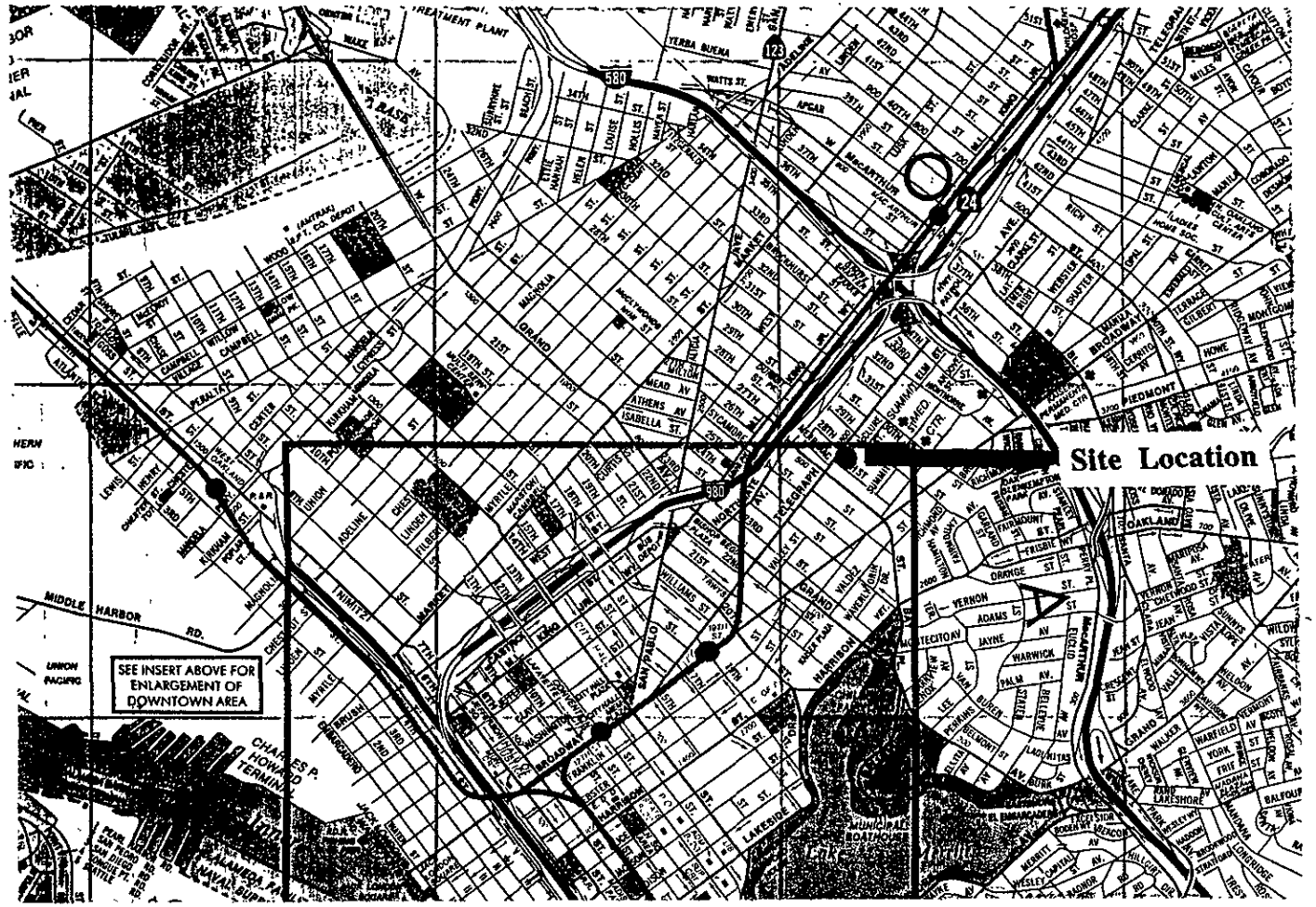
Benzene, Toluene, Ethylbenzene, Xylenes analyzed by EPA Method 8020

a = The concentration reported as gasoline is primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.

b = Well inaccessible since August 1992

c = The concentration reported as gasoline is primarily due to the presence of a discrete peak not indicative of gasoline.

