enviros®

April 12, 1996

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

RE: Quarterly Monitoring Report - First Quarter 1996
Former Shell Service Station
500 40th Avenue
Oakland, California
WIC #204-5508-4903

Dear Mr. Granberry:

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

Quarterly Monitoring & Sampling Summary

Ground water monitoring and sampling for the first quarter of 1996 are summarized below:

- Blaine Tech Services Inc. (Blaine Tech) of San Jose, measured ground water levels in Wells EW-1, MW-2 through MW-5, and OMW-12 and collected samples from Well OMW-12 on February 24, 1996. The samples were transported to National Environmental Testing, Inc. (NET) of Santa Rosa, California for chemical analysis.

- Ground water level measurement data were evaluated and used to prepare a ground water contour map (Plate 2). Ground water flow ranges from the southeast to the southwest with an approximate hydraulic gradient of 0.03.

First Quarter Sampling

Well OMW-12 was sampled and analyzed for Total Purgeable Petroleum Hydrocarbons (TPPH) according to EPA Method 8015 (Modified) and benzene, toluene, ethylbenzene and xylenes (BTEX) according to EPA Method 8020.

Field monitoring data and chemical analytical data are summarized in Table 1. A benzene concentration map is presented as Plate 2. The Blaine Tech Quarterly Ground Water Monitoring Report is presented in Appendix A.

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

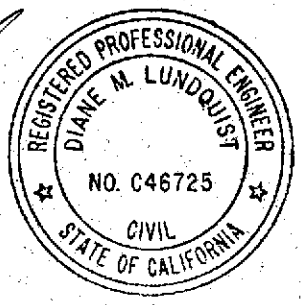
If you have any questions regarding the contents of this document, please call.

Sincerely,

Enviros, Inc.

Matthew E. Donohue
Project 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 Tech Services Inc. - Quarterly Ground Water Sampling Report

cc: Mr. Brian Oliva, Alameda County Health Care Services, Environmental Protection Division

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
500 40th Avenue
Oakland, California
WIC #204-5508-4903

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	Comments
EW-1	**Top casing elevation (ft):**			**78.26**						
06-Aug-91	NA	NA	NA	180	<50	5.4	<0.5	0.9	0.7	
30-Oct-91	12.72	65.54	0.00	70	<50	2.6	<0.5	<0.5	<0.5	
15-Feb-92	NA	NA	NA	<50	NA	2.1	<0.5	<0.5	<0.5	
22-May-92	12.84	65.42	0.00	99	NA	4.1	<0.5	<0.5	<0.5	
19-Aug-92	13.04	65.22	0.00	140	NA	6.6	<0.5	<0.5	<0.5	
18-Nov-92	12.90	65.36	0.00	56	NA	<0.5	<0.5	<0.5	<0.5	
11-Feb-93	11.28	66.98	0.00	63	NA	<0.5	<0.5	<0.5	0.9	
19-May-93	12.52	65.74	0.00	60b	NA	<0.5	<0.5	<0.5	<0.5	
17-Nov-93	12.63	65.63	0.00	170	NA	17	<0.5	<0.5	<0.5	
26-May-94	12.02	66.24	0.00	<50	NA	3.5	<0.5	<0.5	0.51	
11-Nov-94	11.08	67.18	0.00	200	NA	13	0.88	<0.5	<0.5	
07-May-95	11.32	66.94	0.00	90	NA	8.6	<0.5	<0.5	<0.5	
02-Nov-95	12.80	65.46	0.00	240	NA	12	1.5	0.6	1.9	
24-Feb-96	10.15	68.11	0.00	NA	NA	NA	NA	NA	NA	
EW-1 (DUP)										
11-Feb-93	NA	NA	NA	63	NA	<0.5	<0.5	<0.5	0.8	
17-Nov-93	NA	NA	NA	190	NA	17	<0.5	<0.5	<0.5	
MW-2	**Top casing elevation (ft):**			**80.80**						
06-Aug-91	12.12	68.68	0.00	1200	230	59	1.1	38	56	
30-Oct-91	11.70	69.10	0.00	520	300	56	<0.5	56	100	
15-Feb-92	NA	NA	NA	2300	2200a	87	<2.5	88	150	
22-May-92	12.12	68.68	0.00	700	NA	24	1	34	48	
19-Aug-92	12.18	68.62	0.00	740	NA	21	<2.5	24	26	
18-Nov-92	12.03	68.77	0.00	920	NA	19	<2.5	30	51	

