BP OIL

BP Oil Company
Environmental Remediation Management
295 SW 41st Street
Renton, Washington 98055-4931
(425) 251-0667
Fax No: (425) 251-0736

April 9, 1998

AW-4 showing high hits - have extraction system been turned off?

Alameda County Health Care Services Agency
Attention Ms. Eva Chu
1131 Harbor Bay Parkway, Room 250
Alameda, CA 94502-6577

RE: Former BP Oil Site No. 11133
2220 98th Avenue (at Bancroft)
Oakland, CA

Dear Ms. Chu:

This letter transmits the groundwater monitoring and sampling report dated 18 February 1998 prepared on behalf of BP by Alisto Engineering Group.

A petroleum release was documented during the replacement of underground storage tanks by Mobil Oil Corporation during 1987. BP purchased the site from Mobil in 1989, and Mobil later transferred management of the cleanup to BP. BP subsequently sold the site to the current operator (Tosco Corporation) during 1994. To comply with 1998 requirements for leak detection and prevention, the current tanks are understood to require spill buckets around the fill ports, and containment pans beneath the dispensers. The current tanks are believed to be constructed of double-wall fiberglass.

The 18 February 1998 groundwater monitoring and sampling report includes laboratory data for samples collected on 21 January 1998. You will note that aromatic petroleum hydrocarbons were detected in samples obtained from wells MW-1, AW-1, AW-2, AW-3, AW-4, AW-5, and RW-1. The highest benzene concentration this quarter (21,000 µg/l) was detected in a sample obtained from well RW-1.

MTBE concentration data is now shown in Figure 3, replacing the dissolved oxygen measurements shown in past reports. Estimated MTBE concentrations for samples analyzed during 1993 and 1994 are also shown on Table 1 - Summary of Results of Groundwater Sampling. I have no other information regarding the suspected or confirmed presence of MTBE in groundwater other than the data summarized in this report. The results associated with samples obtained on 21 January 1998 show that MTBE has been detected in samples obtained from MW-1, MW-2, MW-3, AW-1, AW-2, AW-3, AW-4, AW-5, AW-6, and RW-1.

Plans for the coming quarter include groundwater monitoring and evaluating the efficacy of the remediation system.

Please give me a call at (425) 251-0689 if you have any questions or comments regarding this submittal.

Sincerely,

Scott Hooton
Environmental Remediation Management

attachment

cc: site file
Brady Nagle - Alisto
T. Berry - Tosco (w/attachment)

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11133
2220 98th Avenue
Oakland, California

Project No. 10-025-17-002

Prepared for:

BP Oil Company
Environmental Resources Management
295 S.W. 41st Street
Building 13, Suite N
Renton, Washington

Prepared by:

Alisto Engineering Group
1575 Treat Boulevard, Suite 201
Walnut Creek, California

February 18, 1998

Brady Nagle
Project Manager

Al Sevilla, P.E.
Principal

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11133
2220 98th Avenue
Oakland, California

Project No. 10-025-17-002

February 18, 1998

INTRODUCTION

This report presents the results and findings of the January 21, 1998 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11133, 2220 98th Avenue, Oakland, California. A site vicinity map is shown on Figure 1.

FIELD PROCEDURES

Field activities were performed in accordance with the procedures and guidelines of the Alameda County Health Care Services Agency and the California Regional Water Quality Control Board, San Francisco Bay Region.

Before purging and sampling, the groundwater level in each well was measured from a permanent mark on top of the casing to the nearest 0.01 foot using an electronic sounder. The depth to groundwater and top of casing elevation data were used to calculate the groundwater elevation in each well in reference to mean sea level. The survey data and groundwater elevation measurements collected to date are presented in Table 1.

Before sample collection, each well was purged of 3 casing volumes while recording field readings of pH, temperature, electrical conductivity, and dissolved oxygen. Groundwater samples were collected for laboratory analysis by lowering a bottom-fill, disposable bailer to just below the water level in the well. The samples were transferred from the bailer into laboratory-supplied containers. The water sampling field survey forms are presented in Appendix A.

FREE PRODUCT MONITORING AND RECOVERY

A product recovery canister has been installed in Monitoring Well MW-1 to recover liquid-phase product. Product thicknesses for this and previous monitoring events are presented in Table 1. The volume of product recovered is presented in Table 2.

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples for this and previous quarters are summarized in Table 1. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown on Figure 2. The results of groundwater analysis are shown on Figure 3. The laboratory report and chain of custody record are presented in Appendix B.

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11133
2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-1	04/05/91	34.46	---	---	---	---	---	---	---	---	---	---	---
MW-1	04/01/92	34.46	11.25	0.01	23.22	---	---	---	---	---	---	---	---
MW-1	07/06/92	34.46	13.61	0.02	20.87	---	---	---	---	---	---	---	---
MW-1	10/07/92	34.46	15.15	0.09	19.38	---	---	---	---	---	---	---	---
MW-1	01/14/93	34.46	10.73	0.01	23.74	---	---	---	---	---	---	---	---
MW-1	04/22/93	34.46	11.64	0.16	22.94	---	---	---	---	---	---	---	---
MW-1	07/15/93	34.46	13.50	1.11	21.79	---	---	---	---	---	---	---	---
MW-1	10/21/93	34.46	15.21	1.00	20.00	---	---	---	---	---	---	---	---
MW-1	01/27/94	34.46	17.46	0.81	17.59	---	---	---	---	---	---	---	---
MW-1	04/21/94	34.46	10.94	---	23.52	110000	1400	9100	3400	30000	11000 (c)	1.6	PACE
MW-1	09/09/94	34.46	13.80	---	20.66	---	---	---	---	---	---	---	---
MW-1	12/21/94	34.46	12.60	0.02	21.88	---	---	---	---	---	---	---	---
MW-1	01/30/95	34.46	---	---	---	---	---	---	---	---	---	---	---
MW-1	04/10/95	34.46	10.62	---	23.84	---	---	---	---	---	---	---	---
MW-1	06/29/95	34.46	18.72	---	15.74	---	---	---	---	---	---	---	---
MW-1	09/18/95	34.46	12.92	---	21.54	---	---	---	---	---	---	---	---
MW-1	12/07/95	34.46	13.82	---	20.64	---	---	---	---	---	---	---	---
MW-1	03/28/96	34.46	10.03	0.01	24.44	---	---	---	---	---	---	---	---
MW-1	06/20/96	34.46	11.29	0.02	23.19	---	---	---	---	---	---	---	---
MW-1	10/11/96	34.46	14.86	0.01	19.61	---	---	---	---	---	---	---	---
MW-1	01/02/97	34.46	11.03	0.01	23.44	---	---	---	---	---	---	---	---
MW-1	04/14/97	34.46	12.25	0.01	22.22	---	---	---	---	---	---	---	---
MW-1	04/15/97	34.46	---	---	---	35000	130	650	1700	8200	4800	---	SPL
MW-1	07/02/97	34.46	14.11	---	20.35	42000	ND<250	ND<500	2000	9600	ND<5000	5.5	SPL
MW-1	09/30/97	34.46	14.40	---	20.06	61000	130	1100	2700	14600	2000	6.7	SPL
MW-1	01/21/98	34.46	7.99	0.01	26.48	14000	11	60	310	1790	1300	4.5	SPL
MW-2	04/05/91	35.50	16.62	---	18.88	ND<50	0.6	0.9	ND<0.3	ND<0.3	---	---	SUP
MW-2	04/01/92	35.50	11.25	---	24.25	---	---	---	---	---	---	---	---
MW-2	04/02/92	35.50	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	APP
MW-2	07/06/92	35.50	12.72	---	22.78	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-2	10/07/92	35.50	15.08	---	20.42	ND<50	ND<0.5	1.8	ND<0.5	2.3	---	---	ANA
MW-2	01/14/93	35.50	9.69	---	25.81	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	04/22/93	35.50	10.46	---	25.04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	30 (c)	---	PACE
MW-2	07/15/93	35.50	12.02	---	23.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	22 (c)	---	PACE
MW-2	10/21/93	35.50	13.12	---	22.38	ND<50	0.7	0.9	ND<0.5	0.9	---	---	PACE
MW-2	01/27/94	35.50	12.01	---	23.49	ND<50	0.6	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	04/21/94	35.50	10.60	---	24.90	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	1.1	PACE
MW-2	09/09/94	35.50	12.42	---	23.08	ND<50	ND<0.5	ND<0.5	ND<0.5	0.6	---	2.2	PACE
MW-2	12/21/94	35.50	10.85	---	24.65	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	1.2	PACE
MW-2	01/30/95	35.50	8.38	---	27.12	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	1.7	ATI
MW-2	04/10/95	35.50	9.00	---	26.50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	7.8	ATI
MW-2	06/29/95	35.50	9.91	---	25.59	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	9.1	ATI
MW-2	09/18/95	35.50	10.98	---	24.52	---	---	---	---	---	---	---	---
MW-2	09/19/95	35.50	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.2	ATI
MW-2	12/07/95	35.50	12.30	---	23.20	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	2.4	ATI
MW-2	03/28/96	35.50	8.57	---	26.93	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	3.2	SPL
MW-2	06/20/96	35.50	9.77	---	25.73	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.2	SPL
MW-2	10/11/96	35.50	13.32	---	22.18	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.3	SPL
MW-2	01/02/97	35.50	9.60	---	25.90	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.7	SPL
MW-2	04/14/97	35.50	10.93	---	24.57	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.7	SPL
MW-2	07/02/97	35.50	12.57	---	22.93	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.9	SPL
MW-2	09/30/97	35.50	12.91	---	22.59	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.3	SPL
MW-2	01/21/98	35.50	10.12	---	25.38	160	ND<0.5	ND<1.0	ND<1.0	ND<1.0	100	5.4	SPL