Elevations referenced to Mean Sea Level

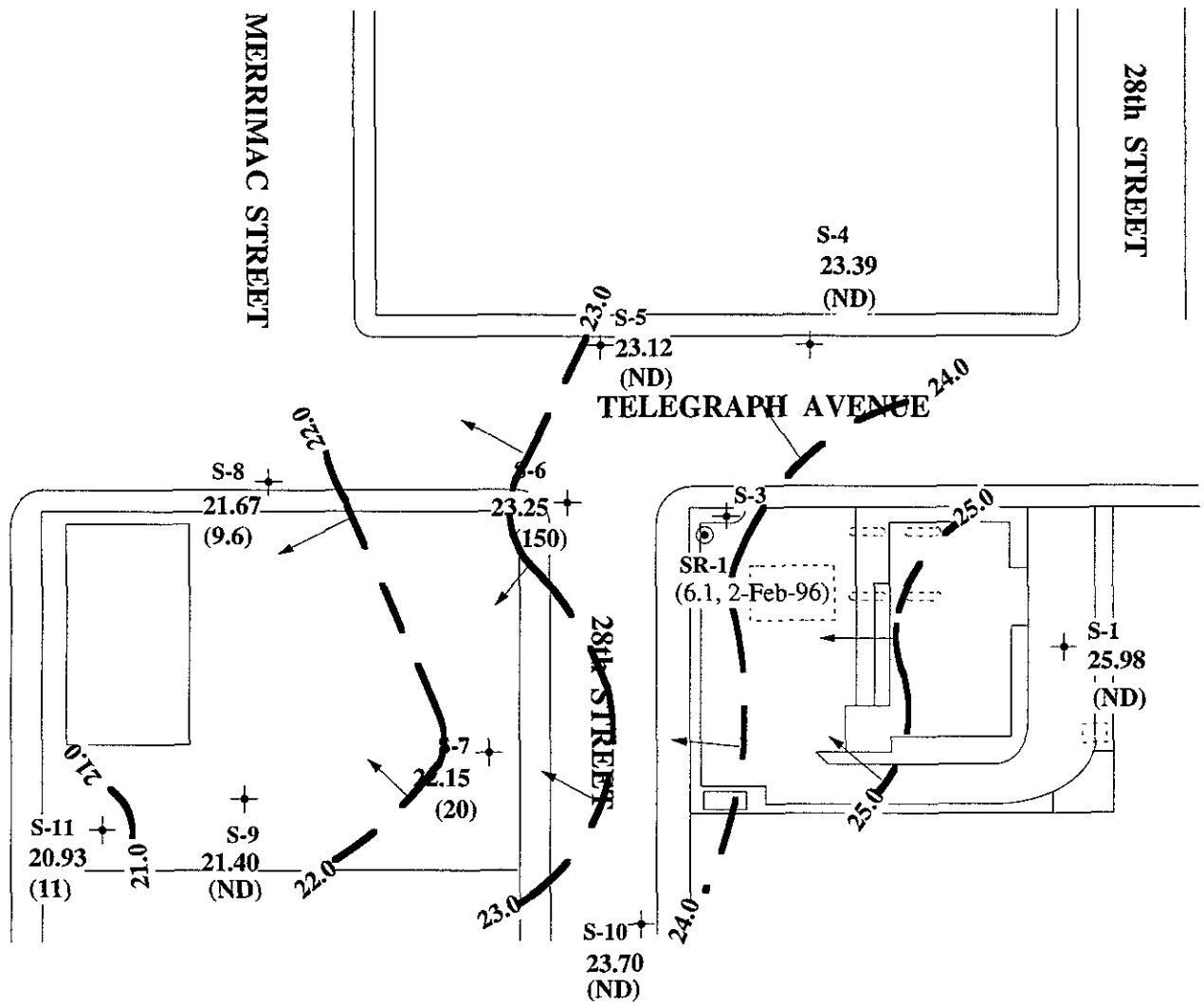


Note: Vicinity Map taken from California State AAA map.