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Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	Comments
11-Feb-93	11.15	69.65	0.00	1000	NA	25	6	43	73	
19-May-93	11.80	69.00	0.00	570	NA	19	<0.5	37	42	
17-Nov-93	12.00	68.80	0.00	250	NA	10	<1.0	26	20	
26-May-94	11.61	69.19	0.00	620	NA	17	1.4	25	31	
11-Nov-94	10.74	70.06	0.00	1100	NA	28	3.1	39	65	
07-May-95	10.98	69.82	0.00	700	NA	15	<0.5	35	39	
02-Nov-95	12.12	68.68	0.00	140	NA	2.3	<0.5	4.4	3.7	
24-Feb-96	10.25	70.55	0.00	NA	NA	NA	NA	NA	NA	
MW-2 (DUP)										
19-Aug-92	NA	NA	NA	840	NA	31	<2.5	36	43	
18-Nov-92	NA	NA	NA	870	NA	25	<2.5	34	52	
26-May-94	NA	NA	NA	600	NA	16	1.2	24	29	
MW-3	**Top casing elevation (ft):**			**79.60**						
06-Aug-91	11.12	68.48	0.00	1900	470	220	57	57	260	
30-Oct-91	10.93	68.67	0.00	1900	480	160	28	63	180	
15-Feb-92	NA	NA	0.00	2300	780a	170	31	59	180	
22-May-92	10.79	68.81	0.00	1500	NA	160	20	44	140	
19-Aug-92	11.23	68.37	0.00	4500	NA	210	64	89	310	
18-Nov-92	11.20	68.40	0.00	2400	NA	81	14	39	140	
11-Feb-93	11.00	68.60	0.00	3000	NA	200	47	90	260	
19-May-93	11.16	68.44	0.00	2100	NA	240	44	100	330	
17-Nov-93	11.10	68.50	0.00	1000	NA	110	13	60	150	
26-May-94	11.85	67.75	0.00	1100	NA	200	17	29	58	
11-Nov-94	10.04	69.56	0.00	870	NA	130	10	38	87	
07-May-95	10.11	69.49	0.00	1300	NA	180	7.5	54	110	

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Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	Comments
02-Nov-95	10.97	68.63	0.00	370	NA	36	1.8	16	21	
24-Feb-96	9.61	69.99	0.00	NA	NA	NA	NA	NA	NA	
MW-3 (DUP)										
11-Nov-94	NA	NA	NA	1000	NA	120	10	42	92	
MW-4	**Top casing elevation (ft):**			**81.00**						
06-Aug-91	12.36	68.64	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	
30-Oct-91	12.02	68.98	0.00	50	<50	<0.5	<0.5	<0.5	<0.5	
15-Feb-92	NA	NA	NA	90	NA	0.9	<0.5	<0.5	<0.5	
22-May-92	12.35	68.65	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
19-Aug-92	12.41	68.59	0.00	82b	NA	<0.5	<0.5	<0.5	<0.5	
18-Nov-92	12.28	68.72	0.00	85b	NA	<0.5	<0.5	<0.5	<0.5	
11-Feb-93	11.65	69.35	0.00	62b	NA	<0.5	<0.5	<0.5	<0.5	
19-May-93	11.92	69.08	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
17-Nov-93	12.24	68.76	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
26-May-94	12.00	69.00	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
11-Nov-94	11.30	69.70	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
07-May-95	11.69	69.31	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
02-Nov-95	12.23	68.77	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
24-Feb-96	11.13	69.87	0.00	NA	NA	NA	NA	NA	NA	
MW-5	**Top casing elevation (ft):**			**81.50**						
06-Aug-91	13.02	68.48	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	
30-Oct-91	12.73	68.77	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	
15-Feb-92	NA	NA	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
22-May-92	13.05	68.45	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	

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Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	Comments
19-Aug-92	13.04	68.46	0.00	55b	NA	<0.5	<0.5	<0.5	<0.5	
18-Nov-92	12.91	68.59	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
11-Feb-93	12.44	69.06	0.00	59b	NA	<0.5	<0.5	<0.5	<0.5	
19-May-93	12.84	68.66	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
17-Nov-93	12.89	68.61	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
26-May-94	12.73	68.77	0.00	<50	NA	1.8	2.4	1.3	4.9	
11-Nov-94	12.20	69.30	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
07-May-95	12.47	69.03	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
02-Nov-95	13.02	68.48	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
24-Feb-96	12.11	69.39	0.00	NA	NA	NA	NA	NA	NA	
MW-5 (DUP)										
19-May-93	NA	NA	NA	<50	NA	<0.5	<0.5	<0.5	<0.5	
OMW-6	**Top casing elevation (ft):**			**77.90**						
06-Aug-91	10.71	67.19	0.00	26000	3600	910	420	560	1900	
30-Oct-91	10.50	67.40	0.00	20000	4600	710	240	410	1700	
15-Feb-92	NA	NA	NA	35000	27000	690	420	650	3000	
22-May-92	10.13	67.77	0.00	15000	NA	460	110	300	1600	
19-Aug-92	10.16	67.74	0.00	24000	NA	600	300	460	2000	
18-Nov-92	9.94	67.96	0.00	29000	NA	480	250	450	2300	
11-Feb-93	9.20	68.70	0.00	24000	NA	1300	250	630	2400	
19-May-93	10.64	67.86	0.00	18000	NA	750	180	520	2500	
17-Nov-93	10.12	67.78	0.00	14000	NA	260	64	430	1900	
26-May-94	NA	NA	NA	NA c	NA	NA	NA	NA	NA	
11-Nov-94	NA	NA	NA	NA c	NA	NA	NA	NA	NA	
07-May-95	8.64	69.26	0.00	11000	NA	460	82	280	540	

