BP OIL

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

December 31, 1997

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

Wait for next Qmr. MTBE could be due to extraction this time

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 5 December 1997 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 5 December 1997 groundwater monitoring and sampling report includes laboratory data for samples collected on 30 September 1997. You will note that aromatic petroleum hydrocarbons were detected in samples obtained from wells MW-1, AW-1, RW-1, and MW-4. The highest benzene concentration this quarter (17,000 µg/l) was detected in a sample obtained from well RW-1.

is extraction system still online

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 30 September 1997 show that MTBE has been detected for the first time in samples obtained from AW-3, AW-2, and AW-7.

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

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-025-17-001

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

December 1, 1997

Brady Nagle
Project Manager

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Principal

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STATE OF CALIFORNIA

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-025-17-001

December 1, 1997

INTRODUCTION

This report presents the results and findings of the September 30, 1997 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	17.48	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-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

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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-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	16.84	---	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
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	580	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

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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	[illegible]		5.4	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	[illegible]		5.7	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	16.07	---	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-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	0.8	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	180	---		---	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

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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	19.66	---	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-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

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-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
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	0.26	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

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.

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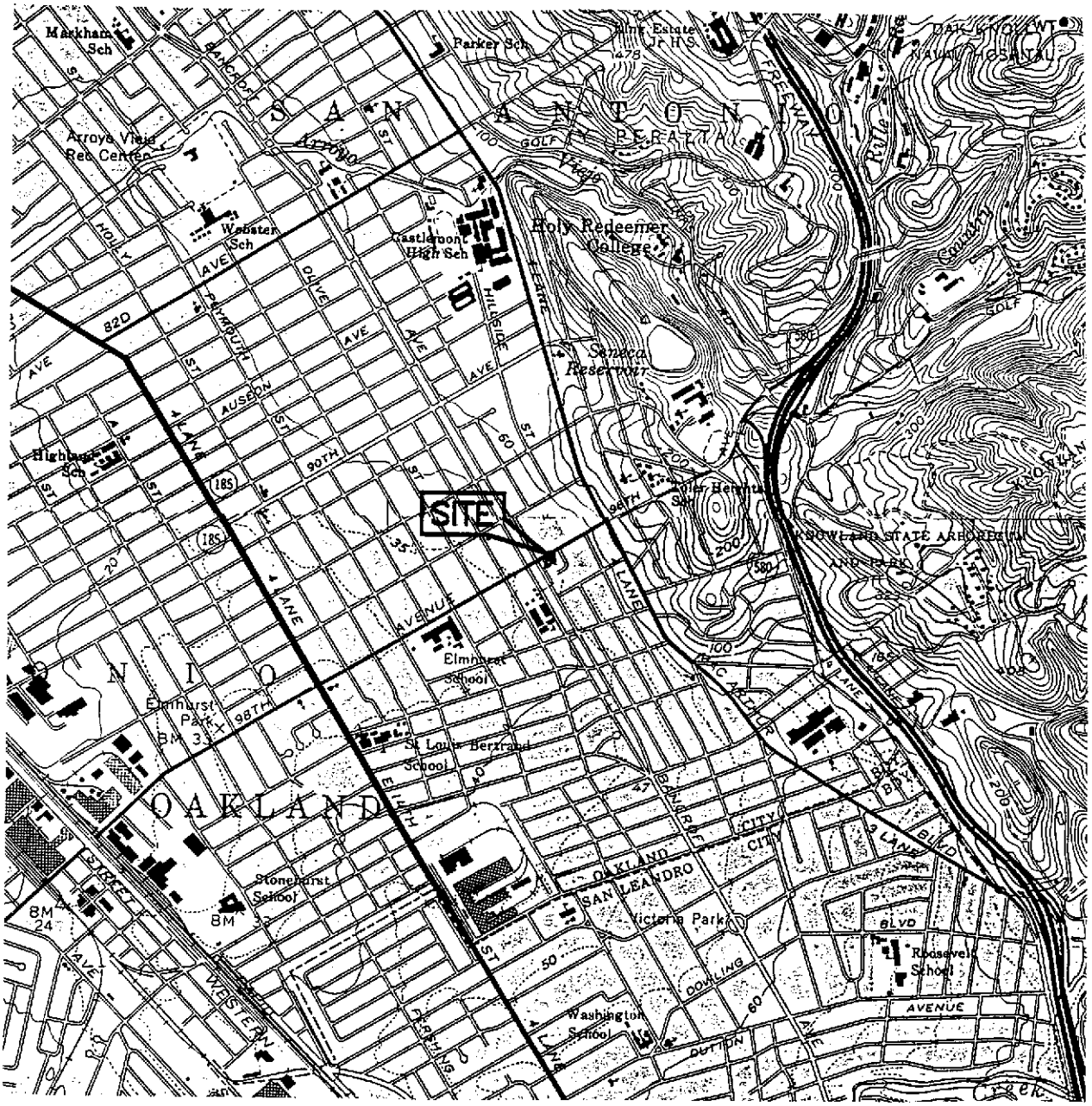
TABLE 2 - PRODUCT REMOVAL STATUS
BP OIL COMPANY SERVICE STATION NO. 11133
2220 98TH STREET, OAKLAND, CALIFORNIA