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2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-3	04/05/91	36.53	17.84	---	18.69	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	SUP
MW-3	04/01/92	36.53	15.64	---	20.89	---	---	---	---	---	---	---	---
MW-3	04/02/92	36.53	---	---	---	ND<50	1.4	ND<0.5	ND<0.5	ND<0.5	---	---	APP
MW-3	07/06/92	36.53	19.03	---	17.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-3	10/07/92	36.53	21.83	---	14.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-3	01/14/93	36.53	15.96	---	20.57	350	ND<0.5	ND<0.5	ND<0.5	ND<0.5	714 (c)	---	PACE
MW-3	04/22/93	36.53	16.20	---	20.33	2800	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3600 (c)	---	PACE
MW-3	07/15/93	36.53	16.82	---	19.71	1400	1.2	ND<0.5	2.0	3.5	2200 (c)	---	PACE
MW-3	10/21/93	36.53	18.84	---	17.69	370	2.1	2.3	2.3	6.0	850 (c)	---	PACE
MW-3	01/27/94	36.53	18.00	---	18.53	1300	6.3	ND<0.5	ND<0.5	ND<0.5	4000 (c)	---	PACE
MW-3	04/21/94	36.53	16.62	---	19.91	2000	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4300 (c)	1.4	PACE
MW-3	09/09/94	36.53	18.38	---	18.15	1300	ND<0.5	ND<0.5	0.5	1.2	---	3.0	PACE
MW-3	12/21/94	36.53	15.28	---	21.25	420	16	0.7	3.5	5.9	---	1.9	PACE
MW-3	01/30/95	36.53	12.62	---	23.91	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	2.5	ATI
MW-3	04/10/95	36.53	12.41	---	24.12	150	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.9	ATI
MW-3	06/29/95	36.53	14.95	---	21.58	100 (d)	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.4	ATI
MW-3	09/18/95	36.53	15.82	---	20.71	---	---	---	---	---	---	---	---
MW-3	09/19/95	36.53	---	---	---	82	ND<0.50	ND<0.50	ND<0.50	ND<1.0	260	7.0	ATI
MW-3	12/07/95	36.53	17.09	---	19.44	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	91	4.5	ATI
MW-3	03/28/96	36.53	11.90	---	24.63	ND<50	ND<0.5	ND<1	ND<1	ND<1	230	4.2	SPL
MW-3	06/20/96	36.53	12.66	---	23.87	260	ND<0.5	ND<1	ND<1	ND<1	370	4.4	SPL
MW-3	10/11/96	36.53	16.23	---	20.30	330	ND<0.5	ND<1.0	ND<1.0	ND<1.0	440	5.8	SPL
MW-3	01/02/97	36.53	12.17	---	24.36	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	140	6.0	SPL
MW-3	04/14/97	36.53	13.45	---	23.08	---	---	---	---	---	---	---	---
MW-3	04/15/97	36.53	---	---	---	1500	ND<0.5	ND<1.0	ND<1.0	ND<1.0	1800	5.6	SPL
MW-3	07/02/97	36.53	15.60	---	20.93	880	ND<0.5	ND<1.0	ND<1.0	ND<1.0	940	5.3	SPL
MW-3	09/30/97	36.53	17.16	---	19.37	40000	13000	2400	870	3100	510	6.6	SPL
MW-3	01/21/98	36.53	11.77	---	24.76	120	ND<0.5	ND<1.0	ND<1.0	ND<1.0	98	4.7	SPL
AW-1	04/05/91	38.11	25.44	---	12.67	4100	1500	69	100	83	---	---	SUP
AW-1	04/01/92	38.11	23.22	---	14.89	---	---	---	---	---	---	---	---
AW-1	04/02/92	38.11	---	---	---	11000	1800	210	210	490	---	---	APP
AW-1	07/06/92	38.11	24.89	---	13.22	6500	4000	40	290	530	---	---	ANA
AW-1	10/07/92	38.11	26.55	---	11.56	4700	1500	41	47	300	---	---	ANA
QC-1 (e)	10/07/92	---	---	---	---	2900	1200	25	37	210	---	---	ANA
AW-1	01/14/93	38.11	23.73	---	14.38	2800	830	31	140	240	---	---	PACE
QC-1 (e)	01/14/93	---	---	---	---	4100	1700	28	130	230	---	---	PACE
AW-1	04/22/93	38.11		---	38.11	39000	14000	530	1800	6100	987 (c)	---	PACE
AW-1	07/15/93	38.11	22.50	---	15.61	6200	2200	28	210	540	840 (c)	---	PACE
AW-1	10/21/93	38.11	24.32	---	13.79	2400	820	13	55	120	830 (c)	---	PACE
AW-1	01/27/94	38.11	23.72	---	14.39	3500	1400	26	130	220	650 (c)	---	PACE
AW-1	04/21/94	38.11	22.48	---	15.63	40000	12000	1900	1600	5000	---	1.4	PACE
AW-1	09/09/94	38.11	23.04	---	15.07	3500	1600	5.0	200	250	---	2.1	PACE
QC-1 (e)	09/09/94	---	---	---	---	3900	1900	5.5	190	240	---	---	PACE
AW-1	12/21/94	38.11	21.70	---	16.41	7600	3100	36	370	320	---	1.6	PACE
AW-1	01/30/95	38.11	17.71	---	20.4	35000	23000	650	3200	4100	---	1.7	ATI
AW-1	04/10/95	38.11	20.04	---	18.07	60000	18000	2000	4300	11000	---	7.9	ATI
QC-1 (e)	04/10/95	---	---	---	---	56000	17000	2000	3900	10000	---	---	ATI
AW-1	06/29/95	38.11	20.60	---	17.51	72000	10000	7300	4200	15000	---	6.2	ATI
QC-1 (e)	06/29/95	---	---	---	---	86000	12000	8400	4800	18000	---	---	ATI
AW-1	09/18/95	38.11	21.87	---	16.24	---	---	---	---	---	---	---	---
AW-1	09/19/95	38.11	---	---	---	65000	12000	3100	4400	14000	1000	8.5	ATI
AW-1	12/07/95	38.11	22.06	---	16.05	25000	8700	ND<50	2500	1300	1100	2.9	ATI
AW-1	03/28/96	38.11	16.91	---	21.20	24000	11000	ND<100	3200	3390	ND<1000	6.6	SPL
AW-1	06/20/96	38.11	20.82	---	17.29	38000	6900	1100	3200	7300	ND<100	6.4	SPL
AW-1	10/11/96	38.11	23.20	---	14.91	33000	8500	69	3300	4230	560	6.3	SPL
AW-1	01/02/97	38.11	20.41	---	17.70	32000	8000	ND<50	3100	2300	700	6.7	SPL
AW-1	04/14/97	38.11	21.61	---	16.50	---	---	---	---	---	---	---	---
AW-1	04/15/97	38.11	---	---	---	31000	5000	160	2400	4540	340	5.4	SPL
AW-1	07/02/97	38.11	21.17	---	16.94	26000	5800	ND<100	2600	2200	ND<1000	6.2	SPL
AW-1	09/30/97	38.11	21.48	---	16.63	29000	9200	17	1400	130	560	6.9	SPL
AW-1	01/21/98	38.11	20.02	---	18.09	50000	6900	450	3200	4450	720	5.8	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11133
2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
AW-2	04/05/91	36.83	22.36	---	14.47	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	SUP
AW-2	04/01/92	36.83	20.81	---	16.02	---	---	---	---	---	---	---	---
AW-2	04/02/92	36.83	---	---	---	130	25	2.3	0.7	2.1	---	---	APP
AW-2	07/06/92	36.83	23.57	---	13.26	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
AW-2	10/07/92	36.83	25.24	---	11.59	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
AW-2	01/14/93	36.83	20.82	---	16.01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-2	04/22/93	36.83	19.37	---	17.46	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-2	07/15/93	36.83	21.29	---	15.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-2	10/21/93	36.83	23.14	---	13.69	ND<50	1.3	1.1	0.9	2.1	---	---	PACE
AW-2	01/27/94	36.83	22.34	---	14.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-2	04/21/94	36.83	21.15	---	15.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	2.0	PACE
AW-2	09/09/94	36.83	22.09	---	14.74	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.1	PACE
AW-2	12/21/94	36.83	20.12	---	16.71	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	2.0	PACE
AW-2	01/30/95	36.83	16.65	---	20.18	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	2.5	ATI
AW-2	04/10/95	36.83	16.22	---	20.61	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.4	ATI
AW-2	06/29/95	36.83	17.55	---	19.28	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	7.8	ATI
AW-2	09/18/95	36.83	19.87	---	16.96	---	---	---	---	---	---	---	---
AW-2	09/19/95	36.83	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	4.5	ATI
QC-1 (e)	09/19/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
AW-2	12/07/95	36.83	21.31	---	15.52	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	4.9	ATI
AW-2	03/28/96	36.83	15.61	---	21.22	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.1	SPL
AW-2	06/20/96	36.83	16.30	---	20.53	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	5.2	SPL
AW-2	10/11/96	36.83	19.60	---	17.23	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.0	SPL
AW-2	01/02/97	36.83	15.97	---	20.86	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.1	SPL
AW-2	04/14/97	36.83	17.19	---	19.64	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.3	SPL
AW-2	07/02/97	36.83	18.11	---	18.72	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.7	SPL
AW-2	09/30/97	36.83	18.52	---	18.31	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	860	5.4	SPL
AW-2	01/21/98	36.83	14.46	---	22.37	160	13	ND<1.0	ND<1.0	ND<1.0	110	4.9	SPL
AW-3	04/05/91	39.13	23.90	---	15.23	5200	980	450	95	310	---	---	SUP
AW-3	04/01/92	39.13	22.50	---	16.63	4700	890	47	43	110	---	---	APP
AW-3	07/06/92	39.13	23.26	---	15.87	3900	3100	30	80	99	---	---	ANA
AW-3	10/07/92	39.13	24.75	---	14.38	5000	2600	ND<0.5	ND<0.5	59	---	---	ANA
AW-3	01/14/93	39.13	23.59	---	15.54	350	250	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-3	04/22/93	39.13	19.42	---	19.71	240	71	2.4	0.6	4.0	---	---	PACE
AW-3	07/15/93	39.13	20.09	---	19.04	650	71	2.8	1.5	1.1	38 (c)	---	PACE
AW-3	10/21/93	39.13	21.88	---	17.25	160	4.8	1.7	1.6	3.6	---	---	PACE
QC-1 (e)	10/21/93	---	---	---	---	170	6.1	2.0	1.7	4.4	---	---	PACE
AW-3	01/27/94	39.13	22.33	---	16.80	92	2.1	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-1 (e)	01/27/94	---	---	---	---	90	2.9	0.5	ND<0.5	ND<0.5	---	---	PACE
AW-3	04/21/94	39.13	20.96	---	18.17	150	3.6	0.8	0.9	2.5	---	1.3	PACE
AW-3	09/09/94	39.13	21.60	---	17.53	53	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	1.9	PACE
AW-3 (f)	12/21/94	39.13	---	---	---	---	---	---	---	---	---	---	---
AW-3 (f)	01/30/95	39.13	---	---	---	---	---	---	---	---	---	---	---
AW-3 (f)	04/10/95	39.13	---	---	---	---	---	---	---	---	---	---	---