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24-Feb-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	Inaccessible
OMW-6 (DUP)										
07-May-95	NA	NA	NA	14000	NA	480	61	230	370	
MW-8	**Top casing elevation (ft):**			**79.91**						
06-Aug-91	13.08	66.89	0.00	90	<50	<0.5	<0.5	<0.5	<0.5	
30-Oct-91	12.87	67.10	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	
15-Feb-92	NA	NA	NA	<50	NA	<0.5	<0.5	<0.5	<0.5	
22-May-92	12.32	67.65	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
19-Aug-92	12.58	67.39	0.00	60	NA	<0.5	<0.5	<0.5	<0.5	
18-Nov-92	12.47	67.50	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
11-Feb-93	11.02	68.95	0.00	76b	NA	<0.5	<0.5	<0.5	<0.5	
19-May-93	11.78	68.19	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
17-Nov-93	12.25	67.72	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
26-May-94	11.30	68.67	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
11-Nov-94	10.12	69.85	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
07-May-95	10.77	69.20	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
02-Nov-95	11.93	68.04	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	
24-Feb-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	Inaccessible
OMW-9	**Top casing elevation (ft):**			**77.71**						
06-Aug-91	10.38	67.33	0.00	3900	190	58	8.8	80	220	
30-Oct-91c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
18-Mar-92	8.76	68.95	0.00	1800d	210	84	11	49	60	
20-May-92c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
19-Aug-92	9.98	67.73	0.00	4600	22a	63	<25	48	70	

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Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	Comments
18-Nov-92	9.81	67.90	0.00	1800	130a	30	9.2	46	61	
11-Feb-93c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
19-May-93c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
17-Nov-93	9.92	67.79	0.00	5900	2400e	86	14	150	46	
26-May-94c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
11-Nov-94c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7-May-95c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
24-Feb-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	Inaccessible
OMW-10	**Top casing elevation (ft):**			**77.91**						
07-Aug-91	10.00	67.91	0.00	460	<50	73	1	18	8.4	
31-Oct-91	10.10	67.81	0.00	630	150	100	<0.5	33	26	
15-Feb-92	NA	NA	NA	810	570a	85	2.5	44	38	
21-May-92	10.41	67.50	0.00	280	NA	47	0.7	4	3.1	
19-Aug-92	10.46	67.45	0.00	330	NA	35	<1	6	4.1	
18-Nov-93	10.31	67.60	0.00	300	NA	30	0.8	7.1	6.3	
11-Feb-93	9.68	68.23	0.00	510b	NA	49	3.8	18	18	
19-May-93	10.19	67.72	0.00	<50	NA	96	<0.5	3.4	1.5	
17-Nov-93	10.32	67.59	0.00	400	NA	24	<1.0	2.8	1.9	
26-May-94	10.14	67.77	0.00	330	NA	32	13	7.5	26	
11-Nov-94	9.34	68.57	0.00	110	NA	7.8	<0.5	2.3	1.5	
07-May-95	9.63	68.28	0.00	1600	NA	110	3.1	17	12	
02-Nov-95	9.74	68.17	0.00	1200	NA	47	0.8	1.4	2.4	
24-Feb-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	Inaccessible
OMW-10 (DUP)										
02-Nov-95	NA	NA	NA	1300	NA	50	0.8	1.5	2.5	

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OMW-11	**Top casing elevation (ft):**			**75.76**						
22-Nov-91	11.90	63.86	0.00	450	240	1.1	<0.5	<0.5	<0.5	
15-Feb-92c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
18-Mar-92c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
20-May-92c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
19-Aug-92	12.06	63.70	0.00	270b	<50	<0.5	<0.5	<0.5	<0.5	
18-Nov-92	12.01	63.75	0.00	400b	100	<0.5	<0.5	<0.5	<0.5	
11-Feb-93c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
20-May-93	11.90	63.86	0.00	200b	<0.5	<0.5	<0.5	<0.5	<0.5	
18-Aug-93	11.90	63.86	0.00	180b	<50	<0.5	<0.5	<0.5	<0.5	
17-Nov-93	11.94	63.82	0.00	150b	<50e	<0.5	3.6	<0.5	<0.5	
18-Feb-94c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
26-May-94c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
11-Nov-94	10.88	64.88	0.00	160	NA	<0.5	<0.5	<0.5	<0.5	
5-Mar-95	NA	NA	NA	220	100	0.7	<0.5	<0.5	<0.5	
7-May-95	11.49	64.27	0.00	160	<50	<0.5	<0.5	<0.5	<0.5	
24-Feb-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	Inaccessible

