BP OIL

ENVIRONMENTAL PROTECTION
97 JUL 16 PM 3:09

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

July 10, 1997

Ms Juliet Shin
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda CA 94502-6577

RE: BP OIL FACILITY #11117
7210 Bancroft Avenue
Oakland, CA ~~94621~~ 94605

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED JUNE 9, 1997** for the above referenced facility. Plans for the following quarter include additional groundwater monitoring.As you know, we have let a contract for off-site assessment at this site. You should expect to receive a copy in the near future.

On a final note, please note that BP and Mobil Oil Corporation have an agreement to cooperate in the filing for reimbursement applications to the UST Cleanup Fund. If you become aware of any notices or proposals to withdraw a Letter of Commitment for this site, please give me a call to let me know immediately.

If you should have any questions regarding this site, I may be reached at (425) 251-0689.

Sincerely,

Scott T. Hooton
Environmental Remediation Management

STH:sb msword\ERM11117

cc: Mr. Ed So, CRWQCB, San Francisco Bay Region, 2101 Webster Street, Suite 500 Oakland CA 94612 (without attachment)

Mr. Brady Nagle, Alisto, 1575 Treat Blvd, Ste 201, Walnut Creek,CA 94596

Mr. Robert K. Barth, Bancroft Oakland Investment Company, 9454 Wilshire Blvd, Ste 901 Beverly Hills CA 98212

Ms. Tina Berry,TOSCO, 2000 Crow Canyon Place, Suite 400, San Ramon, CA 94583

Mr. Andrew Lehane, Pacific Environmental, 2025 Gateway Pl #440, San Jose Ca 95110

Site File

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11117
7210 Bancroft Avenue
Oakland, California

Project No. 10-018-05-003

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

June 9, 1997

Ken Simas
Project Manager

Al Sevilla, P.E.
Principal

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11117
7210 Bancroft Avenue
Oakland, California