PLATE	SITE VICINITY MAP	enviros®
1	Former Shell Service Station 2800 Telegraph Avenue Oakland, California	95290

Drawn By: JLP Date: 5-15-95

Approved By: _____ Date: 9-12-96



EXPLANATION

- Ground water Monitoring Well
- Recovery Well
- 25.0 Ground water elevation contour in feet referenced to Mean Sea Level (MSL). Arrows indicate approximate ground water flow direction.
- **22.15** Ground water elevation in feet MSL
- **(150)** Benzene concentration in ppb
- (ND, 2-Feb-96) Benzene concentration and date of last sampling
- **ND** Not Detected

Notes: Monitoring performed on 2-Aug-96.
Approximate Hydraulic Gradient = 0.02
Well SR-1 not used in contouring.

Base map taken from Weiss Associates Site Map.

PLATE 2

GROUND WATER CONTOUR/BENZENE CONCENTRATION MAP
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California

enviros®
96290

Drawn By: GLV | Date: 4-Sep-96 | Approved By: glw | Date: 9-15-96

BLAINE TECH SERVICES INC.

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

August 22, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-5508-2303
2800 Telegraph Avenue
Oakland, California

3rd Quarter 1996

Quarterly Groundwater Monitoring Report 960802-Z-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: Enviros, Inc.
P.O. Box 259
Sonoma, CA 95476-0259
Attn: Joe Neely

(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-1	8/2/96	TOB	--	NONE	--	--	9.33	27.55
S-4	8/2/96	TOB	--	NONE	--	--	10.69	30.30
S-5	8/2/96	TOB	--	NONE	--	--	10.30	30.52
S-6	8/2/96	TOB	ODOR	NONE	--	--	9.34	22.10
S-7 *	8/2/96	TOB	--	NONE	--	--	11.18	30.65
S-8	8/2/96	TOB	ODOR	NONE	--	--	10.30	19.15
S-9	8/2/96	TOB	--	NONE	--	--	10.46	30.00
S-10	8/2/96	TOB	--	NONE	--	--	9.25	24.20
S-11	8/2/96	TOB	--	NONE	--	--	9.85	19.10
SR-1	8/2/96	TOB	--	NONE	--	--	8.10	34.10

* Sample DUP was a duplicate sample taken from well S-7.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 96882-21

Date: 8-2-96
Page 1 of 2

Site Address: 2800 Telegraph Ave., Oakland

WIC#: 204-5508-2303

Shell Engineer: R. Jeff Granberry ~~Lynn Walker~~ Phone No.: (510) 675-6169 Fax #: 675-6172

Consultant Name & Address: Blaine Tech Services, Inc. 985 Timothy Drive San Jose, CA 95133

Consultant Contact: Jim Keller Phone No.: (408) 995-5535 Fax #: 293-8773

Comments:

Sampled by: BRETT BLEAU

Printed Name:

Analysis Required 9608265

LAB: SEQ

CHECK ONE (1) BOX ONLY — CT/DT

- Quarterly Monitoring ☒ 8441
- Site Investigation ☐ 8441
- Soil Closure/Disposal ☐ 8442
- Water Closure/Disposal ☐ 8443
- Soil/Air Rem. or Sys. O & M ☐ 8452
- Water Rem. or Sys. O & M ☐ 8453
- Other ☐

TURN AROUND TIME

- 24 hour ☐
- 48 hour ☐
- 15 days ☒ (Normal)
- Other ☐ ____

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

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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-1	8-2			x		3		1	A-C			x							Confirm highest MTBE hit by 8260	
S-4	"			x		3		2				x								
S-5	"			x		3		3				x								
S-6	"			x		3		4				x								
S-7	"			x		3		5				x								
S-8	"			x		3		6				x								
S-9	"			x		3		7				x								
S-10	"			x		3		8				x								

Relinquished By (signature):	Printed Name: BRETT BLEAU	Date: 8/5/96 Time: 3:45	Received (signature):	Printed Name: FUTHER	Date: 8/5/96 Time: 3:45
Relinquished By (signature):	Printed Name:	Date: 8/5/96 Time:	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name: Richter	Date: 8/5/96 Time: 1700

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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960802-21