OMW-12	Top casing elevation (ft):			75.65						
2-Dec-91	10.31	65.34	0.00	<1000	<50	<0.5	<0.5	<0.5	<0.5	
18-Mar-92	8.93	66.72	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	
20-May-92	10.26	65.39	0.00	180b	NA	<0.5	<0.5	<0.5	<0.5	
19-Aug-92	10.53	65.12	0.00	230b	NA	<0.5	<0.5	<0.5	<0.5	
18-Nov-92	10.45	65.20	0.00	220b	NA	<0.5	<0.5	<0.5	<0.5	
11-Feb-93	8.90	66.75	0.00	240	NA	<0.5	<0.5	<0.5	<0.5	
19-May-93	10.60	65.05	0.00	110b	NA	<0.5	<0.5	<0.5	<0.5	
18-Aug-93	10.28	65.37	0.00	140b	NA	<0.5	<0.5	<0.5	<0.5	

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17-Nov-93	10.24	65.41	0.00	120b	NA	<0.5	<0.5	<0.5	<0.5	
18-Feb-94	8.97	66.68	0.00	180b	NA	1.7	2.1	0.9	4.8	
26-May-94	9.62	66.03	0.00	150	NA	<0.5	<0.5	<0.5	<0.5	
29-Aug-94	10.20	65.45	0.00	110	NA	<0.5	<0.5	<0.5	<0.5	
11-Nov-94	8.54	67.11	0.00	90	NA	<0.5	<0.5	<0.5	<0.5	
3-Feb-95	8.28	67.37	0.00	80	NA	<0.5	<0.5	<0.5	<0.5	
7-May-95	9.17	66.48	0.00	110	NA	<0.5	<0.5	<0.5	<0.5	
2-Aug-95	10.06	65.59	0.00	90	NA	<0.5	<0.5	<0.5	<0.5	
2-Nov-95	10.09	65.56	0.00	130	NA	<0.5	<0.5	<0.5	<0.5	
24-Feb-96	7.81	67.84	0.00	80	NA	<0.5	<0.5	<0.5	<0.5	
OMW-13	**Top casing elevation (ft):**			**76.36**						
22-Nov-91	11.96	64.40	0.00	900	1000	37	9.5	74	130	
18-Mar-92	10.84	65.52	0.00	900d	590a	24	28	320	320	
20-May-92c	NM	NA	NA	NA	NA	NA	NA	NA	NA	
19-Aug-92	12.12	64.24	0.00	7000	470a	180	36	150	150	
18-Nov-92c	12.00	64.36	0.00	NA	NA	NA	NA	NA	NA	
11-Feb-93c	NM	NA	NA	NA	NA	NA	NA	NA	NA	
20-May-93	12.26	64.10	0.00	9200	NA	320	83	490	950	
17-Nov-93	11.78	64.58	0.00	38000	3800	210	<130	1000	2500	
26-May-94c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
11-Nov-94c	10.28	66.08	0.00	NA	NA	NA	NA	NA	NA	
5-Mar-95	NA	NA	NA	9100	3900	200	9.7	200	130	
7-May-95c	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Aug-95	11.80	64.56	0.00	8000	2900	180	6.6	190	55	
24-Feb-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	Inaccessible