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
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

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

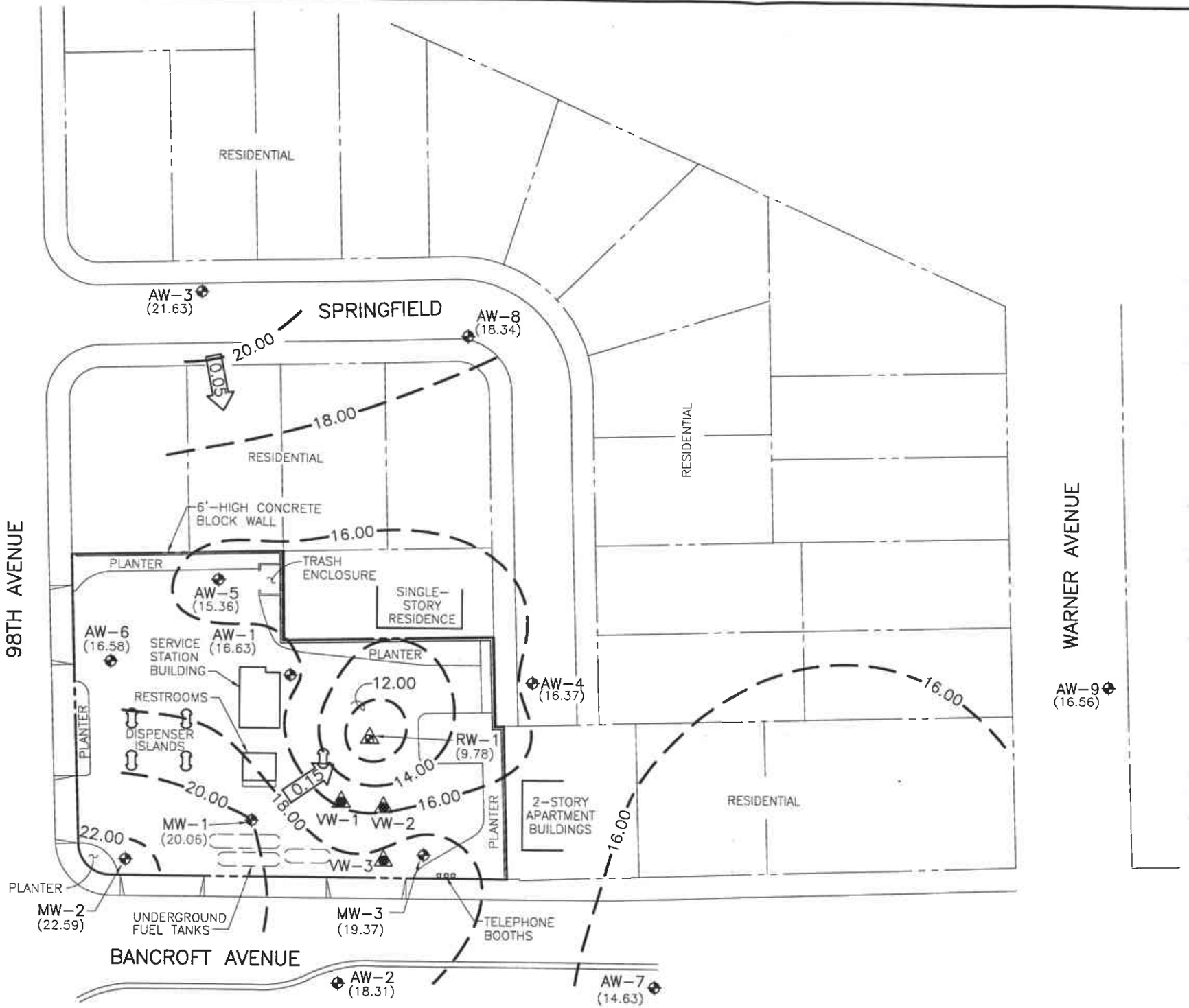
SITE VICINITY MAP

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

PROJECT NO. 10-025

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10025B--.DWG 3-22-94 RKW 1=1