Date: 8-2-96
Page 2 of 2

Site Address: 2800 Telegraph Ave., Oakland

WIC#: 204-5508-2303

Shell Engineer: R. Jeff Granberry
Phone No.: (510) 675-6169
Fax #: 675-6172

Consultant Name & Address: Blaine Tech Services, Inc.
985 Timothy Drive San Jose, CA 95133

Consultant Contact: Jim Keller
Phone No.: (408) 995-5535
Fax #: 293-8773

Comments:

Sampled by: BRETT BLEAU
Printed Name:

LAB: SEQ

CHECK ONE (1) BOX ONLY

	CT/DT
Quarterly Monitoring	5441
Site Investigation	5441
Soil Closure/Disposal	5442
Water Closure/Disposal	5443
Soil/Air Rem. or Sys. O & M	5452
Water Rem. or Sys. O & M	5453
Other	

TURN AROUND TIME

- 24 hour
- 48 hour
- 96 hours (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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-11	8-2			X		3		9	A-C			X							Confirm	Highest
EB	"			X		3		10	/			X							MTBE	hit by
DUP	"			X		3		11	/			X							8260	

Relinquished By (signature):	Printed Name: BRETT BLEAU	Date: 8/5/96 Time: 3:45	Received (signature):	Printed Name: FOTCHER	Date: 8/5/96 Time: 3:45
Relinquished By (signature):	Printed Name:	Date: 8/5/96 Time:	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name: Rich Hertig	Date: 8/5/96 Time: 1525

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

Appendix A

Blaine Tech Services Inc.
Quarterly Ground Water Monitoring Report

Sequoia Analytical

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

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

Project: Shell Oakland 960802-Z1

Enclosed are the results from samples received at Sequoia Analytical on August 5, 1996. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9608265 -01	LIQUID, S-1	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -02	LIQUID, S-4	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -03	LIQUID, S-5	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -04	LIQUID, S-6	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -05	LIQUID, S-7	08/02/96	MTBEMW Methyl t-Butyl Ethe
9608265 -05	LIQUID, S-7	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -06	LIQUID, S-8	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -07	LIQUID, S-9	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -08	LIQUID, S-10	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -09	LIQUID, S-11	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -10	LIQUID, EB	08/02/96	TPGBMW Purgeable TPH/BTEX
9608265 -11	LIQUID, DUP	08/02/96	TPGBMW Purgeable TPH/BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-01

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/13/96
Reported: 08/26/96

QC Batch Number: GC081396BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	112

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-02

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/10/96
Reported: 08/26/96

QC Batch Number: GC081096BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-03

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/10/96
Reported: 08/26/96

QC Batch Number: GC081096BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	89

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-6
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-04

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/13/96
Reported: 08/26/96

QC Batch Number: GC081396BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	1600
Methyl t-Butyl Ether	12	17
Benzene	2.5	150
Toluene	2.5	9.2
Ethyl Benzene	2.5	13
Xylenes (Total)	2.5	23
Chromatogram Pattern:		C6-C12

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

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-7
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9608265-05

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/22/96
Reported: 08/26/96

QC Batch Number: MS0822968260F3A
Instrument ID: F3

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	2.0	11

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	103
Toluene-d8	88	110	92
4-Bromofluorobenzene	86	115	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-05

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/13/96
Reported: 08/26/96

QC Batch Number: GC081396BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	300
Methyl t-Butyl Ether	5.0	21
Benzene	1.0	20
Toluene	1.0	2.2
Ethyl Benzene	1.0	3.8
Xylenes (Total)	1.0	7.9
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	127

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-8
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-06

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/13/96
Reported: 08/26/96

QC Batch Number: GC081396BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	850
Methyl t-Butyl Ether	10	11
Benzene	2.0	9.6
Toluene	2.0	7.4
Ethyl Benzene	2.0	30
Xylenes (Total)	2.0	160
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	109

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-9
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-07

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/13/96
Reported: 08/26/96

QC Batch Number: GC081396BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	**2.5**	**12**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	122

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-10
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-08

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/10/96
Reported: 08/26/96

QC Batch Number: GC081096BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	85

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: S-11
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-09