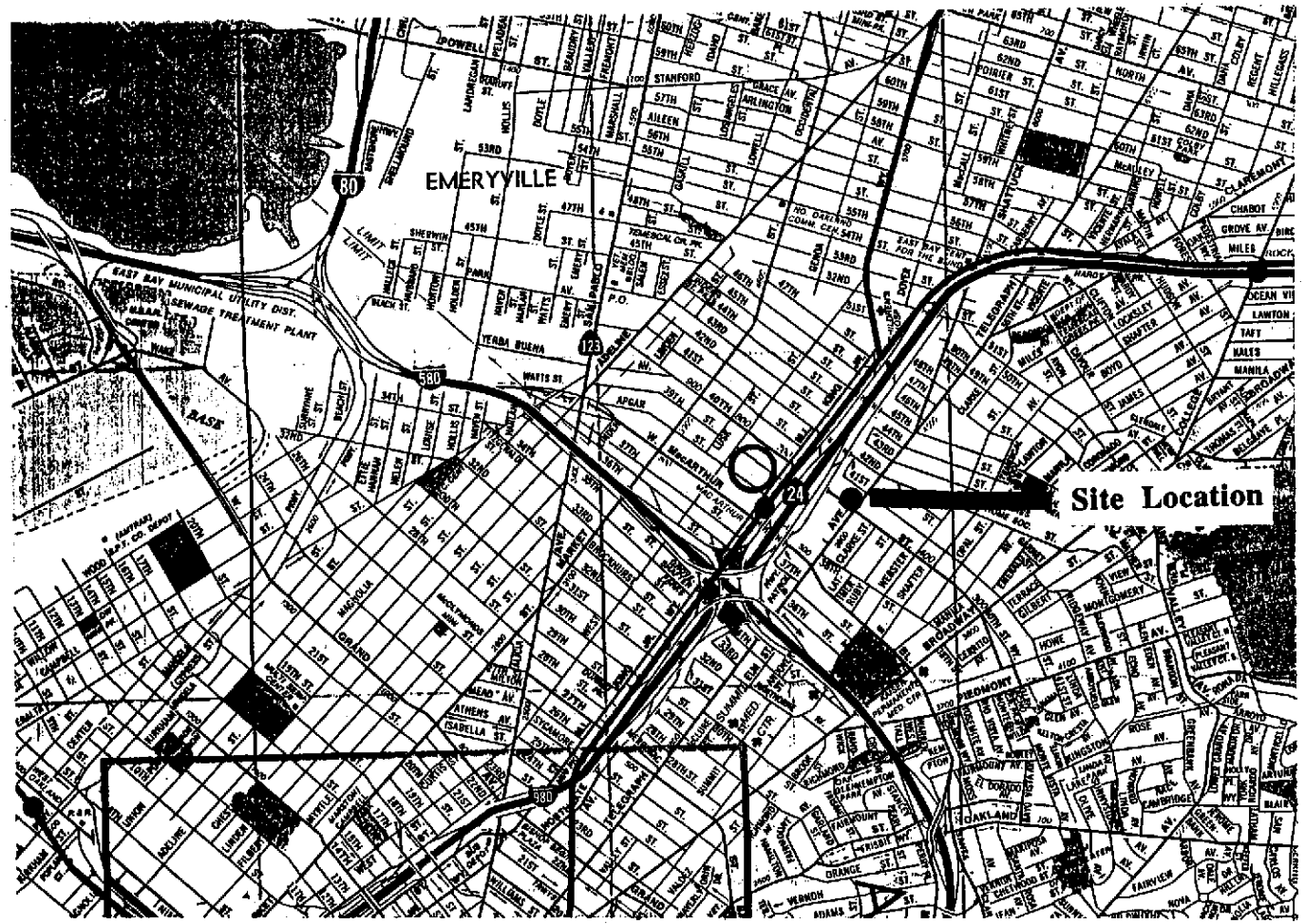
TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
500 40th Avenue
Oakland, California
WIC #204-5508-4903

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

Abbreviations:
TPPH = Total Purgeable Petroleum Hydrocarbons carbon range C6 to C12 by Modified EPA Method 8015
(previously reported as Total Petroleum Hydrocarbons as Gasoline)
TPH-D = Total petroleum hydrocarbons as diesel by Modified EPA Method 8015
<x = Not detected at detection limit of x
NA = Not analyzed or not available
(DUP) = Duplicate sample

Notes:
a = Concentration reported as diesel is primary due to the presence of a lighter petroleum product, possible gasoline or kerosene.
b = Concentration reported as gasoline is primarily due to the presence of discrete hydrocarbon peaks not indicative of gasoline.
c = Well was inaccessible.
d = Compounds detected and calculated as gasoline do not match the standard gasoline chromatographic pattern.
e = The concentrations reported as diesel are primarily due to the presence of a lighter petroleum product of hydrocarbon, range C6-C12, possibly gasoline.
Elevations referenced to Mean Sea Level
Depth to water measured from top of casing