AW-3	06/29/95	39.13	15.41	---	23.72	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	8.0	ATI
AW-3	09/18/95	39.13	17.83	---	21.30	---	---	---	---	---	---	---	---
AW-3	09/19/95	39.13	---	---	---	61000	11000	2900	4100	13000	790	7.4	ATI
AW-3	12/07/95	39.13	19.27	---	19.86	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	3.4	ATI
QC-1 (e)	12/07/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
AW-3	03/28/96	39.13	13.85	---	25.28	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.1	SPL
QC-1 (e)	03/28/96	---	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL
AW-3	06/20/96	39.13	14.47	---	24.66	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.2	SPL
QC-1 (e)	06/20/96	---	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL
AW-3	10/11/96	39.13	17.97	---	21.16	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.7	SPL
QC-1 (e)	10/11/96	---	---	---	---	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	SPL
AW-3	01/02/97	39.13	13.00	---	26.13	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.6	SPL
AW-3	04/14/97	39.13	14.36	---	24.77	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
QC-1 (e)	04/15/97	---	---	---	---	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	SPL
AW-3	07/02/97	39.13	15.87	---	23.26	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.4	SPL
AW-3	09/30/97	39.13	17.50	---	21.63	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	810	5.7	SPL
AW-3	01/21/98	39.13	11.98	---	27.15	140	ND<0.5	ND<1.0	ND<1.0	ND<1.0	99	4.6	SPL
QC-1 (e)	01/21/98	---	---	---	---	150	ND<0.5	ND<1.0	ND<1.0	1.2	110	---	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11133
2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
AW-4	04/05/91	39.08	25.12	---	13.96	110000	40000	13000	2000	5500	---	---	SUP
AW-4	04/01/92	39.08	23.56	---	15.52	230000	57000	31000	2900	7600	---	---	APP
QC-1 (e)	04/01/92	---	---	---	---	210000	55000	23000	2900	7000	---	---	APP
AW-4	07/06/92	39.08	25.87	---	13.21	38000	16000	5400	2000	6100	---	---	ANA
AW-4	10/07/92	39.08	27.53	---	11.55	120000	41000	26000	4700	13000	---	---	ANA
AW-4	01/14/93	39.08	24.12	---	14.96	62000	18000	14000	2700	7700	1400 (c)	---	PACE
AW-4	04/22/93	39.08	21.47	---	17.61	18000	1100	2100	320	3500	---	---	PACE
AW-4	07/15/93	39.08	23.30	---	15.78	21000	820	2300	590	3800	2000 (c)	---	PACE
AW-4	10/21/93	39.08	25.08	---	14.00	11000	570	83	630	2300	4600 (c)	---	PACE
AW-4	01/27/94	39.08	24.61	---	14.47	12000	420	460	600	2200	6400 (c)	---	PACE
AW-4	04/21/94	39.08	22.96	---	16.12	12000	110	250	150	1900	16 (c)	1.5	PACE
QC-1 (e)	04/21/94	---	---	---	---	14000	71	160	29	1200	13000 (c)	---	PACE
AW-4	09/09/94	39.08	23.85	---	15.23	9700	75	64	280	2000	---	2.1	PACE
AW-4 (f)	12/21/94	39.08	---	---	---	---	---	---	---	---	---	---	---
AW-4 (f)	01/30/95	39.08	---	---	---	---	---	---	---	---	---	---	---
AW-4	04/10/95	39.08	18.07	---	21.01	3700	69	8.7	44	130	---	8.5	ATI
AW-4	06/29/95	39.08	19.25	---	19.83	8000	62	190	190	1100	---	7.5	ATI
AW-4	09/18/95	39.08	20.73	---	18.35	---	---	---	---	---	---	---	---
AW-4	09/19/95	39.08	---	---	---	12000	660	1600	200	1900	7100	8.3	ATI
AW-4	12/07/95	39.08	22.49	---	16.59	41000	8400	7200	710	6300	5200	3.6	ATI
AW-4 (f)	03/28/96	39.08	16.49	---	22.59	---	---	---	---	---	---	---	---
AW-4	06/20/96	39.08	16.00	---	23.08	ND<50	ND<0.5	ND<1	ND<1	ND<1	12	---	SPL
AW-4	10/11/96	39.08	19.52	---	19.56	36000	12000	5500	ND<25	3800	880/1000 (g)	6.2	SPL
AW-4	01/02/97	39.08	15.80	---	23.28	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	22	6.4	SPL
QC-1 (e)	01/02/97	---	---	---	---	ND<50	61	3.8	3.5	8.1	110	---	SPL
AW-4	04/14/97	39.08	17.01	---	22.07	---	---	---	---	---	---	---	---
AW-4	04/15/97	39.08	---	---	---	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.4	SPL
AW-4	07/02/97	39.08	19.68	---	19.40	ND<50	21	ND<1.0	ND<1.0	ND<1.0	41	4.1	SPL
AW-4 (f)	09/30/97	39.08	22.71	---	16.37	---	---	---	---	---	---	---	---
AW-4	01/21/98	39.08	15.89	---	23.19	13000	2900	ND<10	230	314	3100	3.9	SPL
AW-5	04/05/91	38.51	25.48	---	13.03	420	31	7.5	20	68	---	---	SUP
AW-5	04/01/92	38.51	23.95	---	14.56	---	---	---	---	---	---	---	---
AW-5	04/02/92	38.51	---	---	---	4000	270	63	190	290	---	---	APP
AW-5	07/06/92	38.51	26.48	---	12.03	1400	160	ND<2.5	250	58	---	---	ANA
AW-5	10/07/92	38.51	28.18	---	10.33	360	12	0.6	8.7	5	---	---	ANA
AW-5	01/14/93	38.51	24.15	---	14.36	1700	270	7.5	130	62	---	---	PACE
AW-5	04/22/93	38.51	22.43	---	16.08	2700	780	30	220	160	---	---	PACE
QC-1 (e)	04/22/93	---	---	---	---	3500	780	29	240	210	---	---	PACE
AW-5	07/15/93	38.51	24.31	---	14.20	1300	69	16	67	120	---	---	PACE
QC-1 (e)	07/15/93	---	---	---	---	1300	68	8.3	64	99	---	---	PACE
AW-5	10/21/93	38.51	26.05	---	12.46	510	9.6	1.5	17	45	75 (c)	---	PACE
AW-5	01/27/94	38.51	26.42	---	12.09	420	3.3	ND<0.5	1.0	0.9	---	---	PACE
AW-5	04/21/94	38.51	24.36	---	14.15	1000	110	25	56	27	75 (c)	1.3	PACE
AW-5	09/09/94	38.51	24.55	---	13.96	210	ND<0.5	ND<0.5	0.5	0.9	---	2.7	PACE
AW-5	12/21/94	38.51	22.30	---	16.21	410	ND<0.5	20	4.3	1.4	---	1.1	PACE
QC-1 (e)	12/21/94	---	---	---	---	340	ND<0.5	15	3.3	1.4	---	---	PACE
AW-5	01/30/95	38.51	18.88	---	19.63	210	0.6	11	8.8	2	---	1.5	ATI
AW-5	04/10/95	38.51	18.44	---	20.07	500	1.4	0.59	6.5	4.3	---	8.3	ATI
AW-5	06/29/95	38.51	19.92	---	18.59	490 (d)	1.2	0.58	7.3	2.2	---	6.9	ATI
AW-5	09/18/95	38.51	22.15	---	16.36	---	---	---	---	---	---	---	---
AW-5	09/19/95	38.51	---	---	---	260	0.62	ND<0.50	3.1	1.1	110	8.2	ATI
AW-5	12/07/95	38.51	23.75	---	14.76	60	ND<0.50	ND<0.50	ND<0.50	ND<1.0	210	4.3	ATI
AW-5	03/28/96	38.51	17.76	---	20.75	ND<50	ND<0.5	ND<1	ND<1	ND<1	63	3.0	SPL
AW-5	06/20/96	38.51	18.46	---	20.05	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	3.6	SPL
AW-5	10/11/96	38.51	21.84	---	16.67	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.5	SPL
AW-5	01/02/97	38.51	18.01	---	20.50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.6	SPL
AW-5	04/14/97	38.51	19.35	---	19.16	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.1	SPL
AW-5	07/02/97	38.51	20.29	---	18.22	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.0	SPL
AW-5	09/30/97	38.51	23.15	---	15.36	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	1300	6.3	SPL
AW-5	01/21/98	38.51	17.33	---	21.18	6100	ND<0.5	2.1	ND<1.0	ND<1.0	3700	4.5	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11133
2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
AW-6	04/05/91	37.08	22.48	---	14.60	1100	80	19	1.4	230	---	---	SUP
AW-6	04/01/92	37.08	22.50	---	14.58	---	---	---	---	---	---	---	---
AW-6	04/02/92	37.08	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	APP
AW-6	07/06/92	37.08	22.74	---	14.34	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
AW-6	10/07/92	37.08	24.64	---	12.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
AW-6	01/14/93	37.08	22.36	---	14.72	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-6	04/22/93	37.08	22.82	---	14.26	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-6	07/15/93	37.08	20.49	---	16.59	ND<50	ND<0.5	ND<0.5	ND<0.5	0.8	---	---	PACE
AW-6	10/21/93	37.08	22.84	---	14.24	ND<50	0.5	0.6	ND<0.5	0.7	---	---	PACE
AW-6	01/27/94	37.08	22.33	---	14.75	ND<50	ND<0.5	0.9	3.1	12	---	---	PACE
AW-6	04/21/94	37.08	20.66	---	16.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	1.7	PACE
AW-6	09/09/94	37.08	21.57	---	15.51	ND<50	0.9	ND<0.5	ND<0.5	0.5	---	2.9	PACE
AW-6	12/21/94	37.08	19.40	---	17.68	ND<50	1.8	0.8	0.8	3.2	---	1.1	PACE
AW-6	01/30/95	37.08	16.74	---	20.34	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	2.2	ATI
QC-1 (e)	01/30/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
AW-6	04/10/95	37.08	16.01	---	21.07	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	8.6	ATI
AW-6	06/29/95	37.08	17.54	---	19.54	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.3	ATI
AW-6	09/18/95	37.08	19.65	---	17.43	---	---	---	---	---	---	---	---
AW-6	09/19/95	37.08	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	25	8.3	ATI
AW-6	12/07/95	37.08	20.35	---	16.73	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	16	4.7	ATI
AW-6	03/28/96	37.08	14.99	---	22.09	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.0	SPL
AW-6	06/20/96	37.08	15.59	---	21.49	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.6	SPL
AW-6	10/11/96	37.08	19.09	---	17.99	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.3	SPL
AW-6	01/02/97	37.08	15.11	---	21.97	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.5	SPL
AW-6	04/14/97	37.08	16.25	---	20.83	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	3.9	SPL
AW-6	07/02/97	37.08	17.99	---	19.09	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.2	SPL