Project No. 10-018-05-003

June 9, 1997

INTRODUCTION

This report presents the results and findings of the April 28, 1997 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11117, 7210 Bancroft 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 relative 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 passive product recovery canister has been installed in Monitoring Well MW-2 to recover liquid-phase product. Product thicknesses for this and previous monitoring events are presented in Table 1. The volume of free product recovered from the wells 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. 11117
7210 BANCROFT AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	Organic Lead (ug/l)	DO (ppm)	LAB
MW-1	01/05/92	49.81	33.16	---	16.65	57000	50000	2400	1000	1100	3100	---	ND	---	---
MW-1	01/10/92	49.81	33.16	---	16.65	---	---	---	---	---	---	---	---	---	---
MW-1	06/05/92	49.81	29.01	---	20.80	31000	---	2800	2100	800	2300	---	---	---	---
MW-1	07/24/92	49.80	29.45	---	20.35	---	---	---	---	---	---	---	---	---	---
MW-1	07/27/92	49.80	29.45	---	20.35	---	---	---	---	---	---	---	---	---	---
MW-1	09/15/92	49.80	30.53	---	19.27	40000	1200 (c)	3400	3000	1300	3400	---	---	---	ANA
QC-1 (d)	09/15/92	---	---	---	---	36000	---	3800	3400	1400	3800	---	---	---	ANA
MW-1	12/15/92	49.80	31.26	---	18.54	27000	1100 (c)	1700	580	700	1900	---	---	---	ANA
QC-1 (d)	12/15/92	---	---	---	---	22000	---	1500	440	510	1300	---	---	---	ANA
MW-1	03/15/93	49.80	24.80	---	25.00	17000	580	1700	1200	590	1800	---	---	---	PACE
QC-1 (d)	03/15/93	---	---	---	---	15000	---	1100	860	440	1400	---	---	---	PACE
MW-1	06/07/93	49.80	25.01	---	24.79	750	100	0.8	0.8	ND<0.5	ND<0.5	---	---	---	PACE
QC-1 (d)	06/07/93	---	---	---	---	720	---	0.7	0.7	ND<0.5	ND<0.5	---	---	---	PACE
MW-1	09/23/93	49.80	28.70	---	21.10	---	---	---	---	---	---	---	---	---	---
MW-1	09/23/93	---	---	---	---	40000	770	4000	500	920	3000	---	---	---	PACE
MW-1	12/27/93	49.80	28.66	---	21.14	27000	---	2000	400	940	2600	---	---	---	PACE
QC-1 (d)	12/27/93	---	---	---	---	21000	---	1700	380	830	2400	---	---	---	PACE
MW-1	04/05/94	49.80	26.37	---	23.43	27000	---	3400	930	950	2900	---	---	---	PACE
QC-1 (d)	04/05/94	---	---	---	---	29000	---	3700	1000	1000	3100	---	---	1.3	PACE
MW-1	07/22/94	49.80	26.54	---	23.26	1700	---	220	2.3	2.0	3.4	---	---	2.0	PACE
MW-1	10/13/94	49.80	27.46	---	22.34	1200	---	250	21	ND<0.5	3.2	---	---	2.6	PACE
MW-1	01/25/95	49.80	20.96	---	28.84	1000	---	420	8	13	4	---	---	---	ATI
MW-1	04/19/95	49.80	19.59	---	30.21	5200	---	420	51	230	340	---	---	6.0	ATI
MW-1	07/05/95	49.80	19.61	---	30.19	320	---	4.2	ND<0.50	ND<0.50	ND<1.0	---	---	4.6	ATI
MW-1	10/05/95	49.80	24.40	---	25.40	5800	---	1000	40	31	180	7800	---	2.3	ATI
MW-1	01/12/96	49.80	25.44	---	24.36	370	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	3.7	ATI
MW-1	04/22/96	49.80	18.02	---	31.78	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	3.9	SPL
MW-1	07/02/96	49.80	19.72	---	30.08	---	---	---	---	---	---	---	---	---	---
MW-1	07/03/96	49.80	---	---	---	ND<250	---	ND<2.5	ND<5	ND<5	ND<5	ND<50	---	3.6	SPL
MW-1	11/08/96	49.80	19.98	---	29.82	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.3	SPL
MW-1	01/03/97	49.80	19.49	---	30.31	ND<50	---	ND<0.5	14	ND<1.0	ND<1.0	ND<10	---	4.6	SPL
MW-1	04/28/97	49.80	20.20	---	29.60	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	3.9	SPL
MW-2	01/05/92	51.07	DRY	---	DRY	---	---	---	---	---	---	---	---	---	---
MW-2	01/10/92	51.06	DRY	---	DRY	---	---	---	---	---	---	---	---	---	---
MW-2	06/05/92	51.06	30.05	---	21.01	11000	---	2000	180	490	1900	---	---	---	---
MW-2	07/24/92	51.07	30.72	---	20.35	---	---	---	---	---	---	---	---	---	---
MW-2	07/27/92	51.07	30.52	---	20.55	---	---	---	---	---	---	---	---	---	---
MW-2	09/15/92	51.07	31.56	---	19.51	75000	3200 (c)	2000	6500	2300	13000	---	---	---	ANA
MW-2	12/15/92	51.07	32.40	---	18.67	34000	1600 (c)	6200	8900	2000	7900	---	---	---	ANA
MW-2	03/15/93	51.07	26.14	---	24.93	150000	8400	12000	18000	3200	22000	---	---	---	PACE
MW-2 (e)	06/07/93	51.07	26.38	SHEEN	24.69	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	09/23/93	51.07	31.43	1.92	21.08	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	12/27/93	51.07	34.07	1.07	17.80	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	04/05/94	51.07	30.44	3.30	23.11	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	07/22/94	51.07	28.51	0.80	23.16	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	10/13/94	51.07	29.33	0.70	22.27	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	01/25/95	51.07	25.55	4.25	28.71	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	04/19/95	51.07	19.78	0.12	31.38	---	---	---	---	---	---	---	---	---	---
MW-2	07/05/95	51.07	20.88	0.09	30.26	140000	---	14000	30000	3500	26000	---	---	---	ATI
MW-2 (e)	10/05/95	51.07	24.68	0.10	26.47	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	01/12/96	51.07	25.72	0.06	25.40	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	04/22/96	51.07	19.33	0.08	31.80	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	07/02/96	51.07	20.01	0.04	31.09	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	11/08/96	51.07	20.28	0.01	30.80	---	---	---	---	---	---	---	---	---	---
MW-2 (e)	01/03/97	51.07	19.87	0.02	31.22	---	---	---	---	---	---	---	---	---	---
MW-2	04/28/97	51.07	20.59	0.01	30.49	560000	---	1200	1300	290	2310	6100	---	3.9	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11117
7210 BANCROFT AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	Organic Lead (ug/l)	DO (ppm)	LAB
MW-3	01/05/92	49.95	33.69	---	16.26	7400	4000	790	23	210	40	---	ND	---	---
MW-3	01/10/92	50.00	33.74	---	16.26	---	---	---	---	---	---	---	---	---	---
MW-3	06/05/92	50.00	29.65	---	20.35	2000	---	130	5.3	93	20	---	---	---	---
MW-3	07/24/92	49.95	30.14	---	19.81	---	---	---	---	---	---	---	---	---	---
MW-3	07/27/92	49.95	30.14	---	19.81	---	---	---	---	---	---	---	---	---	---
MW-3	09/15/92	49.95	31.07	---	18.88	450	ND<50	55	3.1	34	7.1	---	---	---	ANA
MW-3	12/15/92	49.95	31.93	---	18.02	12000	710 (c)	940	ND<50	310	120	---	---	---	ANA
MW-3	03/15/93	49.95	25.71	---	24.24	ND<50	60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-3	06/07/93	49.95	25.80	---	24.15	150	ND<50	3.6	ND<0.5	0.9	1.3	---	---	---	PACE
MW-3	09/23/93	49.95	29.18	---	20.77	---	---	---	---	---	---	---	---	---	---
MW-3	09/24/93	---	---	---	---	160	ND<50	8.4	ND<0.5	3.7	1.3	---	---	---	PACE
MW-3	12/27/93	49.95	29.25	---	20.70	9400	---	1100	48	530	120	---	---	---	PACE
MW-3	04/05/94	49.95	26.84	---	23.11	7000	---	860	19	330	52	---	---	2.0	PACE
MW-3	07/22/94	49.95	26.90	---	23.11	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	2.1	PACE
MW-3	10/13/94	49.95	27.83	---	22.12	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	2.6	PACE
MW-3	01/25/95	49.95	21.65	---	28.30	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	---	ATI
MW-3	04/19/95	49.95	19.33	---	30.62	2400	---	170	8.0	130	27	---	---	5.0	ATI
MW-3	07/05/95	49.95	20.27	---	29.68	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	4.4	ATI
MW-3	10/05/95	49.95	23.73	---	26.22	2300	---	210	3.1	10	5.1	2400	---	4.2	ATI
MW-3	01/12/96	49.95	24.84	---	25.11	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	4.1	ATI
MW-3	04/22/96	49.95	18.60	---	31.35	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	4.4	SPL
MW-3	07/02/96	49.95	18.88	---	31.07	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	4.2	SPL
MW-3	11/08/96	49.95	19.14	---	30.81	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.4	SPL
MW-3	01/03/97	49.95	18.72	---	31.23	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.6	SPL
MW-3	04/28/97	49.95	19.38	---	30.57	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.2	SPL
MW-4	07/24/92	50.76	30.02	---	20.74	42000	---	3200	3600	1400	4100	---	---	---	---
MW-4	07/27/92	50.76	30.02	---	20.74	---	---	---	---	---	---	---	---	---	---
MW-4	09/15/92	50.76	31.14	---	19.62	55000	1700 (c)	7600	13000	2800	9500	---	---	---	ANA
MW-4	12/15/92	50.76	31.98	---	18.78	36000	2200 (c)	3700	4700	1200	4000	---	---	---	ANA
MW-4	03/15/93	50.76	25.34	---	25.42	69000	1200	7600	15000	2500	11000	---	---	---	PACE
MW-4	06/07/93	50.76	25.67	---	25.09	73000	2500	10000	19000	3400	14000	---	---	---	PACE
MW-4	09/23/93	50.76	29.37	---	21.39	---	---	---	---	---	---	---	---	---	---
MW-4	09/24/93	---	---	---	---	68000	5700	11000	2100	8600	990	---	---	---	PACE
QC-1 (d)	09/24/93	---	---	---	---	59000	---	5300	10000	2200	8400	---	---	---	PACE
MW-4	12/27/93	50.76	29.40	---	21.36	32000	---	2500	4400	1300	4400	---	---	---	PACE