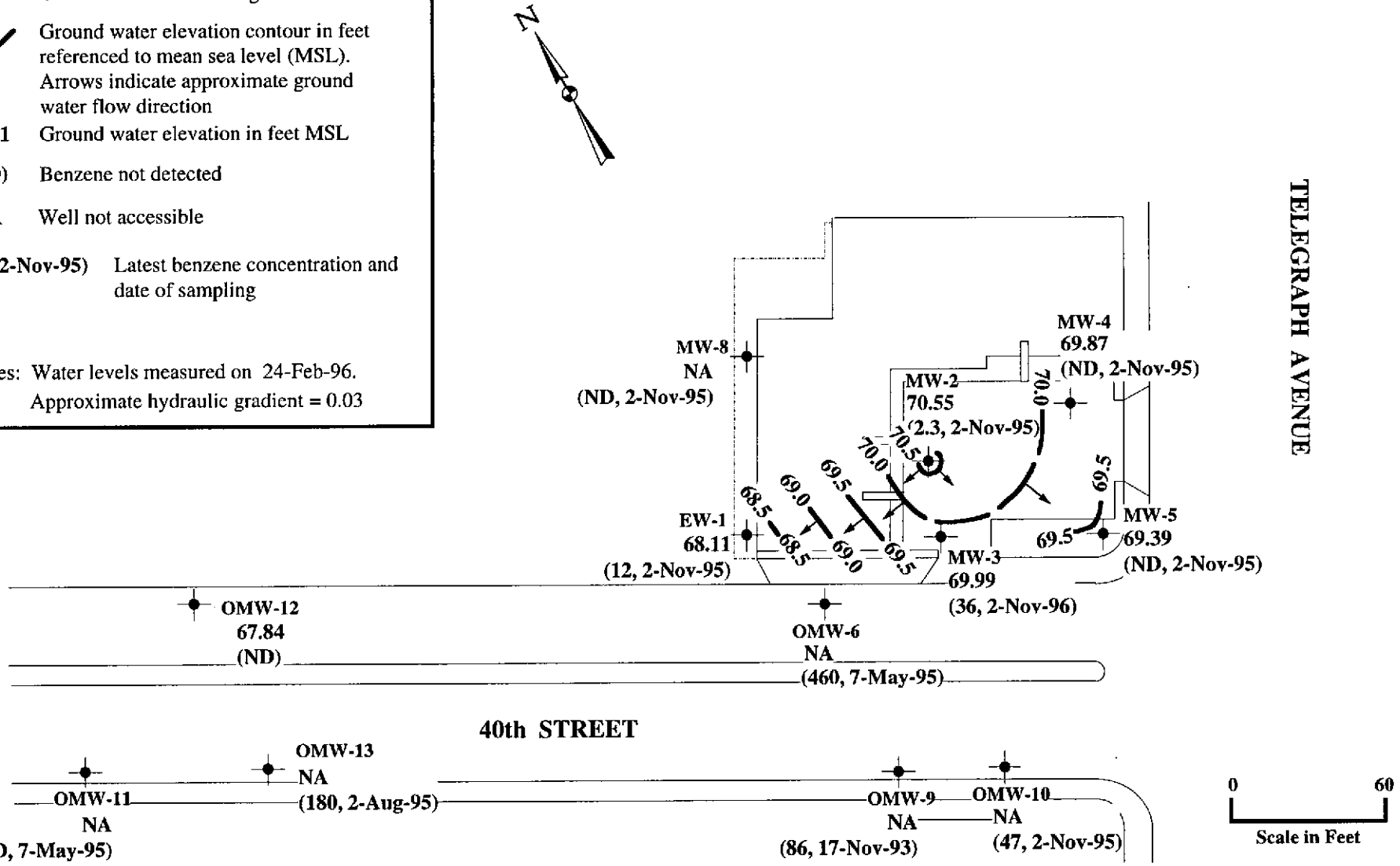
Note: Vicinity Map taken from California State AAA map.

PLATE	SITE VICINITY MAP	enviros®
1	Former Shell Service Station 500 40th Avenue Oakland, California	95289
Drawn By: JLP	Date: 5-15-95	Approved By: MSQ Date: 4-12-96

EXPLANATION

- Ground water Monitoring Well
- Ground water elevation contour in feet referenced to mean sea level (MSL). Arrows indicate approximate ground water flow direction
- **68.11** Ground water elevation in feet MSL
- **(ND)** Benzene not detected
- **NA** Well not accessible
- **(12, 2-Nov-95)** Latest benzene concentration and date of sampling

Notes: Water levels measured on 24-Feb-96.
Approximate hydraulic gradient = 0.03



Base map taken from Weiss Associates Site Map.

PLATE
2

GROUND WATER CONTOUR/BENZENE CONCENTRATION MAP
Former Shell Service Station
500 40th Avenue
Oakland, California

enviros ®
96289

Drawn By: MED Date: 9-Apr-96

Approved By: MED Date: 4-12-96

Appendix A

BLAINE TECH SERVICES INC.
Quarterly Ground Water Monitoring Report

BLAINE
TECH SERVICES INC.

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

March 8, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-5508-4903
500 40th/Telegraph
Oakland, California

1st Quarter 1996

Quarterly Groundwater Monitoring Report 960224-K-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: Diane Lundquist

(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)
EW-1	2/24/96	TOC	--	NONE	--	--	10.15	38.15
MW-2	2/24/96	TOC	--	NONE	--	--	10.25	19.43
MW-3	2/24/96	TOC	--	NONE	--	--	9.61	18.63
MW-4	2/24/96	TOC	--	NONE	--	--	11.13	14.86
MW-5	2/24/96	TOC	--	NONE	--	--	12.11	20.11
OMW-6	2/24/96	INACCESSIBLE						
MW-8	2/24/96	INACCESSIBLE						
OMW-9	2/24/96	INACCESSIBLE						
OMW-10	2/24/96	INACCESSIBLE						
OMW-11	2/24/96	INACCESSIBLE						
OMW-12	2/24/96	TOC	--	NONE	--	--	7.81	19.42
OMW-13	2/24/96	INACCESSIBLE						

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Jim Keller
Blaine Tech Services
985 Timothy Dr.
San Jose, CA 95133

Date: 02/28/1996
NET Client Acct. No: 1821
NET Job No: 96.00685
Received: 02/27/1996

Client Reference Information

Shell 500 40th Telegraph St., Oakland, CA/960224-K1

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. All positive results have been confirmed as required. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2305.