AW-6	09/30/97	37.08	20.50	---	16.58	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.0	SPL
AW-6	01/21/98	37.08	15.72	---	21.36	160	ND<0.5	ND<1.0	ND<1.0	ND<1.0	110	5.0	SPL
AW-7	04/05/91	37.60	23.38	---	14.22	ND<50	0.4	0.7	ND<0.3	ND<0.3	---	---	SUP
AW-7	04/01/92	37.60	21.92	---	15.68	---	---	---	---	---	---	---	---
AW-7	04/02/92	37.60	---	---	---	ND<50	ND<0.5	3.2	1.0	5.4	---	---	APP
AW-7	07/06/92	37.60	24.50	---	13.10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
AW-7	10/07/92	37.60	26.18	---	11.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
AW-7	01/14/93	37.60	22.03	---	15.57	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-7	04/22/93	37.60	21.18	---	16.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-7	07/15/93	37.60	22.09	---	15.51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-7	10/21/93	37.60	24.05	---	13.55	51	5.0	4.2	3.5	8.2	---	---	PACE
AW-7	01/27/94	37.60	23.40	---	14.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-7	04/21/94	37.60	22.24	---	15.36	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	2.5	PACE
AW-7	09/09/94	37.60	22.94	---	14.66	ND<50	ND<0.5	ND<0.5	ND<0.5	0.5	---	4.3	PACE
AW-7	12/21/94	37.60	20.86	---	16.74	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	2.2	PACE
AW-7	01/30/95	37.60	17.51	---	20.09	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	2.7	ATI
AW-7	04/10/95	37.60	16.69	---	20.91	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.8	ATI
AW-7	06/29/95	37.60	18.33	---	19.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	7.6	ATI
AW-7	09/18/95	37.60	20.68	---	16.92	---	---	---	---	---	---	---	---
AW-7	09/19/95	37.60	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	5.1	ATI
AW-7	12/07/95	37.60	22.15	---	15.45	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	5.2	ATI
AW-7	03/28/96	37.60	16.38	---	21.22	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	3.9	SPL
AW-7	06/20/96	37.60	17.02	---	20.58	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	5.0	SPL
AW-7	10/11/96	37.60	20.47	---	17.13	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.3	SPL
AW-7	01/02/97	37.60	16.70	---	20.90	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.2	SPL
AW-7	04/14/97	37.60	17.96	---	19.64	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
AW-7	07/02/97	37.60	19.11	---	18.49	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.4	SPL
AW-7	09/30/97	37.60	22.97	---	14.63	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	1100	6.5	SPL
AW-7	01/21/98	37.60	16.50	---	21.10	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.9	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11133
2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
AW-8	04/05/91	40.86	26.68	---	14.18	80	1.9	2.2	0.5	1.3	---	---	SUP
AW-8	04/01/92	40.86	25.11	---	15.75	73	ND<0.5	0.7	ND<0.5	0.6	---	---	APP
AW-8	07/06/92	40.86	26.43	---	14.43	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
AW-8	10/07/92	40.86	28.59	---	12.27	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
AW-8	01/14/93	40.86	25.55	---	15.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-8	04/22/93	40.86	22.29	---	18.57	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-8	07/15/93	40.86	23.42	---	17.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
AW-8	10/21/93	40.86	25.15	---	15.71	ND<50	1.9	1.8	1.3	3.3	---	---	PACE
AW-8	01/27/94	40.86	25.42	---	15.44	ND<50	ND<0.5	0.5	0.6	8.5	---	---	PACE
AW-8	04/21/94	40.86	24.14	---	16.72	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	1.5	PACE
AW-8	09/09/94	40.86	24.55	---	16.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	2.4	PACE
AW-8	12/21/94	40.86	22.72	---	18.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	1.1	PACE
AW-8	01/30/95	40.86	19.75	---	21.11	ND<50	ND<0.50	1	ND<0.50	1	---	0.8	ATI
AW-8	04/10/95	40.86	17.78	---	23.08	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	8.3	ATI
AW-8	06/29/95	40.86	18.18	---	22.68	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	8.3	ATI
AW-8	09/18/95	40.86	20.20	---	20.66	---	---	---	---	---	---	---	---
AW-8	09/19/95	40.86	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.7	ATI
AW-8	12/07/95	40.86	21.54	---	19.32	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	4.4	ATI
AW-8	03/28/96	40.86	15.77	---	25.09	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	3.8	SPL
AW-8	06/20/96	40.86	16.41	---	24.45	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	3.6	SPL
AW-8	10/11/96	40.86	19.90	---	20.96	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.4	SPL
AW-8	01/02/97	40.86	15.89	---	24.97	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.9	SPL
AW-8	04/14/97	40.86	17.07	---	23.79	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.6	SPL
AW-8	07/02/97	40.86	18.67	---	22.19	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.6	SPL
AW-8	09/30/97	40.86	22.52	---	18.34	ND<50	ND<5	ND<10	ND<10	ND<10	820	6.7	SPL
AW-8	01/21/98	40.86	16.01	---	24.85	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.2	SPL
AW-9	01/02/97	37.78	10.00	---	27.78	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.7	SPL
AW-9 (f)	04/14/97	37.78	---	---	---	---	---	---	---	---	---	---	---
AW-9	07/02/97	37.78	12.71	---	25.07	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.0	SPL
AW-9	09/30/97	37.78	21.22	---	16.56	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.8	SPL
AW-9	01/21/98	37.78	10.26	---	27.52	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.3	SPL
RW-1	04/05/91	37.73	---	---	---	---	---	---	---	---	---	---	---
RW-1	04/01/92	37.73	22.81	0.30	15.14	---	---	---	---	---	---	---	---
RW-1	07/06/92	37.73	26.92	0.41	11.12	---	---	---	---	---	---	---	---
RW-1	10/07/92	37.73	28.51	1.26	10.16	---	---	---	---	---	---	---	---
RW-1	01/14/93	37.73	23.75	0.25	14.17	---	---	---	---	---	---	---	---
RW-1	04/22/93	37.73	22.70	1.38	16.07	---	---	---	---	---	---	---	---
RW-1	07/15/93	37.73	26.10	0.81	12.24	---	---	---	---	---	---	---	---
RW-1	10/21/93	37.73	25.40	0.49	12.70	---	---	---	---	---	---	---	---
RW-1	10/21/93	37.73	25.40	0.49	12.70	---	---	---	---	---	---	---	---
RW-1	01/27/94	37.73	28.02	0.37	9.99	---	---	---	---	---	---	---	---
RW-1	04/21/94	37.73	23.10	0.91	15.31	---	---	---	---	---	---	---	---
RW-1	09/09/94	37.73	24.39	1.04	14.12	---	---	---	---	---	---	---	---
RW-1 (h)	12/21/94	37.73	---	---	---	---	---	---	---	---	---	---	---
RW-1	12/07/95	37.73	25.71	1.04	12.80	150000	34000	35000	4300	21000	2700	---	ATI
RW-1	03/28/96	37.73	16.75	0.18	21.12	---	---	---	---	---	---	---	---
RW-1 (h)	06/20/96	37.73	25.10	0.02	12.64	---	---	---	---	---	---	---	---
RW-1	10/11/96	37.73	25.51	0.00	12.22	130000	20000	32000	2800	20700	1400/1200 (g)	7.4	SPL
RW-1	01/02/97	37.73	24.49	0.01	13.25	---	---	---	---	---	---	---	---
RW-1	04/14/97	37.73	23.99	0.04	13.77	---	---	---	---	---	---	---	---
RW-1	04/15/97	37.73	---	---	---	1800000	38000	190000	48000	281000	ND<25000	---	SPL
RW-1	07/02/97	37.73	16.40	0.20	21.48	140000	19000	55000	4400	32400	ND<10000	5.7	SPL
QC-1 (e)	07/02/97	---	---	---	---	130000	19000	54000	4700	33400	ND<10000	---	SPL
RW-1	09/30/97	37.73	27.97	0.02	9.78	110000	13000	22000	2000	12500	1100	7.0	SPL
QC-1 (e)	09/30/97	---	---	---	---	140000	17000	29000	2500	15900	1200	---	SPL
RW-1	01/21/98	37.73	14.14	0.44	23.92	270000	21000	48000	3500	25000	1100	4.8	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11133
2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
QC-2 (i)	10/07/92	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (i)	01/14/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	04/22/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	07/15/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	10/21/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	01/27/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	04/21/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	09/09/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	12/21/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	01/30/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (i)	04/10/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (i)	06/27/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (i)	09/19/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (i)	12/07/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (i)	03/28/96	---	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL
QC-2 (i)	06/20/96	---	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
---	Not available/applicable/measurable
ND	Not detected above reported detection limit
PACE	Pace, Inc.
SUP	Superior Analytical Laboratories, Inc.
APP	Applied Analytical Laboratory
ANA	Anametrix, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