MW-4	04/05/94	50.76	27.09	---	23.67	64000	---	6500	14000	1900	9600	---	---	1.4	PACE
MW-4	07/22/94	50.76	27.33	---	23.43	85000	---	10000	20000	3200	13000	---	---	0.8	PACE
QC-1 (d)	07/22/94	---	---	---	---	85000	---	11000	21000	3300	14000	---	---	---	PACE
MW-4	10/13/94	50.76	28.25	---	22.51	51000	---	7100	13000	2100	8900	---	---	2.9	PACE
QC-1 (d)	10/13/94	---	---	---	---	51000	---	7400	13000	2100	9100	---	---	---	PACE
MW-4	01/25/95	50.76	21.85	---	28.91	26000	---	3600	9600	1200	6400	---	---	---	ATI
QC-1 (d)	01/25/95	---	---	---	---	28000	---	4200	12000	1500	7800	---	---	---	ATI
MW-4	04/19/95	50.76	19.44	---	31.32	89000	---	12000	24000	3500	18000	---	---	5.1	ATI
QC-1 (d)	04/19/95	---	---	---	---	100000	---	12000	26000	3800	21000	---	---	---	ATI
MW-4	07/05/95	50.76	20.52	---	30.24	130000	---	13000	29000	3300	25000	---	---	4.3	ATI
MW-4	10/05/95	50.76	24.23	---	26.53	110000	---	10000	23000	3600	17000	34000	---	2.1	ATI
MW-4	01/12/96	50.76	25.34	---	25.42	46000	---	3500	8300	1100	8000	3000	---	3.3	ATI
QC-1 (d)	01/12/96	---	---	---	---	40000	---	3500	9000	1200	8700	4300	---	---	ATI
MW-4	04/22/96	50.76	19.13	---	31.63	40000	---	5100	9600	980	11800	29000	---	3.2	SPL
QC-1 (d)	04/22/96	---	---	---	---	61000	---	8300	16000	1600	15200	36000	---	---	SPL
MW-4	07/02/96	50.76	20.67	---	30.09	74000	---	9800	21000	2100	16600	41000	---	3.4	SPL
QC-1 (d)	07/02/96	---	---	---	---	78000	---	9800	21000	1900	15300	42000	---	---	SPL
MW-4	11/08/96	50.76	20.95	---	29.81	100000	---	7900	16000	2500	13700	37000	---	3.7	SPL
QC-1 (d)	11/08/96	---	---	---	---	110000	---	9100	20000	3000	15400	39000	---	---	SPL
MW-4	01/03/97	50.76	20.54	---	30.22	99000	---	17000	30000	4300	22700	79000	---	4.2	SPL
QC-1 (d)	01/03/97	---	---	---	---	66000	---	12000	19000	2900	15000	69000	---	---	SPL
MW-4	04/28/97	50.76	21.28	---	29.48	130000	---	12000	28000	3800	21000	37000	---	3.9	SPL
QC-1 (d)	04/28/97	---	---	---	---	110000	---	11000	26000	3200	18200	34000	---	---	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11117
7210 BANCROFT AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	Organic Lead (ug/l)	DO (ppm)	LAB
MW-6	07/24/92	50.32	30.63	---	19.69	ND	---	1.6	ND	ND	ND	---	---	---	---
MW-6	07/27/92	50.32	30.63	---	19.69	---	---	---	---	---	---	---	---	---	---
MW-6	09/15/92	50.32	31.52	---	18.80	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	ANA
MW-6	12/15/92	50.32	32.42	---	17.90	58	ND<50	1.3	ND<0.5	ND<0.5	ND<0.5	---	---	---	ANA
MW-6	03/15/93	50.32	26.29	---	24.03	ND<50	ND<50	ND<0.5	0.6	ND<0.5	0.7	---	---	---	PACE
MW-6	06/07/93	50.32	26.33	---	23.99	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	1.5	---	---	---	PACE
MW-6	09/23/93	50.32	29.64	---	20.68	---	---	---	---	---	---	---	---	---	---
MW-6	09/24/93	---	---	---	---	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-6	12/27/93	50.32	29.75	---	20.57	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-6	04/05/94	50.32	27.26	---	23.06	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	1.7	PACE
MW-6	07/22/94	50.32	27.34	---	22.98	350	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	4.5	PACE
MW-6 (f)	10/13/94	50.32	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-6	01/25/95	50.32	22.16	---	28.16	240	---	6	ND<0.5	ND<0.5	ND<1	---	---	---	ATI
MW-6 (f)	04/19/95	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-6	07/05/95	50.32	20.80	---	29.52	180	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	4.9	ATI
MW-6	10/05/95	50.32	24.20	---	26.12	860	---	ND<5.0	ND<5.0	ND<5.0	ND<10	3600	---	2.8	ATI
MW-6	01/12/96	50.32	25.30	---	25.02	860	---	ND<5.0	ND<5.0	ND<5.0	ND<10	2800	---	4.2	ATI
MW-6	04/22/96	50.32	19.13	---	31.19	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	470	---	4.3	SPL
MW-6	07/02/96	50.32	20.66	---	29.66	100	---	ND<0.5	ND<1	ND<1	ND<1	1100	---	4.2	SPL
MW-6	11/08/96	50.32	20.98	---	29.34	1100	---	ND<5	ND<10	ND<10	ND<10	1500	---	4.3	SPL
MW-6	01/03/97	50.32	20.53	---	29.79	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	450	---	4.5	SPL
MW-6	04/28/97	50.32	21.25	---	29.07	1400	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	3500	---	4.4	SPL
MW-7	01/25/95	51.4	21.67	---	29.73	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	7.0	ATI
MW-7	04/19/95	51.4	25.27	---	26.13	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	5.0	ATI
MW-7	07/05/95	51.4	24.63	---	26.77	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	4.2	ATI
MW-7	10/05/95	51.4	28.21	---	23.19	83	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	77	---	4.5	ATI
MW-7	01/12/96	51.4	29.29	---	22.11	63	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	120	---	4.8	ATI
MW-7	04/22/96	51.4	23.11	---	28.29	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	13	---	4.8	SPL
MW-7	07/02/96	51.4	23.56	---	27.84	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	4.8	SPL
MW-7	11/08/96	51.4	20.06	---	31.34	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	5.1	SPL
MW-7	01/03/97	51.4	23.42	---	27.98	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.7	SPL
MW-7	04/28/97	51.4	24.12	---	27.28	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	3.9	SPL
MW-8	01/25/95	50.88	31.59	---	19.29	54	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	7.1	ATI
MW-8	04/19/95	50.88	19.18	---	31.70	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	5.1	ATI
MW-8	07/05/95	50.88	19.03	---	31.85	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	4.5	ATI
MW-8	10/05/95	50.88	24.40	---	26.48	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	4.1	ATI
MW-8	01/12/96	50.88	25.51	---	25.37	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	4.6	ATI
MW-8	04/22/96	50.88	18.00	---	32.88	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	4.8	SPL
MW-8	07/02/96	50.88	19.83	---	31.05	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	4.5	SPL
MW-8	11/08/96	50.88	20.09	---	30.79	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.7	SPL
MW-8	01/03/97	50.88	19.72	---	31.16	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.4	SPL
MW-8	04/28/97	50.88	20.44	---	30.44	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.1	SPL
MW-9	01/25/95	51.05	22.32	---	28.73	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	7.4	ATI
MW-9	04/19/95	51.05	19.86	---	31.19	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	5.2	ATI
MW-9	07/05/95	51.05	20.78	---	30.27	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	4.4	ATI
MW-9	10/05/95	51.05	24.33	---	26.72	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	2.3	ATI
QC-1 (d)	10/05/95	---	---	---	---	52	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	160	---	---	ATI
MW-9	01/12/96	51.05	25.44	---	25.61	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	3.2	ATI
MW-9	04/22/96	51.05	18.01	---	33.04	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	11	---	3.5	SPL
MW-9	07/02/96	51.05	19.70	---	31.35	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	3.3	SPL
MW-9	11/08/96	51.05	19.96	---	31.09	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	3.7	SPL
MW-9	01/03/97	51.05	19.52	---	31.53	ND<250	---	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	---	4.4	SPL
MW-9	04/28/97	51.05	20.22	---	30.83	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.0	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11117
7210 BANCROFT AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	Organic Lead (ug/l)	DO (ppm)	LAB
QC-2 (g)	09/15/92	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	ANA
QC-2 (g)	12/15/92	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	ANA
QC-2 (g)	03/15/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2 (g)	06/07/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2 (g)	09/24/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2 (g)	12/27/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2 (g)	04/05/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2 (g)	07/22/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2 (g)	10/13/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2 (g)	01/25/95	---	---	---	---	ND<50	---	ND<0.5	2	0.6	1	---	---	---	ATI
QC-2 (g)	04/19/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	ATI
QC-2 (g)	07/05/95	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	ATI
QC-2 (g)	10/05/95	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	ATI
QC-2 (g)	01/12/96	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	ATI
QC-2 (g)	04/22/96	---	---	---	---	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	SPL
QC-2 (g)	07/02/96	---	---	---	---	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	SPL