LEGEND

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

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

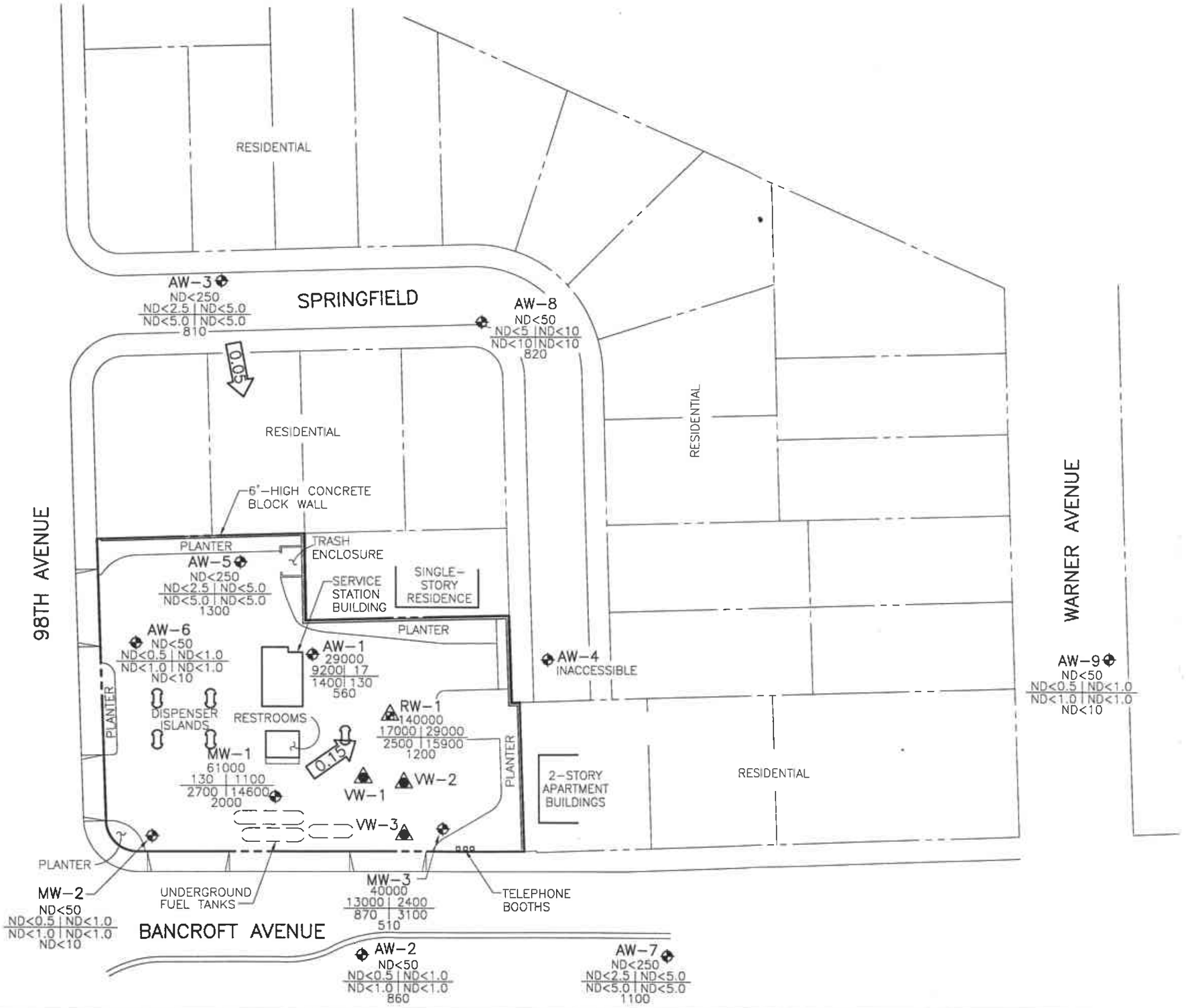
SEPTEMBER 30, 1997

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

PROJECT NO. 10-025

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10025GW4.DWG 11-24-97 RKW 1=50



N

0 50 100

SCALE IN FEET

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
0.15	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

SEPTEMBER 30, 1997

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

PROJECT NO. 10-025

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10025CAR ENG 11-24-97 RKW 1=50

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201

Project No. 10-025-017-001 Date: 9/30/97
Address 2220 98TH Ave. Day: M T W TH F
Contract No. H177113 City: Oakland
Station No. BP 11133 Sampler: LCB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS: * System is Operating During QMS
MW-1	S-11	2"	34'	14.40	Ø	1004	PPRS Serviced 9/30/97
MW-2	S-1	2"	34.10'	12.91		0922	
MW-3	S-9	2"	21.83'	17.16		0957	
AW-1	S-10	2"	38.60'	21.48		1000	
AW-2	S-2	2"	35.20'	18.52		0927	
AW-3	S-3	2"	45'	17.50		0931	~~Dup must be from this well~~
AW-4	~~S-9~~	2"	35'	22.71		0955	Parked over well, ~~vault~~ Cannot access for Sampling
AW-5	S-4	4"	42.90'	23.15		0937	Needs 8" Box W/9/16" Bolts. Fold 12" Box Severly Damaged
AW-6	S-5	4"	34.20'	20.50		0940	
AW-7	S-6	2"	32.30'	22.97		0944	
AW-8	S-7	2"	39.20'	22.52		0948	
AW-9	S-8	2"	27.00	21.22		0951	
RW-1	S-12	4"	?	27.97	.02	1008	well pump Sample through dip tube QC-1 (S-13) From this well