NOTES:

(a) Top of casing elevations surveyed to the nearest 0.01 foot above mean sea level.

(b) Groundwater elevations adjusted assuming a specific gravity of 0.75 for free product.

(c) A copy of the documentation for this data is included in Appendix C of Alisto report 10-025-13-003.

(d) MTBE peak. See documentation in Appendix C of Alisto report 10-025-13-003.

(e) Blind duplicate.

(f) Well inaccessible.

(g) EPA Methods 8020/8260 used.

(h) Well not monitored and/or sampled due to vapor extraction system.

(i) Travel blank.

F:\0\10-025\10-025GW.WQ2

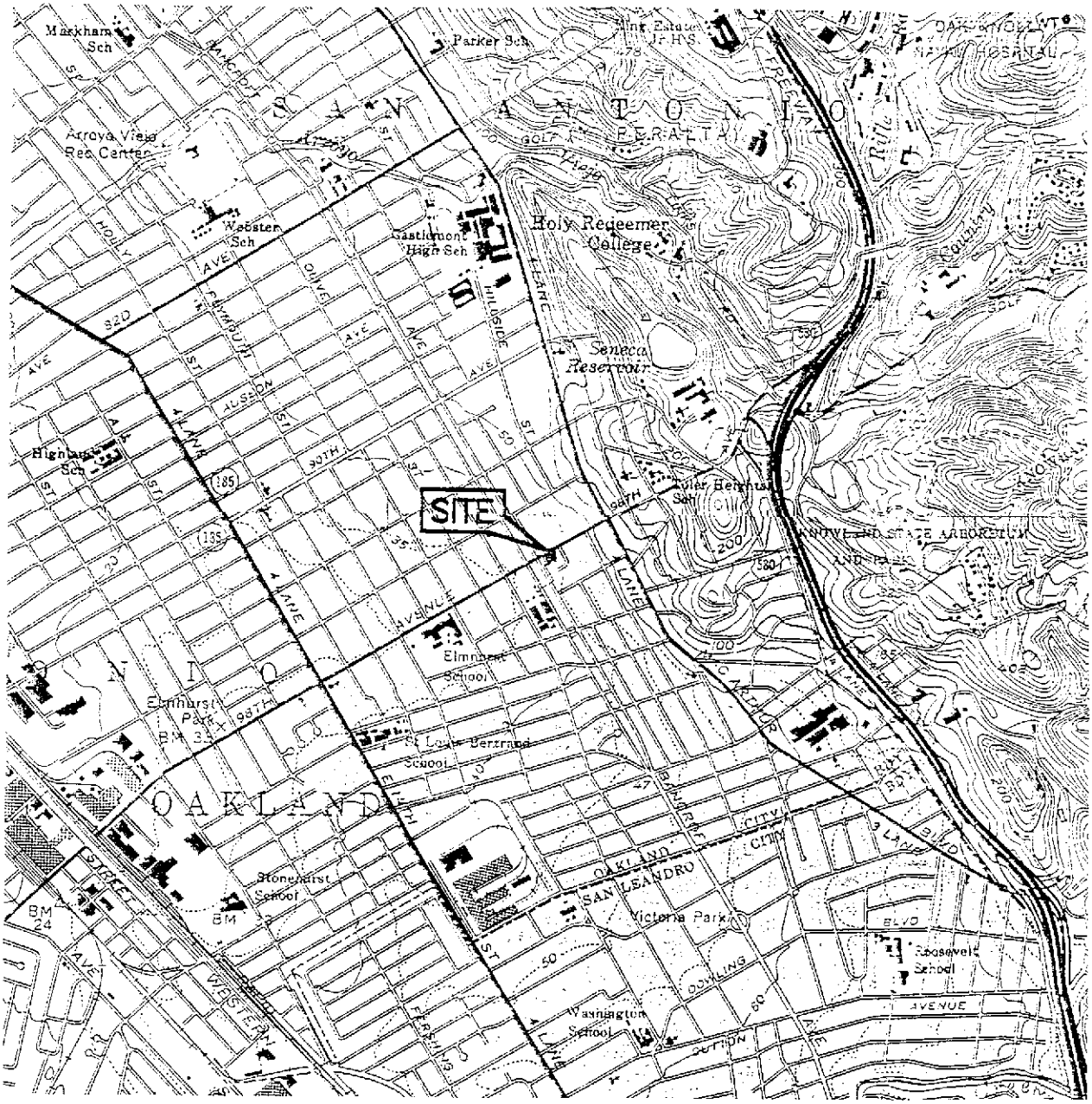
TABLE 2 - PRODUCT REMOVAL STATUS
BP OIL COMPANY SERVICE STATION NO. 11133
2220 98TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

WELL ID	DATE	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)
RW-1	10/06/93	1.00	1.00
	10/14/94	1.00	2.00
	10/20/94	18.00	20.00
	10/26/94	3.00	23.00
	11/02/93	5.00	28.00
	11/10/94	6.00	34.00
	11/16/94	2.50	36.50
	11/23/94	5.00	41.50
	11/30/93	2.00	43.50
	12/07/93	4.00	47.50
	12/17/93	1.50	49.00
	01/04/94	5.00	54.00
	01/12/94	3.50	57.50
	01/20/94	2.50	60.00
	02/11/94	4.00	64.00
	02/18/93	3.50	67.50
	02/25/94	3.00	70.50
	03/04/94	3.50	74.00
	03/18/94	5.50	79.50
	03/30/94	4.00	83.50
	04/13/94	4.60	88.10
	04/21/94	4.20	92.30
	04/29/94	4.50	96.80
	05/06/94	5.50	102.30
	05/13/94	3.50	105.80
	05/20/94	3.50	109.30
	05/26/94	4.50	113.80
	06/02/94	3.50	117.30
	06/09/94	2.50	119.80
	06/16/94	3.50	123.30
	06/23/94	4.00	127.30
	06/29/94	2.50	129.80
	07/07/94	2.00	131.80
	07/12/94	3.00	134.80
	07/20/94	1.50	136.30
	07/29/94	3.50	139.80
	08/05/94	1.50	141.30
	08/12/94	2.00	143.30
	08/18/94	2.50	145.80
	09/09/94	3.50	149.30
	09/16/94	4.00	153.30
	09/23/94	2.00	155.30
	12/07/95	0.00	155.30
	03/28/96	0.01	155.31
	06/20/96	0.00	155.31
	04/14/97	<0.05	155.31
	07/02/97	0.25	155.56
	09/30/97	<0.01	155.56
	01/21/98	0.5	156.06
MW-1	10/20/93	0.10	0.10
	11/10/93	0.10	0.20
	09/09/94	SHEEN	0.20
	10/26/94	SHEEN	0.20
	11/16/94	SHEEN	0.20
	12/21/94	0.25	0.45
	02/08/95	0.00	0.45
	04/10/95	0.25	0.70
	06/29/95	SHEEN	0.70
	09/18/95	SHEEN	0.70
	12/07/95	SHEEN	0.70
	03/28/96	<.001	0.70
	06/20/96	0.002	0.70
	10/11/96	<0.001	0.70
	01/02/97	<0.01	0.70
	04/14/97	<0.01	0.70
	07/02/97	<0.01	0.70
	01/21/98	<0.01	0.70

NOTE: Groundwater and soil vapor extraction equipment installed in RW-1 in October 1994.

F:\0\10-025\PRODUCT.WQ2



SOURCE:
USGS MAP, OAKLAND EAST AND SAN LEANDRO QUADRANGLES, CALIFORNIA, 7.5 MINUTE SERIES, 1956, PHOTOREVISED 1980.

N

0 1000' 2000'

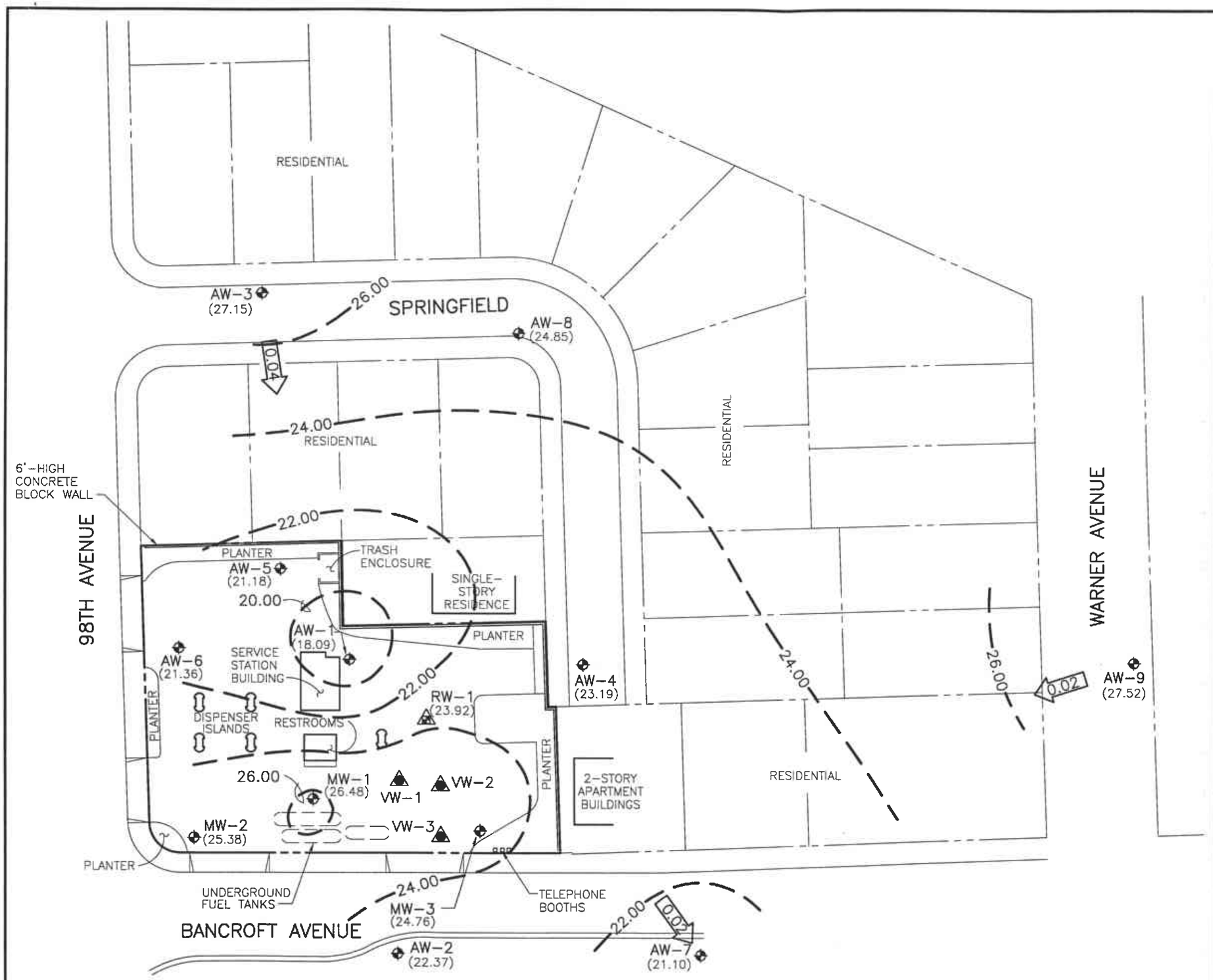
FIGURE 1

SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11133
2220 98TH AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10-025

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION WELL
- COMBINED GROUNDWATER RECOVERY/VAPOR EXTRACTION WELL
- (21.10) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 22.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL-2.00 FEET)
- 0.04 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