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
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
ND	Not detected above reported detection limit
---	Not analyzed/applicable/measurable
ANA	Anametrix, Inc.
PACE	Pace, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

NOTES:

(a) Casing elevations surveyed to the nearest 0.01 foot relative to mean sea level.

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

(c) Concentrations reported as diesel from MW-1, MW-2 and MW-4 are primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene.

(d) Blind duplicate.

(e) Well not sampled due to presence of free product.

(f) Well inaccessible.

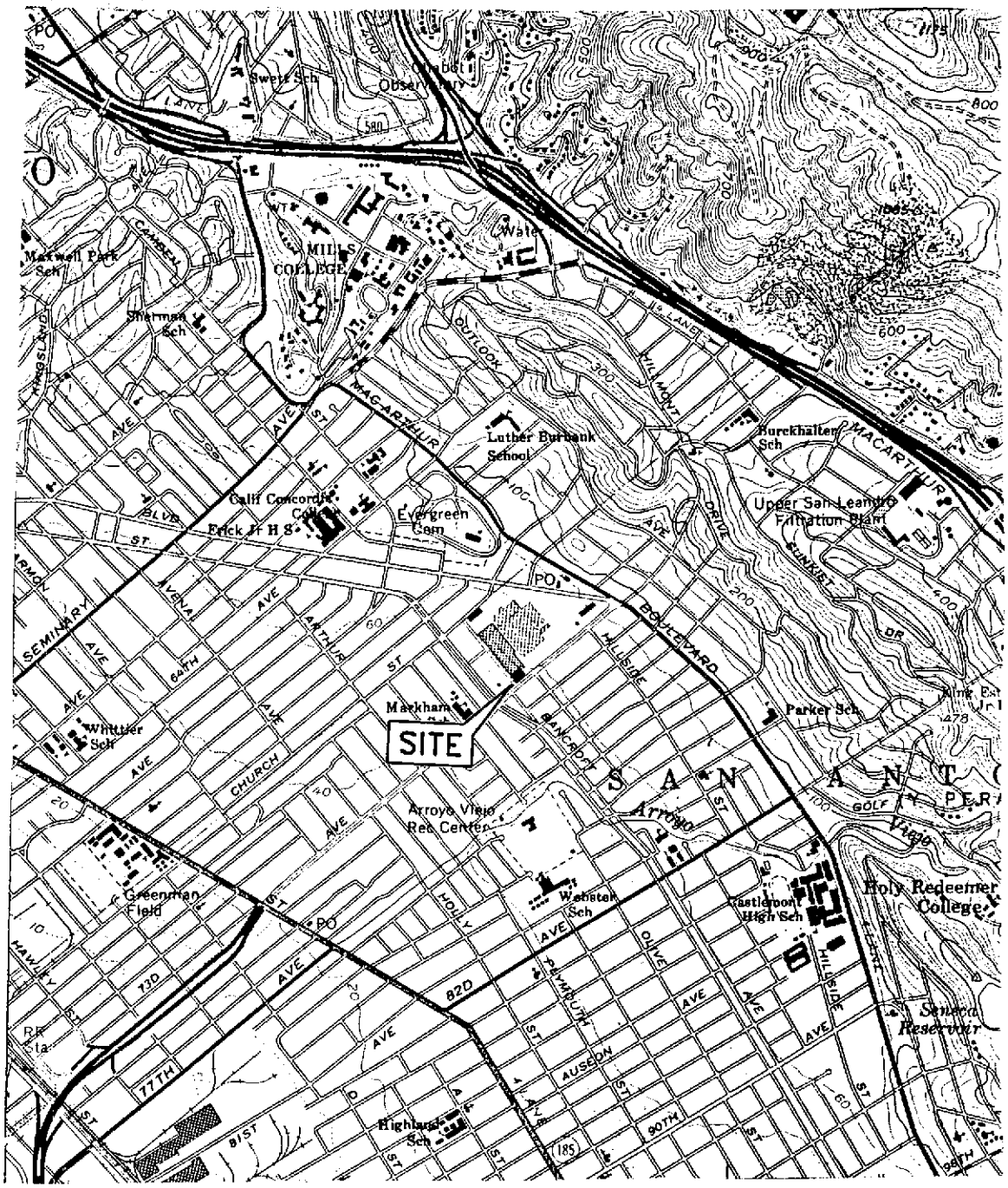
(g) Travel blank.

F:\0\10-018\018-5-3.WQ2

TABLE 2 - PRODUCT REMOVAL STATUS
BP OIL COMPANY SERVICE STATION NO. 11117
7210 BANCROFT AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

WELL ID	DATE	PRODUCT THICKNESS	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)
MW-2	02/01/94	1.78	<0.01	<0.01
MW-2	02/11/94	1.55	0.10	0.10
MW-2	02/18/94	1.62	0.90	1.00
MW-2	02/25/94	3.21	0.10	1.10
MW-2	03/04/94	3.92	0.10	1.20
MW-2	03/30/94	4.06	2.60	3.80
MW-2	04/13/95	3.10	0.10	3.90
MW-2	04/21/94	2.88	0.10	4.00
MW-2	04/24/95	6.00	0.10	4.10
MW-2	05/06/94	8.00	0.60	4.70
MW-2	05/13/94	7.00	0.10	4.80
MW-2	05/20/94	7.38	2.10	6.90
MW-2	05/26/94	2.00	2.00	8.90
MW-2	06/02/94	1.09	1.00	9.90
MW-2	06/09/94	1.70	1.00	10.90
MW-2	06/16/94	1.13	1.00	11.90
MW-2	06/23/94	1.24	0.75	12.65
MW-2	06/29/94	0.72	0.60	13.25
MW-2	07/07/94	0.56	0.50	13.75
MW-2	07/12/94	1.00	1.10	14.85
MW-2	07/20/94	0.72	0.75	15.60
MW-2	07/29/94	1.42	1.10	16.70
MW-2	08/05/94	1.04	0.76	17.46
MW-2	08/12/94	1.22	0.76	18.22
MW-2	08/18/94	1.33	0.43	18.65
MW-2	09/16/94	0.42	0.76	19.41
MW-2	09/23/94	0.19	0.17	19.58
MW-2	10/26/94	1.13	0.76	20.34
MW-2	11/03/94	0.77	1.10	21.44
MW-2	11/12/94	0.64	0.60	22.04
MW-2	11/16/94	0.67	0.67	22.71
MW-2	11/23/94	0.56	0.50	23.21
MW-2	12/01/94	0.49	0.60	23.81
MW-2	12/08/94	0.61	0.76	24.57
MW-2	04/19/05	0.12	<0.01	24.57
MW-2	05/23/95	SHEEN	<0.01	24.57
MW-2	06/15/95	0.10	<0.01	24.57
MW-2	10/05/95	0.10	0.25	24.82
MW-2	01/12/96	0.06	0.01	24.83
MW-2	02/08/96	0.06	0.01	24.84
MW-2	04/22/96	0.08	0.01	24.85
MW-2	07/02/96	0.04	<0.01	24.85
MW-2	11/08/96	0.01	<0.01	24.85
MW-2	01/03/97	0.02	<0.01	24.85
MW-2	04/28/97	0.01	<0.01	24.85



SOURCE:
USGS MAP, OAKLAND EAST QUADRANGLE, CALIFORNIA, 7.5 MINUTE SERIES, 1959, PHOTOREVISED 1980.

N

0 1000' 2000'

FIGURE 1

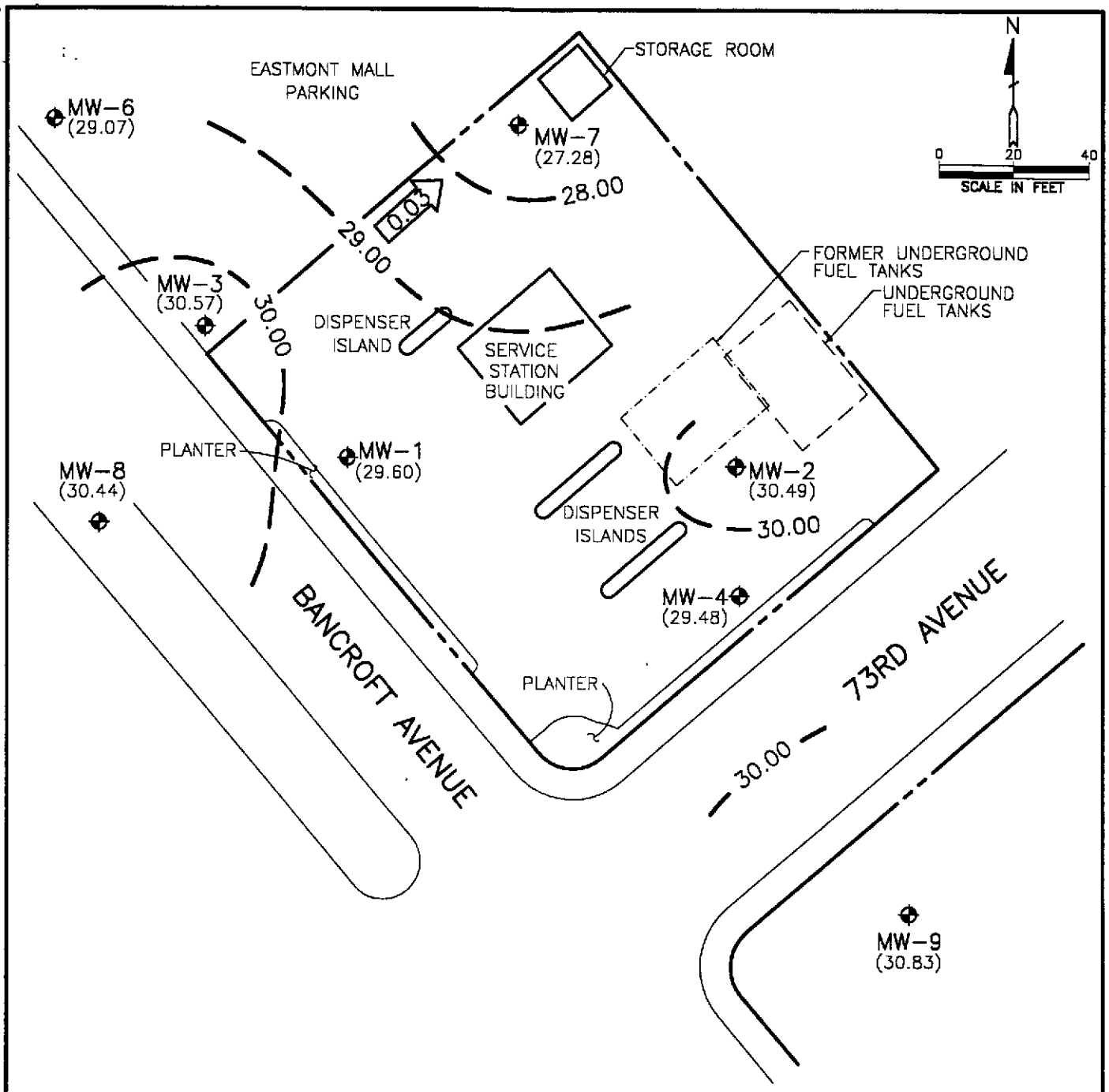
SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10-018