Submitted by:

Ginger Brinlee
Project Coordinator

Enclosure(s)

Ref: Shell 500 40th Telegraph St., Oakland, CA/960224-K1

SAMPLE DESCRIPTION: OMW12
NET SAMPLE NUMBER: 260989

DATE TAKEN: 02/24/1996
TIME TAKEN:

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						02/28/1996	3566
Purgeable TPH	80		50	ug/L	5030/M8015		02/28/1996	3566
Carbon Range: C6 to C12	--						02/28/1996	3566
8020 (GC, Liquid)	--						02/28/1996	3566
Benzene	ND		0.5	ug/L	8020		02/28/1996	3566
Toluene	ND		0.5	ug/L	8020		02/28/1996	3566
Ethylbenzene	ND		0.5	ug/L	8020		02/28/1996	3566
Xylenes (Total)	ND		0.5	ug/L	8020		02/28/1996	3566
SURROGATE RESULTS	--						02/28/1996	3566
Bromofluorobenzene (SURR)	88			% Rec.	8020		02/28/1996	3566

Ref: Shell 500 40th Telegraph St., Oakland, CA/960224-K1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
5030/8015-M/8020 (Shell)								
Purgeable TPH	88.0	0.44	0.50		mg/L	02/28/1996	lss	3566
Benzene	92.0	4.60	5.00		ug/L	02/28/1996	lss	3566
Toluene	89.0	4.45	5.00		ug/L	02/28/1996	lss	3566
Ethylbenzene	91.8	4.59	5.00		ug/L	02/28/1996	lss	3566
Xylenes (Total)	96.0	14.4	15.0		ug/L	02/28/1996	lss	3566
Bromofluorobenzene (SURR)	94.0	94	100		% Rec.	02/28/1996	lss	3566

Ref: Shell 500 40th Telegraph St., Oakland, CA/960224-K1

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
5030/8015-M/8020 (Shell)							
Purgeable TPH	ND	0.05		mg/L	02/28/1996	lss	3566
Benzene	ND	0.5		ug/L	02/28/1996	lss	3566
Toluene	ND	0.5		ug/L	02/28/1996	lss	3566
Ethylbenzene	ND	0.5		ug/L	02/28/1996	lss	3566
Xylenes (Total)	ND	0.5		ug/L	02/28/1996	lss	3566
Bromofluorobenzene (SURR)	89			% Rec.	02/28/1996	lss	3566

Ref: Shell 500 40th Telegraph St., Oakland, CA/960224-K1

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Flags	Units	Date Analyzed	Run Batch	Sample Spiked
5030/8015-M/8020 (Shell)												260949
Purgeable TPH	86.0	88.0	2.3	0.50	0.29	0.72	0.73		mg/L	02/28/1996	3566	260949
Benzene	82.8	84.5	2.0	7.57	11	17.27	17.40		ug/L	02/28/1996	3566	260949
Toluene	89.7	91.5	2.0	28.2	1.6	26.9	27.4		ug/L	02/28/1996	3566	260949
Bromofluorobenzene (SURR)	95.0	99.0	4.1	100	94	95	99		% Rec.	02/28/1996	3566	260949

0428

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 780224-101

Date: 2/24/96
Page 1 of 1

Site Address: 500 40th Street, Oakland TELEGRAPH

WIC#: 204-5508-4903

Shell Engineer: 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: KCB

Printed Name: Keith Brown

LAB: Net

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
OMW12	2/24			W		3						X								

Analysis Required

CHECK ONE (1) BOX ONLY	C1/D1	TURN AROUND TIME
Quarterly Monitoring	X 6441	24 hours ☐
Site Investigation	☐ 6441	48 hours ☐
Soil Classify/Disposal	☐ 6442	15 days ☒ (Normal)
Water Classify/Disposal	☐ 6443	Other ☐
Soil/Air Rem. or Sys. O & M	☐ 6452	
Water Rem. or Sys. O & M	☐ 6453	
Other	☐	

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

CUSTODY SEALED
Date 2/26/96 Time 1816 Initials GS
SEAL INTACT?
Yes ✓ No ____ Initials

	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:
Relinquished By (signature):	Keith Brown	2/26/96	1816	P. Smart	P. Smart	2/26/96	1600
Relinquished By (signature):	P. Smart			Received (signature):	Printed Name:	Date:	Time:
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:

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

NET *Santa Rosa Division* LOGIN CHECKLIST

CLIENT: Blaine Tech JOB #: _____ LOG #: 0428
Project ID: 960224-K1
Samples Received On : 2/26/96 Checked in on : 2/26/96