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/10/96
Reported: 08/26/96

QC Batch Number: GC081096BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	200
Methyl t-Butyl Ether	2.5	10
Benzene	0.50	11
Toluene	0.50	4.6
Ethyl Benzene	0.50	12
Xylenes (Total)	0.50	38
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: EB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-10

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/10/96
Reported: 08/26/96

QC Batch Number: GC081096BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell Oakland 960802-Z1
Sample Descript: DUP
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9608265-11

Sampled: 08/02/96
Received: 08/05/96

Analyzed: 08/13/96
Reported: 08/26/96

QC Batch Number: GC081396BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	340
Methyl t-Butyl Ether	5.0	20
Benzene	1.0	22
Toluene	1.0	2.2
Ethyl Benzene	1.0	4.4
Xylenes (Total)	1.0	8.9
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	121

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Client Project ID: Shell, Oakland / 960802-Z1
Matrix: Liquid
Work Order #: 9608265 -01, 04-07, 11
Reported: Aug 27, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC081396BTEX22A	GC081396BTEX22A	GC081396BTEX22A	GC081396BTEX22A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	H. Porter	H. Porter	H. Porter	H. Porter
MS/MSD #:	960818501	960818501	960818501	960818501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/13/96	8/13/96	8/13/96	8/13/96
Analyzed Date:	8/13/96	8/13/96	8/13/96	8/13/96
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	11	10	31
MS % Recovery:	100	110	100	105
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	0.0	9.5	0.0	1.6
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK081396	BLK081396	BLK081396	BLK081396
Prepared Date:	8/13/96	8/13/96	8/13/96	8/13/96
Analyzed Date:	8/13/96	8/13/96	8/13/96	8/13/96
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22
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	104
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

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

Client Project ID: Shell, Oakland / 960802-Z1
Matrix: Liquid
Work Order #: 9608265-02-03, 08-10
Reported: Aug 27, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC081096BTEX03A	GC081096BTEX03A	GC081096BTEX03A	GC081096BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	960822406	960822406	960822406	960822406
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/10/96	8/10/96	8/10/96	8/10/96
Analyzed Date:	8/10/96	8/10/96	8/10/96	8/10/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.3	9.2	9.3	28
MS % Recovery:	93	92	93	93
Dup. Result:	9.1	9.0	9.0	27
MSD % Recov.:	91	90	90	90
RPD:	2.2	2.2	3.3	3.6
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK081096	BLK081096	BLK081096	BLK081096
Prepared Date:	8/10/96	8/10/96	8/10/96	8/10/96
Analyzed Date:	8/10/96	8/10/96	8/10/96	8/10/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.9	8.7	8.8	26
LCS % Recov.:	89	87	88	87
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

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.

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

Client Project ID: Shell, Oakland / 960802-Z1
Matrix: Liquid
Work Order #: 9608265-05

Reported: Aug 27, 1996

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0822968260F3A	MS0822968260F3A	MS0822968260F3A	MS0822968260F3A	MS0822968260F3A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N/A	N/A	N/A	N/A	N/A
Analyst:	L. Duong	L. Duong	L. Duong	L. Duong	L. Duong
MS/MSD #:	960826505	960826505	960826505	960826505	960826505
Sample Conc.:	N.D.	N.D.	21	N.D.	N.D.
Prepared Date:	-	-	-	-	-
Analyzed Date:	8/22/96	8/22/96	8/22/96	8/22/96	8/22/96
Instrument I.D.#:	F3	F3	F3	F3	F3
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	52	52	75	55	53
MS % Recovery:	104	104	108	110	106
Dup. Result:	48	48	71	50	49
MSD % Recov.:	96	96	100	100	98
RPD:	8.0	8.0	9.6	9.5	7.8
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	VDB082296	VDB082296	VDB082296	VDB082296	VDB082296
Prepared Date:	-	-	-	-	-
Analyzed Date:	8/22/96	8/22/96	8/22/96	8/22/96	8/22/96
Instrument I.D.#:	F3	F3	F3	F3	F3
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	49	47	49	50	49
LCS % Recov.:	98	94	98	100	98
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

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.

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