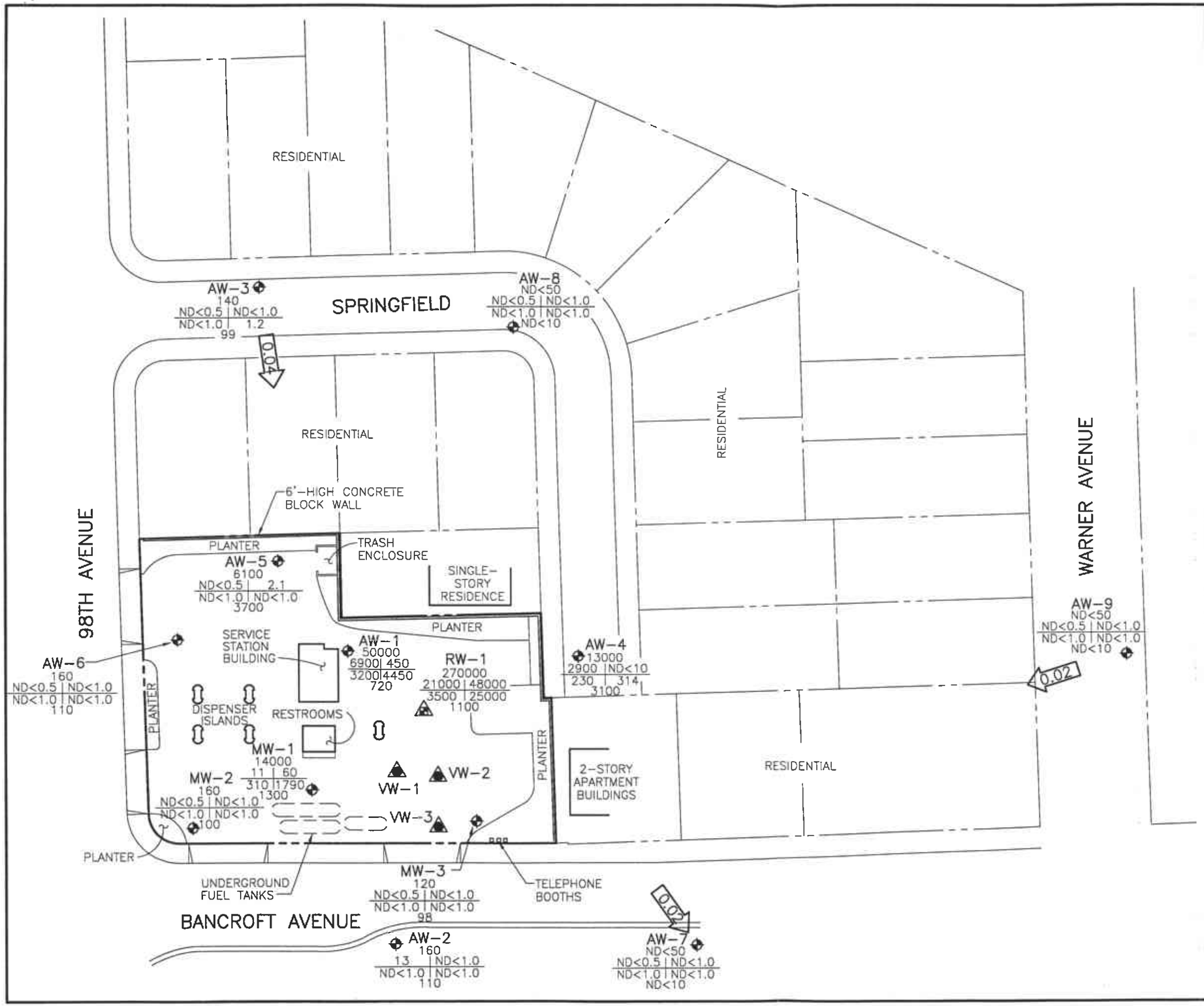
JANUARY 21, 1998

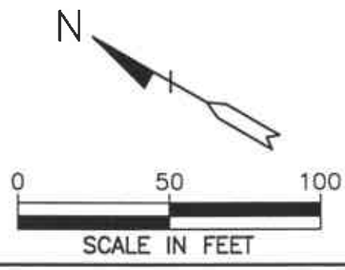
BP OIL SERVICE STATION NO. 11133
2220 98TH AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10-025

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10025D-1.DWG 3-11-98 RW 1-50





LEGEND

- GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION WELL
- COMBINED GROUNDWATER RECOVERY/VAPOR EXTRACTION WELL
- TPH-G / B | T / E | X / MTBE — CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER
- TPH-G — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B — BENZENE
- T — TOLUENE
- E — ETHYLBENZENE
- X — TOTAL XYLENES
- MTBE — METHYL TERT BUTYL ETHER
- ND — NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- 0.04 — CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

JANUARY 21, 1998

BP OIL SERVICE STATION NO. 11133
2220 98TH AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10-025

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10025C-Y.DWG 2-11-98 RHW 1=50

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201

Field Report / Sampling Data Sheet

Project No. 10-025-017-002 Date: 11/21/98
Address 2220 98TH Ave. Day: M T W TH F
Contract No. H177113 City: Oakland
Station No. BP 11133 Sampler: LB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-1	S-11	2"	34.00	7.99	.01	1030	PPRS Serviced Removed < .01 gal FP
MW-2	S-1	2"	34.10	10.12	Ø	0945	
MW-3	S-10	2"	21.83	11.77		1027	
AW-1	S-12	2"	38.60	20.02		1040	
AW-2	S-2	2"	35.20	14.46		0950	
AW-3	S-3	2"	45.00	11.98		0957	Dup must be from this well QC-1 (S-14) from this well
AW-4	S-9	2"	35.00	15.89		1024	
AW-5	S-4	4"	42.90	17.33		1000	
AW-6	S-5	4"	34.20	15.72		1004	
AW-7	S-6	2"	32.30	16.50		1017	
AW-8	S-7	2"	39.20	16.01		1015	
AW-9	S-8	2"	40.00	10.26		1018	
RW-1	S-13	4"	40.00	14.14	.44	1051	Sample through dip tube well Not Pumping

FIELD INSTRUMENT CALIBRATION DATA

pH METER Icm 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1100
D.O. METER Icm ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE 760 TEMP 62 WEATHER Cloudy
CONDUCTIVITY METER Icm 10,000 _____ TURBIDITY METER _____ 5.0 NTU _____ OTHER X
LEAK DETECTOR : _____ ALARM MODE X NON ALARM MODE

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-2	10.12	2"	OK	Ø	Y (N)	4	1127	59.3	7.63	309 µs	5.1
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			8		61.1	7.42	329 µs	
34.10 - 10.12 = 23.98 X .16 = 3.84 X 3 =			11.52			12	1140	61.9	7.34	333 µs	5.4
Purge Method: (X) Surface Pump O Disp.Tube O Winch O Disp. Bailer(s) ___ O Sys Port											
Comments:											

O EPA 601 _____
(X) TPH-G/BTEX ___
O TPH Diesel _____
O TOG 5520 ___
TIME/SAMPLE ID: 1144

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-2	14.46	2"	OK	Ø	Y (N)	3	1156	60.6	7.81	277 µs	4.7
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		61.9	7.55	310 µs	
35.20 - 14.46 = 20.74 X .16 = 3.32 X 3 =			9.96			10	1207	62.4	7.48	318 µs	4.9
Purge Method: (X) Surface Pump O Disp.Tube O Winch O Disp. Bailer(s) ___ O Sys Port											
Comments:											

O EPA 601 _____
(X) TPH-G/BTEX ___
O TPH Diesel _____
O TOG 5520 ___
TIME/SAMPLE ID: 1213

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94598 (510) 295-1650 FAX 295-1823

Project No. 10-025-017-002 | Date: 11/2/98
Address 2220 98TH Ave. | Day: M T W TH F
Contract No. H177113 | City: Oakland
Station No. BP 11133 | Sampler: LUB

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
AW-3	11.98	2"	OK	Ø	Y (N)	6	1226	60.6	7.72	897µS	4.4
						12		61.4	7.55	960µS	
						16	1240	62.2	7.44	972µS	4.6

Total Depth - Water Level= 45.00 - 11.98 = 33.02 x Well Vol. Factor= .16 = 5.28 x# vol. to Purge= 3 PurgeVol.= 15.84
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel_____
O TOG 5520 ___
TIME/SAMPLE ID: 1243

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
AW-5	17.33	4"	OK	Ø	Y (N)	17	1251	58.6	7.62	411µS	4.2
						34		60.3	7.33	436µS	
						50	1337	61.2	7.24	451µS	4.5

Total Depth - Water Level= 42.90 - 17.33 = 25.57 x Well Vol. Factor= .65 = 16.62 x# vol. to Purge= 3 PurgeVol.= 49.86
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel_____
O TOG 5520 ___
TIME/SAMPLE ID: 1340

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
AW-6	15.72	4"	Replaced	Ø	Y (N)	12	1355	60.6	7.36	284µS	4.6
						24		62.1	7.19	310µS	
						37	1415	62.9	7.12	317µS	5.0

Total Depth - Water Level= 34.20 - 15.72 = 18.48 x Well Vol. Factor= .65 = 12.01 x# vol. to Purge= 3 PurgeVol.= 36.03
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel_____
O TOG 5520 ___
TIME/SAMPLE ID: 1417

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
AW-7	16.50	4"	OK	Ø	Y (N)	3	1431	61.1	7.71	262µS	4.6
						5		62.0	7.39	297µS	
						8	1442	62.6	7.31	310µS	4.9

Total Depth - Water Level= 32.30 - 16.50 = 15.80 x Well Vol. Factor= .16 = 2.53 x# vol. to Purge= 3 PurgeVol.= 7.59
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel_____
O TOG 5520 ___
TIME/SAMPLE ID: 1450

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
AW-8	16.01	2"	OK	Ø	Y (N)	4	1501	60.2	7.86	1036µS	4.8
						8		60.9	7.55	1067µS	
						12	1510	61.8	7.46	1100µS	5.2

Total Depth - Water Level= 39.20 - 16.01 = 23.19 x Well Vol. Factor= .16 = 3.71 x# vol. to Purge= 3 PurgeVol.= 11.13
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel_____
O TOG 5520 ___
TIME/SAMPLE ID: 1514

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94598 (510) 295-1650 FAX 295-1823

Project No. 10-025-017-002 | Date: 11/21/98
Address 2220 98TH Ave. | Day: M T W TH F
Contract No. H177113 | City: Oakland
Station No. BP 11133 | Sampler: CW