FIELD INSTRUMENT CALIBRATION DATA

pH METER Hydac ICM 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1015
D.O. METER ~~Hydac~~ ICM ZERO d.O. SOLUTION _____ BARometric PRESSURE 760 TEMP _____ WEATHER Clear
CONDUCTIVITY METER ~~Hydac~~ ICM 10,000 X TURBIDITY METER _____ 5.0 NTU _____ OTHER _____
LEAK DETECTOR : _____ ALARM MODE _____ X NON ALARM MODE

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-2	12.91	2"	OK	Ø	Y (N)	3	1037	72.9	7.62	297 µS	6.3
Total Depth - Water Level=	x Well Vol. Factor=		x#vol. to Purge	PurgeVol.		7		71.3	7.47	310 µS	
34.10 - 12.91 = 21.19	x .16 = 3.39	X 3 =	10.17			10	1047	71.0	7.41	321 µS	6.3

Purge Method: ⊗Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
⊗ TPH-G/BTEX___
O TPH Diesel____
O TOG 5520 ___
TIME/SAMPLE ID
1050

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
AW-2	18.52	2"	OK	Ø	Y (N)	3	1101	73.1	7.77	279 µS	4.9
Total Depth - Water Level=	x Well Vol. Factor=		x#vol. to Purge	PurgeVol.		5		72.0	7.47	307 µS	
35.20 - 18.52 = 16.68	x .16 = 2.67	X 3 =	8.01			8.5	1110	71.4	7.47	317 µS	5.4

Purge Method: ⊗Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
⊗ TPH-G/BTEX___
O TPH Diesel____
O TOG 5520 ___
TIME/SAMPLE ID
1115

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. 10-025-017-001 Date: 9/30/97
Address 2220 98TH Ave. Day: M T W TH F
Contract No. H177113 City: Oakland
Station No. BP 11133 Sampler: CB

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-3	17.50	2"	Replaced	Ø	Y (N)	5	1122	72.8	7.79	972 µS	5.6
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			9		71.9	7.52	1005 µS	
45-17.50=27.50	x.16=4.40	x3=	13.20			14	1137	71.4	7.50	1010 µS	5.7
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

TIME/SAMPLE ID: 1140

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-5	23.15	4"	—	Ø	Y (N)	12	1155	70.9	7.79	427 µS	6.0
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			25		69.9	7.63	469 µS	
42.90-23.15=19.75	X.65=12.84	X3=	38.52			39	1221	69.8	7.52	475 µS	6.3
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments: Needs new well Box											

TIME/SAMPLE ID: 1230

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-6	20.50	4"	OK	Ø	Y (N)	9	1242	72.4	7.42	297 µS	6.0
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			18		71.3	7.30	320 µS	
34.20-20.50=13.70	X.65=8.91	X3=	26.73			27	1255	70.7	7.21	327 µS	6.0
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

TIME/SAMPLE ID: 1300

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-7	22.97	2"	OK	Ø	Y (N)	2	1402	73.0	7.61	266 µS	6.4
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			4		72.4	7.42	310 µS	
32.30-22.97=9.33	X.16=1.49	X3=	4.47			5	1410	71.9	7.37	317 µS	6.5
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

TIME/SAMPLE ID: 1415

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-8	22.52	2"	OK	Ø	Y (N)	3	1422	72.9	7.84	103 µS	6.4
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		71.4	7.70	108 µS	
39.20-22.52=16.68	X.16=2.67	X3=	8.01			9	1430	70.5	7.62	108 µS	6.7
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

TIME/SAMPLE ID: 1437

- O EPA 601
- Ø TPH-G/BTEX
- O TPH Diesel
- O TOG 5520

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. 10-025-017-001 | Date: 9/30/97
Address 2220 98TH Ave. | Day: M T W TH F
Contract No. H177113 | City: Oakland
Station No. BP 11133 | Sampler: LB

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-9	21.22	2"	OK	Ø	Y (N)	1	1445	73.4	7.77	900µs	6.5
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			2		72.1	7.49	917µs	
27.00 - 21.22 = 5.78	X .16 = .92	X3 = 2.76				3	1457	71.7	7.44	927µs	6.8

Purge Method: (O)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

TPH-G/BTEX (X) | TIME/SAMPLE ID: 1502

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-3	17.16	2"	OK	Ø	Y (N)	1	1517	72.9	7.50	472µs	6.3
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			2		71.0	7.30	501µs	
21.83 - 17.16 = 4.67	X .16 = .75	X3 = 2.25				3	1525	70.4	7.17	507µs	6.6

Purge Method: (O)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

TPH-G/BTEX (X) | TIME/SAMPLE ID: 1527

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-1	21.48	2"	Replaced	Ø	Y (N)	3	1539	72.7	7.03	722µs	6.7
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			6		71.4	6.92	740µs	
38.60 - 21.48 = 17.12	X .16 = 2.74	X3 = 8.22				9	1547	70.7	6.92	744µs	6.9