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10018B---.DWG 11-12-93 RKW 1=1



LEGEND

⊕	GROUNDWATER MONITORING WELL
(27.28)	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
28.00	GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–1.00 FOOT)
0.03	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

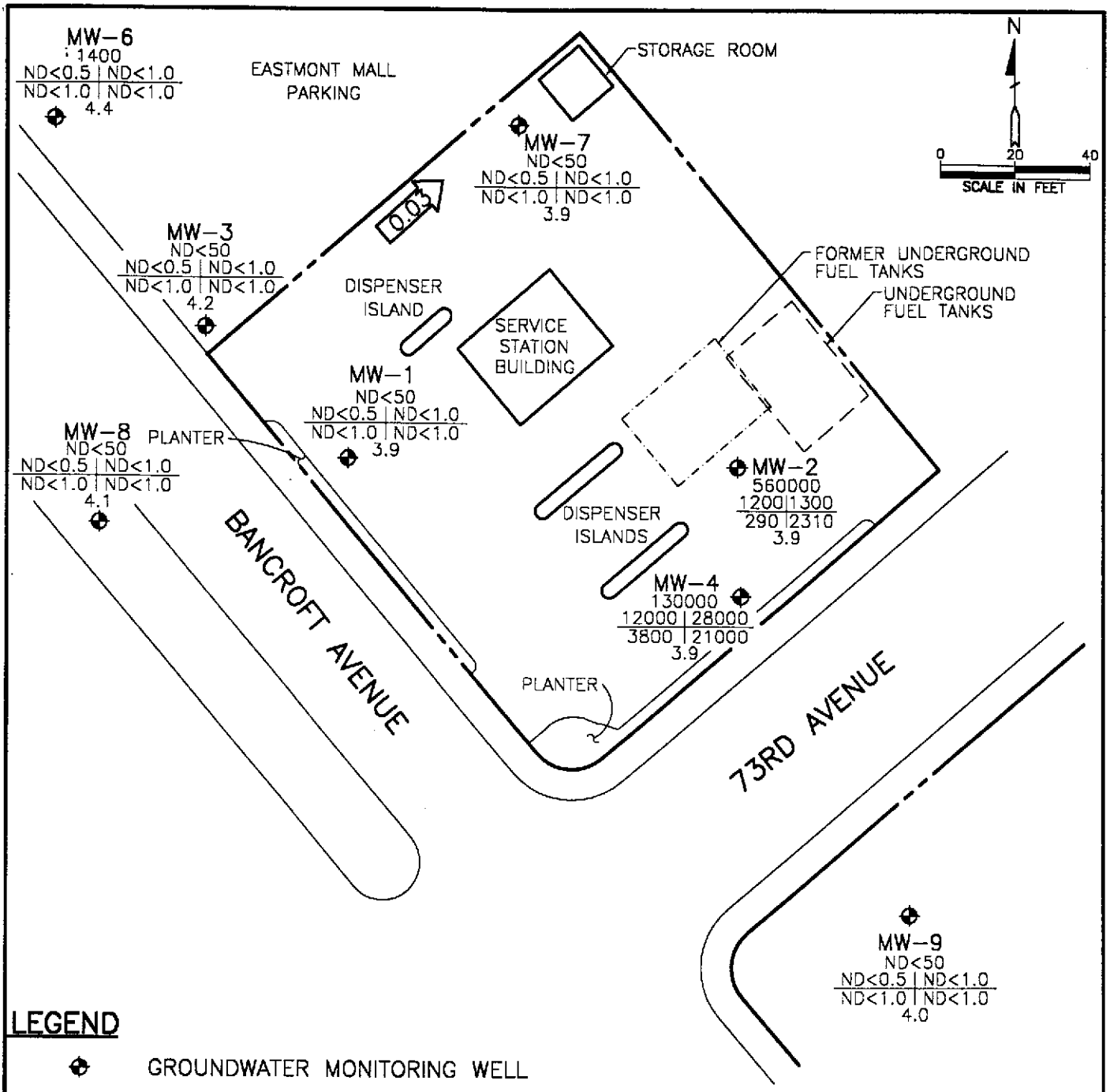
APRIL 28, 1997

BP OIL SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10–018

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10018D-Y.DWG 3-27-97 DDM 1=40



LEGEND

⊕	GROUNDWATER MONITORING WELL
TPH-G / B | T / E | X / DO	CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
TPH-G	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
DO	DISSOLVED OXYGEN
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
◁ 0.03	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

APRIL 28, 1997

BP OIL SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10-018

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10018E-V.DWG 5-28-97 ODM 1=40

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201

Project No. 10-018-05-003 Date: 4/28/97
Address 7210 Bancroft Ave. Day: M T W TH F
Contract No. G797409 City: Oakland
Station No. BP 11117 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-5	2"	36.12'	20.20	Ø	1330	
MW-2	S-8	2"	39.56'	20.59	.01	1340	
MW-3	S-4	2"	42.40'	19.38	Ø	1325	
MW-4	S-7	2"	44.72'	21.28		1336	(QC-1 S-9 Dup from this well)
MW-6	S-6	2"	40.00'	21.25		1333	
MW-7	S-1	2"	44.72'	24.12		1310	
MW-8	S-2	2"	39.50'	20.44		1313	
MW-9	S-3	2"	38.86'	20.22		1317	

FIELD INSTRUMENT CALIBRATION DATA

pH METER Iwa 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 0830
D.O. METER Iwa ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE _____ TEMP 69 WEATHER clear
CONDUCTIVITY METER Iwa 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-7	24.12	2"	OK	Ø	Y (N)	3	1355	68.4	7.49	1071µS	3.7
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		67.9	7.27	1121µS	
44.72 - 24.12 = 20.60	X .16 = 3.30	X3 = 9.90				10	1410	67.2	7.24	1124µS	3.9

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

O EPA 601 ____
X TPH-G/BTEX HCl
O TPH Diesel ____
O TOG 5520 ___
TIME/SAMPLE ID: 1413

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-8	20.44	2"	OK	Ø	Y (N)	3	1420	69.4	7.61	555µS	4.1
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		68.3	7.43	537µS	
39.50 - 20.44 = 19.06	X .16 = 3.05	X3 = 9.15				10	1428	68.0	7.36	531µS	4.1

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

O EPA 601 ____
X TPH-G/BTEX HCl
O TPH Diesel ____
O TOG 5520 ___
TIME/SAMPLE ID: 1430

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. 10-018-05-003 Date: 4/28/97
Address 7210 Bancroft Ave. Day: M T W TH F
Contract No. G797409 City: Oakland
Station No. BP 11117 Sampler: LB

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-9	20.22	2"	OIC	Ø	Y (N)	3	1444	70.3	7.64	942 µS	4.0	O EPA 601 ___
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						6		69.4	7.51	917 µS		X TPH-G/BTEX HCl
38.86 - 20.22 = 18.64 X .16 = 2.98 X 3 = 8.94						9	1451	68.7	7.46	911 µS	4.0	O TPH Diesel ___
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID 1456