AW-9 | Depth to Water: 10.26 | Diam: 2" | Cap/Lock: OK | Product Depth: Ø | Iridescence: Y (N)
Total Depth - Water Level= 40.00-10.26=29.74X.16=4.76X3= 14.28 | x Well Vol. Factor= | x#vol. to Purge | PurgeVol.
Purge Method: X Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

Gal.	Time	Temp *F	pH	E.C.	D.O.
5	1526	60.9	7.71	380µs	4.9
10		61.8	7.47	417µs	
15	1539	62.5	7.40	426µs	5.3

O EPA 601____ X TPH-G/BTEX___ O TPH Diesel____ O TOG 5520 ___
TIME/SAMPLE ID: 1540

AW-4 | Depth to Water: 15.89 | Diam: 2" | Cap/Lock: OK | Product Depth: Ø | Iridescence: Y (N)
Total Depth - Water Level= 35.00-15.89=19.11X.16=3.06X3= 9.18 | x Well Vol. Factor= | x#vol. to Purge | PurgeVol.
Purge Method: X Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

Gal.	Time	Temp *F	pH	E.C.	D.O.
3	1555	58.7	7.87	477µs	3.3
7		59.9	7.60	507µs	
10	1603	60.6	7.49	511µs	3.9

O EPA 601____ X TPH-G/BTEX___ O TPH Diesel____ O TOG 5520 ___
TIME/SAMPLE ID: 1611

MW-3 | Depth to Water: 11.77 | Diam: 2" | Cap/Lock: OK | Product Depth: Ø | Iridescence: Y (N)
Total Depth - Water Level= 21.83-11.77=10.06X.16=1.61X3= 4.83 | x Well Vol. Factor= | x#vol. to Purge | PurgeVol.
Purge Method: X Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

Gal.	Time	Temp *F	pH	E.C.	D.O.
3	1620	59.9	7.42	442µs	4.4
4		61.2	7.22	466µs	
5	1624	61.7	7.13	474µs	4.7

O EPA 601____ X TPH-G/BTEX___ O TPH Diesel____ O TOG 5520 ___
TIME/SAMPLE ID: 1627

MW-1 2" Diam.
34.00-7.99=26.01X.16=4.16X3=12.48 6gl

Time	Temp	Cond	pH	~~Time~~
1635	59.7	633µs	7.46	4
	60.6	642µs	7.26	8
1641	61.3	649µs	7.19	13

D.O. = Begin 4.3 End 4.5

AW-1 2" Diam.
38.60-20.02=18.58X.16=2.97X3= 8.91 6Gal

Time	Temp	Cond	pH	~~Time~~
1655	61.2	687µs	7.11	3
	62.6	711µs	7.03	6
1707	62.9	724µs	6.92	9

D.O. = Begin 6.1 End 5.8

RW-1 4" Diam
40 - 14.14 = 25.86X.65=16.81X3= 50.43 6gl

Time	Temp	Cond	pH	~~Time~~
1722	58.1	803µs	7.44	17
	59.6	822µs	7.31	34
1750	60.7	833µs	7.24	51

D.O. = 4.6 Begin 4.8 End
Removed .50gal FP

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

February 4, 1998

Mr. Scott Hooton
BP OIL COMPANY
295 SW 41st St, Bldg 13, Ste N
Renton, WA 98055

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on January 23, 1998. The sample(s) was assigned to Certificate of Analysis No.(s) 9801A11 and analyzed for all parameters as listed on the chain of custody.

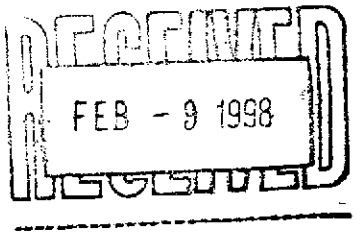
Any data flag or quality control exception associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Joel Grice
Project Manager



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 98-01-A11

Approved for Release by:

Joel Grice, Project Manager Date: 2/4/98

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-01

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	100	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ			
Date: 02/01/98			
Gasoline Range Organics	0.16	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 02/01/98 11:38:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-02

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	110	10 P	µg/L
Benzene	13	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ			
Date: 02/01/98			
Gasoline Range Organics	0.16	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 02/01/98 04:31:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-03

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	99	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/01/98			
Gasoline Range Organics	0.14	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	97		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/01/98 03:45:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-04

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-4

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	3700	250 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	2.1	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	143MI		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/02/98			
Gasoline Range Organics	6.1	1.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	79		
4-Bromofluorobenzene	103		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/03/98 12:30:00			

(P) - Practical Quantitation Limit ND - Not detected.
MI - Matrix interference.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-05

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-5

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	110	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/02/98			
Gasoline Range Organics	0.16	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	97		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/01/98 05:52:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-06

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-6

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ			
Date: 02/01/98			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 02/01/98 09:09:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-07

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-7

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: LJ			
Date: 02/01/98			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	97		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 02/01/98 09:34:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-08

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-8

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/02/98			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/01/98 06:17:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-09

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-9

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	3100	100 P	µg/L
Benzene	2900	5 P	µg/L
Toluene	ND	10 P	µg/L
Ethylbenzene	230	10 P	µg/L
Total Xylene	314	10 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ			
Date: 02/03/98			
Gasoline Range Organics	13	1.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	80		
4-Bromofluorobenzene	101		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/03/98 12:55:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-10

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-10

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/21/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	98	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/02/98			
Gasoline Range Organics	0.12	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	73		
4-Bromofluorobenzene	100		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/03/98 01:20:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
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HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-11

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-11

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/22/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	1300	50 P	µg/L
Benzene	11	2.5 P	µg/L
Toluene	60	5.0 P	µg/L
Ethylbenzene	310	5.0 P	µg/L
Total Xylene	1790	5.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	113		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/02/98			
Gasoline Range Organics	14	0.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	87		
4-Bromofluorobenzene	100		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/01/98 08:48:00			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-12

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-12

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/22/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	720	250 P	µg/L
Benzene	6900	12 P	µg/L
Toluene	450	25 P	µg/L
Ethylbenzene	3200	25 P	µg/L
Total Xylene	4450	25 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	115		
4-Bromofluorobenzene	112		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/02/98			
Gasoline Range Organics	50	1.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	85		
4-Bromofluorobenzene	100		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/01/98 09:13:00			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-13

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-13

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/22/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	1100	1000 P	µg/L
Benzene	21000	50 P	µg/L
Toluene	48000	100 P	µg/L
Ethylbenzene	3500	100 P	µg/L
Total Xylene	25000	100 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	103		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/02/98			
Gasoline Range Organics	270	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	80		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/01/98 09:39:00			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9801A11-14

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# H177113, COC#086213
DATE: 02/04/98

PROJECT: #11133, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-14

PROJECT NO: 10-025-17/002
MATRIX: WATER
DATE SAMPLED: 01/22/98
DATE RECEIVED: 01/23/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	110	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	1.2	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/02/98			
Gasoline Range Organics	0.15	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/01/98 07:33:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
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QUALITY CONTROL

DOCUMENTATION

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Batch Id: VARE980201052100

Units: µg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	44	88.0	72 - 128
Benzene	ND	50	47	94.0	61 - 119
Toluene	ND	50	46	92.0	65 - 125
EthylBenzene	ND	50	46	92.0	70 - 118
O Xylene	ND	50	47	94.0	72 - 117
M & P Xylene	ND	100	93	93.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20.0	20	100	19.3	96.5	3.56	20	39 - 150
BENZENE	ND	20.0	17	85.0	17.6	88.0	3.47	21	32 - 164
TOLUENE	ND	20.0	17	85.0	17.2	86.0	1.17	20	38 - 159
ETHYLBENZENE	ND	20.0	17	85.0	16.9	84.5	0.590	19	52 - 142
O XYLENE	ND	20.0	18	90.0	17.9	89.5	0.557	18	53 - 143
M & P XYLENE	ND	40.0	34	85.0	34.2	85.5	0.587	17	53 - 144

Analyst: LJ
Sequence Date: 02/01/98
SPL ID of sample spiked: 9801A11-06A
Sample File ID: E_A4219.TX0
Method Blank File ID:
Blank Spike File ID: E_A4212.TX0
Matrix Spike File ID: E_A4214.TX0
Matrix Spike Duplicate File ID: E_A4215.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9801A09-01A 9801A09-09A 9801A09-02A 9801A11-03A 9801A11-04A 9801A11-06A 9801A11-07A 9801A11-01A 9801A09-05A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Batch Id: VARE980131115100

Units: µg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	46	92.0	72 - 128
Benzene	ND	50	47	94.0	61 - 119
Toluene	ND	50	46	92.0	65 - 125
EthylBenzene	ND	50	46	92.0	70 - 118
O Xylene	ND	50	47	94.0	72 - 117
M & P Xylene	ND	100	93	93.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	4.3	20	24	98.5	26	108	9.20	20	39 - 150
BENZENE	ND	20	17	85.0	19	95.0	11.1	21	32 - 164
TOLUENE	ND	20	17	85.0	19	95.0	11.1	20	38 - 159
ETHYLBENZENE	ND	20	17	85.0	18	90.0	5.71	19	52 - 142
O XYLENE	ND	20	17	85.0	19	95.0	11.1	18	53 - 143
M & P XYLENE	ND	40	33	82.5	37	92.5	11.4	17	53 - 144

Analyst: LJ
Sequence Date: 01/31/98
SPL ID of sample spiked: 9801A09-03A
Sample File ID: E_A4185.TX0
Method Blank File ID:
Blank Spike File ID: E_A4187.TX0
Matrix Spike File ID: E_A4190.TX0
Matrix Spike Duplicate File ID: E_A4191.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9801A09-04A 9801A09-08A 9801A09-01A 9801A09-02A
9801A09-07A 9801940-01A 9801A09-09A 9801A11-02A
9801942-01A 9801942-02A 9801940-02A 9801940-04A
9801940-01A 9801940-04A 9801A09-03A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Batch Id: VARE980201223900

Units: µg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50.0	37	74.0	72 - 128
Benzene	ND	50.0	44	88.0	61 - 119
Toluene	ND	50.0	43	86.0	65 - 125
EthylBenzene	ND	50.0	43	86.0	70 - 118
O Xylene	ND	50.0	43	86.0	72 - 117
M & P Xylene	ND	100.0	87	87.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	2300	20.0	2300	NC	2300	NC	NC	20	39 - 150
BENZENE	ND	20.0	15	75.0	15	75.0	0	21	32 - 164
TOLUENE	ND	20.0	15	75.0	15	75.0	0	20	38 - 159
ETHYLBENZENE	ND	20.0	15	75.0	14	70.0	6.90	19	52 - 142
O XYLENE	ND	20.0	15	75.0	16	80.0	6.45	18	53 - 143
M & P XYLENE	1.4	40.0	30	71.5	29	69.0	3.56	17	53 - 144