1) Custody Seals: ☐ N/A ☑ Present ☐ Absent ☐ Broken

2) Chain of Custody ☑ Present ☐ Absent #(s): _____
Forms: ☑ Complete ☐ Incomplete _____

3) Type of packing material used: Ice

4) Temperature(s) 1 °C Thermometer #(s) _____

5) Sample Container(s) ☑ Intact ☐ Broken _____

6) Container Label(s) ☑ Match COC ☐ Do Not Match _____

7) Sample Volume ☑ Sufficient ☐ Insufficient _____

8) Preservative(s) ☑ Correct ☐ Incorrect ☐ pH verified ☐ Res.Cl chk (CN & PHLs)

9) Headspace (VOAs) ☑ None ☐ Present (list ID's / number vials affected)

Sample ID	# of Vials	Sample ID	# of Vials

10) Form Completed By: [signature] Date: 2/27/96

Attach shipper's packing slip to this form before routing

Problem Resolution:

1) ☐ Project Coordinator Verbally Informed on _____

2) ☐ Client Informed on _____ By _____

Project Coordinator: _____ Date _____ Resolved: ☐ Y ☐ N

Comments: _____

qamisc\logn1rm

KEY TO RESULT FLAGS

*	: RPD between sample duplicates exceeds 30%.
*M	: RPD between sample duplicates or MS/MSD exceeds 20%.
+	: Correlation coefficient for the Method of Standard Additions is less than 0.995.
<	: Sample result is less than reported value.
B-I	: Value is between Method Detection Limit and Reporting Limit.
B-0	: Analyte found in blank and sample.
C	: The result confirmed by secondary column or GC/MS analysis.
CNA	: Cr+6 not analyzed; Total Chromium concentration below Cr+6 regulatory level.
COMP	: Sample composited by equal volume prior to analysis.
D-	: The result has an atypical pattern for Diesel analysis.
D1	: The result for Diesel is an unknown hydrocarbon which consists of a single peak.
DH	: The result appears to be a heavier hydrocarbon than Diesel.
DL	: The result appears to be a lighter hydrocarbon than Diesel.
DR	: Elevated Reporting Limit due to Matrix.
DS	: Surrogate diluted out of range.
DX	: The result for Diesel is an unknown hydrocarbon which consists of several peaks.
FA	: Compound quantitated at a 2X dilution factor.
FB	: Compound quantitated at a 5X dilution factor.
FC	: Compound quantitated at a 10X dilution factor.
FD	: Compound quantitated at a 20X dilution factor.
FE	: Compound quantitated at a 50X dilution factor.
FF	: Compound quantitated at a 100X dilution factor.
FG	: Compound quantitated at a 200X dilution factor.
FH	: Compound quantitated at a 500X dilution factor.
FI	: Compound quantitated at a 1000X dilution factor.
FJ	: Compound quantitated at a greater than 1000x dilution factor.
FK	: Compound quantitated at a 25X dilution factor.
FL	: Compound quantitated at a 250X dilution factor.
G-	: The result has an atypical pattern for Gasoline.
G1	: The result for Gasoline is an unknown hydrocarbon which consists of a single peak.
GH	: The result appears to be a heavier hydrocarbon than Gasoline.
GL	: The result appears to be a lighter hydrocarbon than Gasoline.
GX	: The result for Gasoline is an unknown hydrocarbon which consists of several peaks.
HX	: Peaks detected within the quantitation range do not match standard used.
J	: Value is estimated.
MI	: Matrix Interference Suspected.
MSA	: Value determined by Method of Standard Additions.
MSA*	: Value obtained by Method of Standard Additions; Correlation coefficient is <0.995.
NI1	: Sample spikes outside of QC limits; matrix interference suspected.
NI2	: Sample concentration is greater than 4X the spiked value; the spiked value is considered insignificant.
NI3	: Matrix Spike values exceed established QC limits, post digestion spike is in control.
P7	: pH of sample > 2; sample analyzed past 7 days.
RSC	: Refer to subcontract laboratory report for QC data.
S2	: Matrix interference confirmed by repeat analysis.
SCN	: Thiocyanate not analyzed separately; total value is below the Reporting Limit for Free Cyanide.
UMDL	: Undetected at the Method Detection Limit.

KEY TO ABBREVIATIONS

ICVS	: Initial Calibration Verification Standard (External Standard).
mean	: Average; sum of measurements divided by number of measurements.
mg/Kg	: Concentration in units of milligrams of analyte per kilogram of sample.
mg/L	: Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	: Milliliters per liter per hour.
MPN/100 mL	: Most probable number of bacteria per one hundred milliliters of sample.
N/A	: Not applicable.
NA	: Not analyzed.
ND	: Not detected.
NTU	: Nephelometric turbidity units.
RPD	: Relative percent difference.
SNA	: Standard not available.
ug/Kg	: Concentration in units of micrograms of analyte per kilogram of sample.
ug/L	: Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	: Micromhos per centimeter.