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-3	19.38	2"	OIC	Ø	Y (N)	4	1510	68.4	7.92	931 µS	4.0	O EPA 601 ___
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						8		67.6	7.71	911 µS		X TPH-G/BTEX HCl
42.40 - 19.38 = 23.02 X .16 = 3.68 X 3 = 11.04						11.5	1519	67.2	7.64	906 µS	4.0	O TPH Diesel ___
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID 1521

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-1	20.20	2"	OIC	Ø	Y (N)	3	1530	67.7	7.49	717 µS	3.7	O EPA 601 ___
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						5		67.0	7.39	736 µS		X TPH-G/BTEX HCl
36.12 - 20.20 = 15.92 X .16 = 2.55 X 3 = 7.65						8	1540	66.3	7.32	746 µS	3.9	O TPH Diesel ___
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID 1546

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-6	21.25	2"	OIC	Ø	Y (N)	3	1557	71.2	7.71	943 µS	4.2	O EPA 601 ___
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						6		70.4	7.60	920 µS		X TPH-G/BTEX HCl
40.00 - 21.25 = 18.75 X .16 = 3.00 X 3 = 9.00						9	1608	69.7	7.51	914 µS	4.4	O TPH Diesel ___
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID 1610

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-4	21.28	2"	OIC	Ø	Y (N)	4	1624	68.9	7.39	1.20 mS	3.9	O EPA 601 ___
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						8		67.7	7.20	1.11 mS		X TPH-G/BTEX HCl
44.72 - 21.28 = 23.44 X .16 = 3.75 X 3 = 11.25						11.5	1633	67.4	7.12	1.06 mS	3.9	O TPH Diesel ___
Purge Method: (S)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments: QC-1 (S-9) From this well												TIME/SAMPLE ID 1640

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. 10-018-05-003 Date: 4/28/97
Address 7210 Bancroft Ave. Day: M T W TH F
Contract No. G797409 City: Oakland
Station No. BP 11117 Sampler: CA

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-2	20.59	2"	DR	0	Y (N)	3	1655	71.0	7.32	1.17ms	3.5
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			6		70.3	7.19	1.11ms	
39.56 - 20.59 = 18.97	X .16 = 3.03	X3 = 9.09				9.5	1710	69.5	7.12	1.09ms	3.7
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

- O EPA 601_____
- (X) TPH-G/BTEX HCl
- O TPH Diesel____
- O TOG 5520 ___

TIME/SAMPLE ID: 1715

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
					Y N						
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.								
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

- O EPA 601_____
- O TPH-G/BTEX___
- O TPH Diesel____
- O TOG 5520 ___

TIME/SAMPLE ID:

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

May 9, 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 April 30, 1997. The samples were assigned to Certificate of Analysis No(s).9704F44 and analyzed for the parameters specified on the chain of custody.

There were no analytical problems encountered with this group of samples and all quality control data was 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 Number 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

Ed Fry
Project Manager

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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 97-04-F44

Approved for Release by:

Ed Fry, Project Manager

Date: 5/9/97

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. H9-9704F44-01

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

P.O.# G797409,COC#081069
DATE: 05/09/97

PROJECT: BP Oil #11117
SITE: Oakland, CA.
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-018-5-3
MATRIX: WATER
DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97

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	90		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: RL			
Date: 05/07/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	83		
California LUFT Manual			
Analyzed by: RL			
Date: 05/07/97 07:38:00			

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. H9-9704F44-02

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

P.O.# G797409,COC#081069
DATE: 05/09/97

PROJECT: BP Oil #11117
SITE: Oakland, CA.
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-018-5-3
MATRIX: WATER
DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97

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	97		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: RL			
Date: 05/07/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	77		
California LUFT Manual			
Analyzed by: RL			
Date: 05/07/97 07:10:00			

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. H9-9704F44-03

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

P.O.# G797409,COC#081069
DATE: 05/09/97

PROJECT: BP Oil #11117
SITE: Oakland, CA.
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-018-5-3
MATRIX: WATER
DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97

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	90		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: RL			
Date: 05/07/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	90		
California LUFT Manual			
Analyzed by: RL			
Date: 05/07/97 08:32:00			

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. H9-9704F44-04

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

P.O.# G797409,COC#081069
DATE: 05/09/97

PROJECT: BP Oil #11117
SITE: Oakland, CA.
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-4

PROJECT NO: 10-018-5-3
MATRIX: WATER
DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97

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	90		
4-Bromofluorobenzene	90		
Method 8020A***			
Analyzed by: RL			
Date: 05/07/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	87		
California LUFT Manual			
Analyzed by: RL			
Date: 05/07/97 02:46:00			

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. H9-9704F44-05

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

P.O.# G797409,COC#081069
DATE: 05/28/97

PROJECT: BP Oil #11117
SITE: Oakland, CA.
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-5

PROJECT NO: 10-018-5-3
MATRIX: WATER
DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97

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	90		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: RL			
Date: 05/06/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: RL			
Date: 05/06/97 11:26:00			

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. H9-9704F44-06

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

P.O.# G797409,COC#081069
DATE: 05/09/97

PROJECT: BP Oil #11117
SITE: Oakland, CA.
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-6

PROJECT NO: 10-018-5-3
MATRIX: WATER
DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	3500	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	93		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: RL			
Date: 05/08/97			
Total Petroleum Hydrocarbons-Gasoline	1.4	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	117		
4-Bromofluorobenzene	83		
California LUFT Manual			
Analyzed by: RL			
Date: 05/07/97 04:33:00			

(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.
SPL California License # 1903

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

Certificate of Analysis No. H9-9704F44-09

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

P.O.# G797409,COC#081069
DATE: 05/09/97

PROJECT: BP Oil #11117
SITE: Oakland, CA.
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-9

PROJECT NO: 10-018-5-3
MATRIX: WATER
DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	34000	2500 P	µg/L
Benzene	11000	120 P	µg/L
Toluene	26000	250 P	µg/L
Ethylbenzene	3200	250 P	µg/L
Total Xylene	18200	250 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	108		
4-Bromofluorobenzene	99		
Method 8020A***			
Analyzed by: RL			
Date: 05/07/97			
Total Petroleum Hydrocarbons-Gasoline	110	1.2 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	147		
4-Bromofluorobenzene	133		
California LUFT Manual			
Analyzed by: RL			
Date: 05/07/97 02:10:00			

(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

CPL COMPOUND®

SURROGATE RECOVERY SUMMARY **PAGE 1**
05/09/97 09:04:46

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

Modified 8015A - Gasoline* BATCH#:HP_W970506070600**
WORK ORDER: 9704F44-05A **CLIENT SAMPLE ID:** S-5

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	28	93	52- 152
1,4-Difluorobenzene	30	29	97	54- 137

California LUFT Manual **BATCH#:HP_W970506070600**
WORK ORDER: 9704F44-08A **CLIENT SAMPLE ID:** S-8

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	33.0000	110	50- 150
4-Bromofluorobenzene	30	30.0000	100	50- 150

California LUFT Manual **BATCH#:HP_W970506070600**
WORK ORDER: 9704F44-09A **CLIENT SAMPLE ID:** S-9

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	44.0000	147	50- 150
4-Bromofluorobenzene	30	40.0000	133	50- 150

Modified 8015A - Gasoline* BATCH#:HP_W970506070600**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	25	83	52- 152
1,4-Difluorobenzene	30	31	103	54- 137

Modified 8015A - Gasoline* BATCH#:HP_W970506070600**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9704F44-05A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	34	113	52- 152
1,4-Difluorobenzene	30	32	107	54- 137

Modified 8015A - Gasoline* BATCH#:HP_W970506070600**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:** 9704F44-05A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	33	110	52- 152
1,4-Difluorobenzene	30	31	103	54- 137

Method 8020A* BATCH#:HP_W970506100400**
WORK ORDER: 9704F44-05A **CLIENT SAMPLE ID:** S-5

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	28	93	43- 135

Method 8020A * BATCH#:HP_W970506100400**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	27	90	74- 131

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

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	30	100	43- 135

Method 8020A *** **BATCH#:**HP_W970506100400
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9705049-09A