Analyst: LJ/
Sequence Date: 02/02/98
SPL ID of sample spiked: 9801A25-03A
Sample File ID: E_A4253.TX0
Method Blank File ID:
Blank Spike File ID: E_A4260.TX0
Matrix Spike File ID: E_A4248.TX0
Matrix Spike Duplicate File ID: E_A4249.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9801A11-10A 9801A09-09A 9801A11-04A 9801A11-09A
9801A25-07A 9801A09-06A 9801A11-05A 9801A11-08A
9801A11-11A 9801A11-12A 9801A11-13A 9801A11-14A
9801A25-01A 9801A25-03A 9801A25-06A 9801A25-08A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Batch Id: HP_W980203130000

Units: µg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	50	100	72 - 128
Benzene	ND	50	55	110	61 - 119
Toluene	ND	50	57	114	65 - 125
EthylBenzene	ND	50	57	114	70 - 118
O Xylene	ND	50	57	114	72 - 117
M & P Xylene	ND	100	110	110	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	660	20	750	NC	670	NC	NC	20	39 - 150
BENZENE	ND	20	25	125	23	115	8.33	21	32 - 164
TOLUENE	ND	20	23	115	21	105	9.09	20	38 - 159
ETHYLBENZENE	ND	20	23	115	21	105	9.09	19	52 - 142
O XYLENE	ND	20	25	125	23	115	8.33	18	53 - 143
M & P XYLENE	ND	40	46	115	42	105	9.09	17	53 - 144

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

Analyst: LJ
Sequence Date: 02/03/98
SPL ID of sample spiked: 9801D56-03A
Sample File ID: W_B1046.TX0
Method Blank File ID:
Blank Spike File ID: W_B1045.TX0
Matrix Spike File ID: W_B1041.TX0
Matrix Spike Duplicate File ID: W_B1042.TX0

SAMPLES IN BATCH(SPL ID): 9801A09-05A 9801A11-09A 9801A25-03A 9801A25-05A 9801A25-06A 9801D44-05A 9801D44-06A 9801D44-07A 9801D44-05A 9801940-03A

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PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Batch Id: VARE980201054600

Units: mg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	1.04	104	64 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
GASOLINE RANGE ORGANICS	ND	0.90	0.48	53.3	0.41	45.6	15.6	36	36 - 160

Analyst: LJ
Sequence Date: 02/01/98
SPL ID of sample spiked: 9801A11-07A
Sample File ID: EEA4220.TX0
Method Blank File ID:
Blank Spike File ID: EEA4213.TX0
Matrix Spike File ID: EEA4216.TX0
Matrix Spike Duplicate File ID: EEA4217.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9801A11-05A 9801A11-08A 9801A11-14A 9801A25-01A
9801A25-02A 9801A11-11A 9801A11-12A 9801A11-13A
9801A11-01A 9801A11-06A 9801A11-07A 9801A09-05A
9801A11-03A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Batch Id: VARE980131121601

Units: mg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	1.08	108	64 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
GASOLINE RANGE ORGANICS	0.84	0.90	1.55	78.9	1.38	60.0	27.2	36	36 - 160

Analyst: LJ

Sequence Date: 01/31/98

SPL ID of sample spiked: 9801A09-04A

Sample File ID: EEA4199.TX0

Method Blank File ID:

Blank Spike File ID: EEA4188.TX0

Matrix Spike File ID: EEA4192.TX0

Matrix Spike Duplicate File ID: EEA4193.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)

« = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical data (1st Q '97)

(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9801A09-01A 9801A09-02A 9801A09-06A 9801A09-07A
9801A11-02A 9801A09-03A 9801A09-04A 9801A09-08A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Batch Id: VARE980202204400

Units: mg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	1.1	110	64 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
GASOLINE RANGE ORGANICS	1.6	0.90	2.46	95.6	2.41	90.0	6.03	36	36 - 160

Analyst: LJ/
Sequence Date: 02/02/98
SPL ID of sample spiked: 9801B37-11A
Sample File ID: EEB1059.TX0
Method Blank File ID:
Blank Spike File ID: EEB1020.TX0
Matrix Spike File ID: EEB1023.TX0
Matrix Spike Duplicate File ID: EEB1024.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9801A09-09A 9801A11-04A 9801A11-09A 9801A11-10A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9801A11

CHAIN OF CUSTODY

No. 086213

Page 1 of 2

CONSULTANT'S NAME: Alisto Engineering	CONSULTANT'S ADDRESS: 1575 Treat Blvd #201 W.C. Ca 94598		
BP SITE NUMBER: 11133	BP SITE / FACILITY ADDRESS: Oakland, Ca		CONSULTANT PROJECT NUMBER: 10-025-17/002
CONSULTANT PROJECT MANGER: Brady Nagle	PHONE NUMBER: (510) 295-1650	FAX NUMBER: 295-1823	CONSULTANT CONTRACT NUMBER: #177113
BP CONTACT: Scott Hooton	BP ADDRESS: Lenton, WA	PHONE NUMBER: —	FAX NO. —
LAB CONTACT: SPL	LABORATORY ADDRESS: Texas	PHONE NUMBER: —	FAX NO. —
BP CONTACT REQUESTING RUSH TAT (Print BP Contact Name)	RUSH REQUESTED OF (Print Consultant Contact Name)	DATE/TIME	SHIPMENT DATE: 1/22/98

SHIPMENT METHOD: Fed EX

AIRBILL NUMBER: 384847170 1

TAT: ☐ 24 Hours ☐ 48 Hours ☐ 72 Hours ☒ Standard 7 or 14 Days

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH-GAS/BTEX	BTEX	COMMENTS
S-1	1/21/98		W	3	HCL		X	X	
S-2									
S-3									
S-4									
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									

SAMPLED BY (Please Print Name)

SAMPLED BY (Signature)

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION (Print Name / Signature)	DATE	TIME	ACCEPTED BY /AFFILIATION (Print Name / Signature)	DATE	TIME
[signature]	1/22/98	0800	R. Hooton	1/22/98	0800
R. Hooton	1/22/98	1600	[signature] SPL	1/23/98	1000

3°C

CLV-16722-A (8/96)
PKG/50

DISTRIBUTION: WHITE - ORIGINAL (WITH DATA) YELLOW - BP PINK - LAB BLUE - CONSULTANT FIELD STAFF

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
1-23-98	1000

SPL Sample ID:
9801411

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		3° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	384847101	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	1-23-98

CHAIN OF CUSTODY

No. 086214

Page 2 of 2

CONSULTANT'S NAME: Alisto Engineering	CONSULTANT'S ADDRESS: 1575 Treat Blvd #201 W.C. Ca 94598		
BP SITE NUMBER: 11133	BP SITE / FACILITY ADDRESS: ~~Pleasanton Valley, Ca~~ Oakland, Ca		CONSULTANT PROJECT NUMBER: ~~10-138-10/001~~ 10-025-1 002
CONSULTANT PROJECT MANGER: Brady Nayle	PHONE NUMBER: (510) 295-1650	FAX NUMBER: 295-1823	CONSULTANT CONTRACT NUMBER: A177113
BP CONTACT: Scott Hooton	BP ADDRESS: Renton, WA	PHONE NUMBER: —	FAX NO. —
LAB CONTACT: SPL	LABORATORY ADDRESS: Texas	PHONE NUMBER: —	FAX NO. —
BP CONTACT REQUESTING RUSH TAT (Print BP Contact Name)	RUSH REQUESTED OF (Print Consultant Contact Name)	DATE/TIME	SHIPMENT DATE: 1/22/98

SHIPMENT METHOD: Fed Ex

AIRBILL NUMBER: 384847170 1

TAT: ☐ 24 Hours ☐ 48 Hours ☐ 72 Hours ☒ Standard 7 or 14 Days

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH-D	TPH-G BTEX	COMMENTS
S-11	1/22/98		W	3	HCL		X	X	
S-12	"		"	"	"		"	"	
S-13	"		"	"	"		"	"	
S-14	"		"	"	"		"	"	

SAMPLED BY (Please Print Name)

SAMPLED BY (Signature)

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION (Print Name / Signature)	DATE	TIME	ACCEPTED BY /AFFILIATION (Print Name / Signature)	DATE	TIME
R. Hooton	1/22/98	800	R. Hooton	1/22/98	0800
R. Hooton	1/22/98	1600	[illegible] /SPL	1/23/98	1000

30C

CLV-16722-A (8/96)
PKG/50

DISTRIBUTION: WHITE - ORIGINAL (WITH DATA) YELLOW - BP PINK - LAB BLUE - CONSULTANT FIELD STAFF

BP EXPLORATION & OIL, INC.
ENVIRONMENTAL RESOURCE MANAGEMENT
DATA REVIEW CHECKLIST

BP Site Number:	11133
ERM Contact:	H177113
Sampling Date:	01/21/98
Matrix Description:	Water
Date Final Report Received:	02/09/98
Laboratory & Location:	SPL, Houston, Texas

		Yes	No	N/A
1.	Is BP contract release number consistent with analytical report?	_X_	____	____
2.	Was report submitted within the specified timeframe?	_X_	____	____
3.	Does report agree with the COC?	_X_	____	____
4.	Are units consistent with the given matrix?	_X_	____	____
5.	Were any target analytes/compounds detected in blanks (i.e., trip or equipment)?	____	____	_X_
6.	Are duplicate water samples within 30%?	_X_	____	____
7.	Are holding times met?	_X_	____	____
8.	Are surrogates within limits using laboratory criteria?	See Attached	____	____
9.	Are MS/MSD acceptable using laboratory criteria?	See Attached	____	____
10.	Are LCS results acceptable using laboratory criteria?	_X_	____	____

Analysis of one of the two surrogates (1,4-Difluorobenzene) during BTEX/MTBE analysis of S-4 were outside quality control limits due to matrix interference; the quality control for that method specifies that only one of two surrogate should be within the specified recovery range.

MS/MSD recovery and relative % difference for both matrix spikes for MTBE not calculated due to sample exceeding spike by a factor of 4 or more. MS/MSD limits are advisory only; as stated in SW-846, Section 8.7 to 8.8, if the MS/MSD results fall outside the advisable ranges, a laboratory control samples (LCS) must be analyzed and fall within those ranges. LCS results are within quality control limits.

Data Validation Completed by: Brady Nagle

(signature): Brady Nagle

Date: 2/14/98