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

TPH-G/BTEX (X) | TIME/SAMPLE ID: 1552

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-1	14.40	2"	Replaced	Ø	Y (N)	3	1610	73.0	7.71	619µs	6.3
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		71.4	7.49	642µs	
34.00 - 14.40 = 19.60	X .16 = 3.14	X3 = 9.42				10	1622	70.6	7.40	651µs	6.7

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: Serviced PRS < .00 gal FP

TPH-G/BTEX (X) | TIME/SAMPLE ID: 1630

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
RW-1	27.97	4"	OK	.02	(Y) N		1645	71.0	7.42	829µs	7.0
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.								
Sample Thru Dip Tube w/System On											

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ (O)Sys Port
Comments:

TPH-G/BTEX (X) | TIME/SAMPLE ID: 1645

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

October 13, 1997

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

The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on October 2, 1997. The samples were assigned to Certificate of Analysis No.(s) 9710095 and analyzed for all parameters as listed on the chain of custody.

The following exceptions were noted for this data package:

Your sample, "S-7" (SPL ID# 9710095-07), was randomly selected for the use in SPL's quality control program for the BTEX (8020A) analysis. Due to the amount of MTBE found in the sample, the Matrix Spike, the Matrix Spike Duplicate, and the Relative Percent Difference (%RPD) recoveries could not be calculated. There were no other analytical problems encountered with this group of samples and all the Laboratory Control Sample values were within acceptance limits.

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

Brett VanDelinder
Project Manager

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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number 97-10-095

Approved for Release by:

Brett VanDelinder, Project Manager

10-13-97
Date:

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. H9-9710095-01

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

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	100		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: AA			
Date: 10/05/97			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	80		
California LUFT Manual for Gasoline			
Analyzed by: AA			
Date: 10/05/97 09:18:00			

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. H9-9710095-02

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	860	100 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	87		
Method 8020A***			
Analyzed by: AA			
Date: 10/06/97			
Gasoline Range Organics	ND	0.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	77		
California LUFT Manual for Gasoline			
Analyzed by: AA			
Date: 10/06/97 06:04:00			

(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. H9-9710095-03

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	810	50 P	µg/L
Benzene	ND	2.5 P	µg/L
Toluene	ND	5.0 P	µg/L
Ethylbenzene	ND	5.0 P	µg/L
Total Xylene	ND	5.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	87		
Method 8020A***			
Analyzed by: AA			
Date: 10/06/97			
Gasoline Range Organics	ND	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	80		
California LUFT Manual for Gasoline			
Analyzed by: AA			
Date: 10/06/97 06:37:00			

(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. H9-9710095-04

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	1300	50 P	µg/L
Benzene	ND	2.5 P	µg/L
Toluene	ND	5.0 P	µg/L
Ethylbenzene	ND	5.0 P	µg/L
Total Xylene	ND	5.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	87		
Method 8020A***			
Analyzed by: RL			
Date: 10/10/97			
Gasoline Range Organics	ND	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	113		
4-Bromofluorobenzene	73		
California LUFT Manual for Gasoline			
Analyzed by: RL			
Date: 10/10/97 12:11:00			

(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. H9-9710095-05

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

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	93		
4-Bromofluorobenzene	80		
Method 8020A***			
Analyzed by: VHZ			
Date: 10/10/97			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	107		
4-Bromofluorobenzene	77		
California LUFT Manual for Gasoline			
Analyzed by: VHZ			
Date: 10/10/97 12:34:00			

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. H9-9710095-06

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	1100	50 P	µg/L
Benzene	ND	2.5 P	µg/L
Toluene	ND	5.0 P	µg/L
Ethylbenzene	ND	5.0 P	µg/L
Total Xylene	ND	5.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	80		
Method 8020A***			
Analyzed by: RL			
Date: 10/10/97			
Gasoline Range Organics	ND	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	120		
4-Bromofluorobenzene	80		
California LUFT Manual for Gasoline			
Analyzed by: RL			
Date: 10/10/97 12:35:00			

(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. H9-9710095-07

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	820	100 P	µg/L
Benzene	ND	5 P	µg/L
Toluene	ND	10 P	µg/L
Ethylbenzene	ND	10 P	µg/L
Total Xylene	ND	10 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	73		
Method 8020A***			
Analyzed by: VHZ			
Date: 10/10/97			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	73		
California LUFT Manual for Gasoline			
Analyzed by: AA			
Date: 10/07/97 12:44:00			

(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. H9-9710095-08

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

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	93		
4-Bromofluorobenzene	77		
Method 8020A***			
Analyzed by: VHZ			
Date: 10/10/97			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	73		
California LUFT Manual for Gasoline			
Analyzed by: AA			
Date: 10/07/97 01:18:00			

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. H9-9710095-09

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	510	100 P	µg/L
Benzene	13000	25 P	µg/L
Toluene	2400	10 P	µg/L
Ethylbenzene	870	10 P	µg/L
Total Xylene	3100	10 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	200MI		
4-Bromofluorobenzene	133		
Method 8020A***			
Analyzed by: RL			
Date: 10/10/97			
Gasoline Range Organics	40	2.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	127		
4-Bromofluorobenzene	107		
California LUFT Manual for Gasoline			
Analyzed by: RL			
Date: 10/10/97 01:23:00			

(P) - Practical Quantitation Limit 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.