1,4-DIFLUOROBENZENE	30	29	97	70- 131
4-BROMOFLUOROBENZENE	30	29	97	43- 135

Method 8020A *** **BATCH#:**HP_W970506100400
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9705049-09A

1,4-Difluorobenzene	30	29	97	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

Method 8020A*** **BATCH#:**HP_W970507033200
WORK ORDER: 9704F44-01A **CLIENT SAMPLE ID:**S-1

1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A*** **BATCH#:**HP_W970507033200
WORK ORDER: 9704F44-02A **CLIENT SAMPLE ID:**S-2

1,4-Difluorobenzene	30	29	97	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

Method 8020A*** **BATCH#:**HP_W970507033200
WORK ORDER: 9704F44-03A **CLIENT SAMPLE ID:**S-3

1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

Method 8020A*** **BATCH#:**HP_W970507033200
WORK ORDER: 9704F44-04A **CLIENT SAMPLE ID:**S-4

1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	27	90	43- 135

Method 8020A*** **BATCH#:**HP_W970507033200
WORK ORDER: 9704F44-06A **CLIENT SAMPLE ID:**S-6

1,4-Difluorobenzene	30	33	110	70- 131
4-Bromofluorobenzene	30	28	93	43- 135

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

Method 8020A* BATCH#:HP_W970507033200**
WORK ORDER: 9704F44-07A **CLIENT SAMPLE ID:** S-7

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	35.0000	117	70- 131
4-Bromofluorobenzene	30	31.0000	103	43- 135

Method 8020A * BATCH#:HP_W970507033200**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	29	29.0	74- 131
4-Bromofluorobenzene	30	30	29.6	43- 135

Method 8020A* BATCH#:HP_W970507033200**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9704F43-07A

1,4-DIFLUOROBENZENE	30	30	100	70- 131
4-BROMOFLUOROBENZENE	30	28	93	43- 135

Method 8020A* BATCH#:HP_W970507033200**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:** 9704F43-07A

1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

California LUFT Manual BATCH#:HP_W970507035900
WORK ORDER: 9704F44-01A **CLIENT SAMPLE ID:** S-1

1,4-Difluorobenzene	30	30	100	50- 150
4-Bromofluorobenzene	30	25	83	50- 150

California LUFT Manual BATCH#:HP_W970507035900
WORK ORDER: 9704F44-02A **CLIENT SAMPLE ID:** S-2

1,4-Difluorobenzene	30	30	100	50- 150
4-Bromofluorobenzene	30	23	77	50- 150

California LUFT Manual BATCH#:HP_W970507035900
WORK ORDER: 9704F44-03A **CLIENT SAMPLE ID:** S-3

1,4-Difluorobenzene	30	29	97	50- 150
4-Bromofluorobenzene	30	27	90	50- 150

California LUFT Manual BATCH#:HP_W970507035900
WORK ORDER: 9704F44-04A **CLIENT SAMPLE ID:** S-4

1,4-Difluorobenzene	30	30	100	50- 150

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

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	26	87	50- 150

California LUFT Manual **BATCH#:HP_W970507035900**
WORK ORDER: 9704F44-06A **CLIENT SAMPLE ID:** S-6

1,4-Difluorobenzene	30	35	117	50- 150
4-Bromofluorobenzene	30	25	83	50- 150

California LUFT Manual **BATCH#:HP_W970507035900**
WORK ORDER: 9704F44-07A **CLIENT SAMPLE ID:** S-7

1,4-Difluorobenzene	30	38.0000	127	50- 150
4-Bromofluorobenzene	30	33.0000	110	50- 150

Modified 8015A - Gasoline* ** **BATCH#:HP_W970507035900**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

4-Bromofluorobenzene	30	24	80	52- 152
1,4-Difluorobenzene	30	30	100	54- 137

California LUFT Manual **BATCH#:HP_W970507035900**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9704F44-03A

1,4-Difluorobenzene	30	31	103	50- 150
4-Bromofluorobenzene	30	33	110	50- 150

California LUFT Manual **BATCH#:HP_W970507035900**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:** 9704F44-03A

1,4-Difluorobenzene	30	31	103	50- 150
4-Bromofluorobenzene	30	33	110	50- 150

Method 8020A* ** **BATCH#:HP_W970507071400**
WORK ORDER: 9704F44-08A **CLIENT SAMPLE ID:** S-8

1,4-Difluorobenzene	30	31.0000	103	70- 131
4-Bromofluorobenzene	30	29.0000	97	43- 135

Method 8020A* ** **BATCH#:HP_W970507071400**
WORK ORDER: 9704F44-09A **CLIENT SAMPLE ID:** S-9

1,4-Difluorobenzene	30	32.4000	108	70- 131
4-Bromofluorobenzene	30	29.6000	99	43- 135

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

Method 8020A *** BATCH#:HP_W970507071400
WORK ORDER: Method Blank CLIENT SAMPLE ID:

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	28	93	74- 131
4-Bromofluorobenzene	30	30	100	43- 135

Method 8020A *** BATCH#:HP_W970507071400
WORK ORDER: Matrix Spike CLIENT SAMPLE ID:9705118-06A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-DIFLUOROBENZENE	30	31	103	70- 131
4-BROMOFLUOROBENZENE	30	30	100	43- 135

Method 8020A *** BATCH#:HP_W970507071400
WORK ORDER: Matrix Spike Dup. CLIENT SAMPLE ID:9705118-06A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	31	103	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

California LUFT Manual BATCH#:HP_W970507074200
WORK ORDER: 9704F44-08A CLIENT SAMPLE ID:S-8

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	33.0000	110	50- 150
4-Bromofluorobenzene	30	28.0000	93	50- 150

California LUFT Manual BATCH#:HP_W970507074200
WORK ORDER: 9704F44-09A CLIENT SAMPLE ID:S-9

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	34.0000	113	50- 150
4-Bromofluorobenzene	30	29.6000	99	50- 150

Modified 8015A - Gasoline*** BATCH#:HP_W970507074200
WORK ORDER: Method Blank CLIENT SAMPLE ID:

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	26	87	52- 152
1,4-Difluorobenzene	30	30	100	54- 137

Method Modified 8015A* for Gasoline** BATCH#:HP_W970507074200
WORK ORDER: Matrix Spike CLIENT SAMPLE ID:9705084-02A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	35	117	52- 152
1,4-Difluorobenzene	30	32	107	54- 137

Method Modified 8015A* for Gasoline** BATCH#:HP_W970507074200
WORK ORDER: Matrix Spike Dup. CLIENT SAMPLE ID:9705084-02A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	33	110	52- 152

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

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	32	107	54- 137

Method 8020A* BATCH#:HP_W970508101400**
WORK ORDER: 9704F44-06A **CLIENT SAMPLE ID:** S-6

1,4-Difluorobenzene	30	28.0000	93	70- 131
4-Bromofluorobenzene	30	28.0000	93	43- 135

Method 8020A * BATCH#:HP_W970508101400**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	29	97	74- 131
4-Bromofluorobenzene	30	28	93	43- 135

Method 8020A * BATCH#:HP_W970508101400**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9705118-15A

1,4-DIFLUOROBENZENE	30	36	120	70- 131
4-BROMOFLUOROBENZENE	30	42	140 «	43- 135

Method 8020A * BATCH#:HP_W970508101400**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:** 9705118-15A

1,4-Difluorobenzene	30	36	120	70- 131
4-Bromofluorobenzene	30	42	140 «	43- 135

« = Recovery outside of control limits
*** = Methods for Chemical Analysis of Water & Wastes,1983,EPA**
**** = Standard Methods for Examination of Water & Wastewater,17th**
***** = Test Methods for Evaluating Solid Waste,EPA SW846,3rd**