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

Certificate of Analysis No. H9-9710095-10

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	560	100 P	µg/L
Benzene	9200	10 P	µg/L
Toluene	17	10 P	µg/L
Ethylbenzene	1400	10 P	µg/L
Total Xylene	130	10 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	157MI		
4-Bromofluorobenzene	120		
Method 8020A***			
Analyzed by: RL			
Date: 10/10/97			
Gasoline Range Organics	29	1.0 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	148MI		
4-Bromofluorobenzene	142		
California LUFT Manual for Gasoline			
Analyzed by: RL			
Date: 10/10/97 12:59:00			

(P) - Practical Quantitation Limit 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.
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HOUSTON LABORATORY
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HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710095-11

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	2000	500 P	µg/L
Benzene	130	25 P	µg/L
Toluene	1100	50 P	µg/L
Ethylbenzene	2700	50 P	µg/L
Total Xylene	14600	50 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	80		
Method 8020A***			
Analyzed by: AA			
Date: 10/07/97			
Gasoline Range Organics	61	2.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	67		
California LUFT Manual for Gasoline			
Analyzed by: AA			
Date: 10/07/97 04:38:00			

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

Certificate of Analysis No. H9-9710095-12

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	1100	1000 P	µg/L
Benzene	13000	50 P	µg/L
Toluene	22000	100 P	µg/L
Ethylbenzene	2000	100 P	µg/L
Total Xylene	12500	100 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	73		
Method 8020A***			
Analyzed by: AA			
Date: 10/07/97			
Gasoline Range Organics	110	5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	70		
California LUFT Manual for Gasoline			
Analyzed by: AA			
Date: 10/07/97 05:11:00			

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

Certificate of Analysis No. H9-9710095-13

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

P.O.# H177113,COC#076973
DATE: 10/10/97

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

PROJECT NO: 10-025-17-1
MATRIX: WATER
DATE SAMPLED: 09/30/97
DATE RECEIVED: 10/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	1200	1000 P	µg/L
Benzene	17000	50 P	µg/L
Toluene	29000	100 P	µg/L
Ethylbenzene	2500	100 P	µg/L
Total Xylene	15900	100 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	77		
Method 8020A***			
Analyzed by: AA			
Date: 10/07/97			
Gasoline Range Organics	140	5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	70		
California LUFT Manual for Gasoline			
Analyzed by: AA			
Date: 10/07/97 05:45:00			

(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.
SPL California License # 1903

QUALITY CONTROL

DOCUMENTATION

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

SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_N971005120300

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	43	86.0	63 - 120
Benzene	ND	50	45	90.0	62 - 121
Toluene	ND	50	47	94.0	66 - 136
EthylBenzene	ND	50	45	90.0	70 - 136
O Xylene	ND	50	46	92.0	74 - 134
M & P Xylene	ND	100	92	92.0	77 - 140

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	23	115	23	115	0	20	39 - 150
BENZENE	ND	20	21	105	20	100	4.88	25	39 - 150
TOLUENE	ND	20	21	105	20	100	4.88	26	56 - 134
ETHYLBENZENE	ND	20	21	105	20	100	4.88	38	61 - 128
O XYLENE	ND	20	21	105	19	95.0	10.0	29	40 - 130
M & P XYLENE	ND	40	37	92.5	33	82.5	11.4	20	43 - 152

Analyst: AA
Sequence Date: 10/05/97
SPL ID of sample spiked: 9709E67-09A
Sample File ID: N_J7146.TX0
Method Blank File ID:
Blank Spike File ID: N_J7139.TX0
Matrix Spike File ID: N_J7140.TX0
Matrix Spike Duplicate File ID: N_J7141.TX0

* = Values Outside QC Range. « = 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):

9709E67-04A 9709E67-02A 9709C09-07A 9709C87-08A
9709C87-09A 9710192-01A 9709E67-08A 9709E69-03A
9709E69-02A 9710095-02A 9710095-03A 9709E67-09A
9710095-01A 9709E67-06A 9709E67-05A

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

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_U971010050100

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	63 - 120
Benzene	ND	50	54	108	62 - 121
Toluene	ND	50	55	110	66 - 136
EthylBenzene	ND	50	55	110	70 - 136
O Xylene	ND	50	57	114	74 - 134
M & P Xylene	ND	100	120	120	77 - 140

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	18	90.0	18	90.0	0	20	39 - 150
BENZENE	ND	20	18	90.0	17	85.0	5.71	25	39 - 150
TOLUENE	ND	20	18	90.5	17	85.5	5.68	26	56 - 134
ETHYLBENZENE	ND	20	17	85.0	17	85.0	0	38	61 - 128
O XYLENE	ND	20	18	91.0	18	91.0	0	29	40 - 130
M & P XYLENE	ND	40	36	91.0	36	91.0	0	20	43 - 152

Analyst: RL
Sequence Date: 10/10/97
SPL ID of sample spiked: 9710271-01A
Sample File ID: U_J7407.TX0
Method Blank File ID:
Blank Spike File ID: U_J7395.TX0
Matrix Spike File ID: U_J7409.TX0
Matrix Spike Duplicate File ID: U_J7410.TX0

* = Values Outside QC Range. « = 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): 9710271-04A 9710271-03A 9710095-04A 9710095-06A 9710095-10A 9710095-09A 9710224-13A

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HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_U971009014700

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	42	84.0	63 - 120
Benzene	ND	50	46	92.0	62 - 121
Toluene	ND	50	46	92.0	66 - 136
EthylBenzene	ND	50	46	92.0	70 - 136
O Xylene	ND	50	48	96.0	74 - 134
M & P Xylene	ND	100	97	97.0	77 - 140

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	19	95.0	22	110	14.6	20	39 - 150
BENZENE	ND	20	16	80.0	17	85.0	6.06	25	39 - 150
TOLUENE	ND	20	16	80.0	17	85.0	6.06	26	56 - 134
ETHYLBENZENE	ND	20	15	75.0	16	80.0	6.45	38	61 - 128
O XYLENE	ND	20	18	90.0	17	85.0	5.71	29	40 - 130
M & P XYLENE	ND	40	33	82.5	31	77.5	6.25	20	43 - 152

Analyst: VHZ
Sequence Date: 10/09/97
SPL ID of sample spiked: 9710096-06A
Sample File ID: U_J7370.TX0
Method Blank File ID:
Blank Spike File ID: U_J7362.TX0
Matrix Spike File ID: U_J7365.TX0
Matrix Spike Duplicate File ID: U_J7366.TX0

* = Values Outside QC Range. « = 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):

9710224-06A 9710224-10A 9710224-12A 9710224-16A
9710224-15A 9710095-05A 9710095-08A 9710095-07A
9710095-09A 9710095-10A 9710096-05A 9710096-07A
9710096-08A 9710096-06A 9710096-04A 9710224-11A
9710224-03A

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

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020***

Matrix: Aqueous
Units: µg/L

Batch Id: HP_N971006081700

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	39	78.0	20 - 110
Benzene	ND	50	43	86.0	62 - 121
Toluene	ND	50	44	88.0	66 - 136
Ethyl_Benzene	ND	50	44	88.0	70 - 136
O-Xylene	ND	50	43	86.0	74 - 134
M and P Xylene	ND	100	88	88.0	77 - 140

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	820	20	820	NC	820	NC	NC	20	39 - 150
BENZENE	ND	20	21	105	20	100	4.88	25	39 - 150
TOLUENE	ND	20	21	105	20	100	4.88	26	56 - 134
ETHYL_BENZENE	ND	20	21	105	20	100	4.88	38	61 - 128
O-XYLENE	ND	20	21	105	20	100	4.88	29	40 - 130
M AND P XYLENE	ND	40	43	108	40	100	7.69	20	43 - 152

Analyst: AA
Sequence Date: 10/06/97
SPL ID of sample spiked: 9710095-07A
Sample File ID: N_J7191.TX0
Method Blank File ID:
Blank Spike File ID: N_J7182.TX0
Matrix Spike File ID: N_J7184.TX0
Matrix Spike Duplicate File ID: N_J7185.TX0

* = Values Outside QC Range. « = 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): 9710095-13A 9709E69-01A 9709C36-01B 9709C36-02B 9710144-01A 9710144-03A 9710095-07A 9710096-03A 9710095-11A 9710095-12A

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HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL BATCH QUALITY CONTROL REPORT **
Modified 8015 - Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_N971005123700

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 Petr. Hydrocarbon	ND	1.0	0.95	95.0	56 - 130

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 PETR. HYDROCARBON	ND	0.9	1.0	111	1.0	111	0	22	37 - 169

Analyst: AA
Sequence Date: 10/05/97
SPL ID of sample spiked: 9710095-01A
Sample File ID: NNJ7147.TX0
Method Blank File ID:
Blank Spike File ID: NNJ7142.TX0
Matrix Spike File ID: NNJ7143.TX0
Matrix Spike Duplicate File ID: NNJ7144.TX0

* = Values Outside QC Range. « = 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 (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (3rd Q '95)

SAMPLES IN BATCH(SPL ID):

9709E67-05A 9709E67-04A 9709E67-02A 9709C09-07A
9709C90-03A 9709C90-13A 9709C84-02A 9709E67-08A
9709E69-03A 9709E69-02A 9710095-02A 9710095-03A
9709E67-09A 9710095-01A 9709C90-04A 9709E67-06A

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

** SPL BATCH QUALITY CONTROL REPORT **
California LUFT Manual for Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_U971010105800

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	0.94	94.0	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	290	900	1100	90.0	1100	90.0	0	36	36 - 160

Analyst: RL
Sequence Date: 10/10/97
SPL ID of sample spiked: 9710271-04A
Sample File ID: UUJ7408.TX0
Method Blank File ID:
Blank Spike File ID: UUJ7396.TX0
Matrix Spike File ID: UUJ7411.TX0
Matrix Spike Duplicate File ID: UUJ7412.TX0

* = Values Outside QC Range. « = 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): 9710271-04A 9710271-03A 9710095-04A 9710095-06A 9710095-10A 9710095-09A 9710096-01A 9710271-01A

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

** SPL BATCH QUALITY CONTROL REPORT **
California LUFT Manual for Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_U971009021100

L A B O R A T O R Y C O N T R O L S A M P L E

S P I K E C O M P O U N D S	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	0.87	87.0	64 - 131

M A T R I X S P I K E S

S P I K E C O M P O U N D S	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	1.2	133	1.2	133	0	36	36 - 160

Analyst: RL
Sequence Date: 10/09/97
SPL ID of sample spiked: 9710096-04A
Sample File ID: UUJ7371.TX0
Method Blank File ID:
Blank Spike File ID: UUJ7363.TX0
Matrix Spike File ID: UUJ7399.TX0
Matrix Spike Duplicate File ID: UUJ7400.TX0

* = Values Outside QC Range. « = 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): 9710095-05A 9710096-05A 9710096-07A 9710096-08A 9710096-06A 9710096-04A

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

** SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Matrix: Aqueous

Batch Id: HP_N971006103000

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	0.93	93.0	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	0.75	83.3	0.80	88.9	6.50	36	36 - 160

Analyst: AA

Sequence Date: 10/06/97

SPL ID of sample spiked: 9710095-08A

Sample File ID: NNJ7192.TX0

Method Blank File ID:

Blank Spike File ID: NNJ7186.TX0

Matrix Spike File ID: NNJ7188.TX0

Matrix Spike Duplicate File ID: NNJ7189.TX0

* = Values Outside QC Range. « = 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):

9710095-11A 9710095-12A 9710095-13A 9709E69-01A
9709C36-01B 9709C36-02B 9710144-01A 9710144-03A
9710144-02A 9710095-07A 9710095-08A 9710096-02A
9710096-03A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 10/2/97	Time: 1330

SPL Sample ID: 9710095

#	Item		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:		4 C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	3848471502	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name: [signature]	Date: 10/2/97

9710095

CHAIN OF CUSTODY

No. 076973 Page 1 of 1

CONSULTANT'S NAME: Alisto Engineering	ADDRESS: 1575 Treat Blvd #201	CITY: W.C.	STATE: Ca ZIP CODE: 94598
BP SITE NUMBER: 11133	BP CORNER ADDRESS/CITY: Oakland, Ca		CONSULTANT PROJECT NUMBER: 10-025-17-1
CONSULTANT PROJECT MANAGER: Brady Nagle	PHONE NUMBER: (510) 295-1650	FAX NUMBER: 295-1823	CONSULTANT CONTRACT NUMBER: H177713
BP CONTACT: Scott Hooton	BP ADDRESS: Renton	PHONE NUMBER: —	FAX NO.: —
LAB CONTACT: SPL	LABORATORY ADDRESS: Texas	PHONE NUMBER: —	FAX NO.: —
SAMPLED BY (Please Print Name): Larry Brownewicz	SAMPLED BY (Signature):	SHIPMENT DATE:	SHIPMENT METHOD: FedEX

TAT: ☐ 24 Hours ☐ 48 Hours ☐ 1 Week ☒ Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER: 38484 71502

SAMPLE DESCRIPTION	COLLECTION DATE / TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH EPA 8015	BTEX EPA 8020	COMMENTS
S-1	9/30/97	W	3	HCl		X	X	
S-2								
S-3								
S-4								
S-5								
S-6								
S-7								
S-8								
S-9								
S-10								
S-11								
S-12								Intact ROI 4°C

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	10/1/97	0900	Patricia Yelton	10/1/97	0905
Patricia Yelton	10/1/97	1500	Ruben Stl	10/2/97	1000

ADDITIONAL COMMENTS

CLV-16722
PKG/50

Distribution: White - Original (with Data)
Yellow - BP
Pink - Lab
Blue - Consultant Field Staff

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

BP Site Number:	11133
ERM Contact:	H177113
Sampling Date:	09/30/97
Matrix Description:	Water
Date Final Report Received:	10/17/97
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?	V	___	___
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~~	below	___
9.	Are MS/MSD acceptable using laboratory criteria?	~~See~~	below	___
10.	Are LCS results acceptable using laboratory criteria?	✓	___	___

Notes: Surrogate % recovery for 5-9 and 5-10 during BTEX/MTBE analysis (1,4-Difluorobenzene) outside of QC limits due to matrix interference. MS/MSD recovery and relative % difference not calculated due to sample exceeding spike by factor of 4 or more.

Data Validation Completed by: Brady Nagle

(signature): Brady Nagle

Date: 12/1/97