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_W970507033200

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	63 - 120
Benzene	ND	50	44	88.0	62 - 121
Toluene	ND	50	48	96.0	66 - 136
EthylBenzene	ND	50	48	96.0	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	14	20	31	85.0	31	85.0	0	20	39 - 150
BENZENE	ND	20	18	90.0	18	90.0	0	25	39 - 150
TOLUENE	ND	20	17	85.0	17	85.0	0	26	56 - 134
ETHYL_BENZENE	ND	20	16	80.0	16	80.0	0	38	61 - 128
O-XYLENE	ND	20	16	80.0	17	85.0	6.06	29	40 - 130
M AND P XYLENE	ND	40	33	82.5	33	82.5	0	20	43 - 152

Analyst: RL
Sequence Date: 05/07/97
SPL ID of sample spiked: 9704F43-07A
Sample File ID: W_E7245.TX0
Method Blank File ID:
Blank Spike File ID: W_E7257.TX0
Matrix Spike File ID: W_E7258.TX0
Matrix Spike Duplicate File ID: W_E7259.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 '96)

SAMPLES IN BATCH(SPL ID):

9704F44-01A 9704F43-02A 9704F44-03A 9704F44-07A
9704F26-01A 9704F44-04A 9704F44-06A 9705101-01A
9705101-07A 9705101-14A 9705101-10A 9704F43-01A
9704F43-07A 9704F43-06A 9704F43-04A 9704F43-03A
9704F44-02A

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_W970508101400

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	45	90.0	63 - 120
Benzene	ND	50	44	88.0	62 - 121
Toluene	ND	50	48	96.0	66 - 136
EthylBenzene	ND	50	48	96.0	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	380	20	430	NC	430	NC	NC	20	39 - 150
BENZENE	530	20	540	NC	550	NC	NC	25	39 - 150
TOLUENE	16	20	41	125	41	125	0	26	56 - 134
ETHYLBENZENE	1.5	20	28	132 *	27	128	3.08	38	61 - 128
O XYLENE	3.0	20	29	130	28	125	3.92	29	40 - 130
M & P XYLENE	3.6	40	55	128	53	124	3.17	20	43 - 152

Analyst: RL
Sequence Date: 05/08/97
SPL ID of sample spiked: 9705118-15A
Sample File ID: W_E7318.TX0
Method Blank File ID:
Blank Spike File ID: W_E7308.TX0
Matrix Spike File ID: W_E7312.TX0
Matrix Spike Duplicate File ID: W_E7313.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 (2nd Q '95)

SAMPLES IN BATCH(SPL ID): 9705118-14A 9705118-15A 9704F44-06A 9704E91-02A

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_W970506100400

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	63 - 120
Benzene	ND	50	45	90.0	62 - 121
Toluene	ND	50	48	96.0	66 - 136
EthylBenzene	ND	50	49	98.0	70 - 136
O Xylene	ND	50	49	98.0	74 - 134
M & P Xylene	ND	100	99	99.0	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	11	20	31	100	31	100	0	20	39 - 150
BENZENE	ND	20	20	100	20	100	0	25	39 - 150
TOLUENE	ND	20	20	100	20	100	0	26	56 - 134
ETHYLBENZENE	ND	20	19	95.0	18	90.0	5.41	38	61 - 128
O XYLENE	ND	20	19	95.0	18	90.0	5.41	29	40 - 130
M & P XYLENE	ND	40	38	95.0	36	90.0	5.41	20	43 - 152

Analyst: RL
Sequence Date: 05/06/97
SPL ID of sample spiked: 9705049-09A
Sample File ID: W_E7231.TX0
Method Blank File ID:
Blank Spike File ID: W_E7223.TX0
Matrix Spike File ID: W_E7225.TX0
Matrix Spike Duplicate File ID: W_E7226.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 (2nd Q '95)

SAMPLES IN BATCH(SPL ID): 9705101-02A 9705101-06A 9705049-15A 9705049-09A 9704F44-05A 9705049-08A 9705049-13A 9705049-14A 9705101-03A 9705101-04A 9705101-05A

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_W970507071400

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	45	90.0	63 - 120
Benzene	ND	50.0	44	88.0	62 - 121
Toluene	ND	50.0	48	96.0	66 - 136
EthylBenzene	ND	50.0	48	96.0	70 - 136
O Xylene	ND	50.0	49	98.0	74 - 134
M & P Xylene	ND	100.0	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	66	20	84	90.0	84	90.0	0	20	39 - 150
BENZENE	ND	20	20	100	20	100	0	25	39 - 150
TOLUENE	ND	20	18	90.0	19	95.0	5.41	26	56 - 134
ETHYLBENZENE	ND	20	18	90.0	18	90.0	0	38	61 - 128
O XYLENE	ND	20	17	85.0	17	85.0	0	29	40 - 130
M & P XYLENE	ND	40	33	82.5	34	85.0	2.99	20	43 - 152

Analyst: RL
Sequence Date: 05/07/97
SPL ID of sample spiked: 9705118-06A
Sample File ID: W_E7287.TX0
Method Blank File ID:
Blank Spike File ID: W_E7275.TX0
Matrix Spike File ID: W_E7302.TX0
Matrix Spike Duplicate File ID: W_E7303.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 (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9704F43-06A 9704F43-04A 9705084-01A 9705084-07A
9705084-06A 9705084-08A 9705084-03A 9705084-05A
9705084-04A 9704F04-06A 9704F04-05A 9704F43-03A
9704F43-02A 9704F43-05A 9704F43-08A 9704F44-08A
9704F44-09A 9705084-02A

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

** SPL BATCH QUALITY CONTROL REPORT **
Modified 8015 - Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_W970506070600

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	1.1	122	1.0	111	9.44	22	37 - 169

Analyst: RL
Sequence Date: 05/06/97
SPL ID of sample spiked: 9704F44-05A
Sample File ID: WWE7232.TX0
Method Blank File ID:
Blank Spike File ID: WWE7205.TX0
Matrix Spike File ID: WWE7227.TX0
Matrix Spike Duplicate File ID: WWE7228.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): 9705101-06A 9705049-15A 9705049-09A 9704F44-05A 9704F44-09A 9704F44-08A 9705101-03A 9705101-04A 9705101-05A 9705101-02A

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

** SPL BATCH QUALITY CONTROL REPORT **
Modified 8015 - Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_W970507035900

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	0.99	99.0	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
PETROLEUM HYDROCARBONS-GAS	ND	0.9	1.15	128	1.1	122	4.80	50	50 - 150

Analyst: RL
Sequence Date: 05/06/97
SPL ID of sample spiked: 9704F44-03A
Sample File ID: WWE7252.TX0
Method Blank File ID:
Blank Spike File ID: WWE7224.TX0
Matrix Spike File ID: WWE7260.TX0
Matrix Spike Duplicate File ID: WWE7261.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: Temporary Limits

SAMPLES IN BATCH(SPL ID):

9704F44-01A 9704F43-02A 9704F44-03A 9704F44-07A
9704F26-01A 9704F44-04A 9705042-08A 9705042-02A
9705042-07A 9704F44-06A 9705101-01A 9705101-07A
9705101-14A 9705101-10A 9704F43-01A 9704F43-07A
9704F43-06A 9704F43-04A 9704F43-03A 9704F44-02A

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

** SPL BATCH QUALITY CONTROL REPORT **
Modified 8015 - Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_W970507074200

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 RANGE ORGANICS	ND	0.9	1.2	119	1.2	119	0	22	37 - 169

Analyst: RL
Sequence Date: 05/07/97
SPL ID of sample spiked: 9705084-02A
Sample File ID: WWE7283.TX0
Method Blank File ID:
Blank Spike File ID: WWE7276.TX0
Matrix Spike File ID: WWE7304.TX0
Matrix Spike Duplicate File ID: WWE7305.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 (4th Q '95)

SAMPLES IN BATCH(SPL ID):

9705118-06A 9705084-01A 9705084-07A 9705084-06A
9705084-08A 9705084-03A 9705084-05A 9705084-04A
9704F43-02A 9704F43-05A 9704F43-08A 9704F44-08A
9704F44-09A 9705084-02A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9704 F44

BP

CHAIN OF CUSTODY

No. 081069 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	11117
BP CORNER ADDRESS/CITY	Oakland, Ca
CONSULTANT PROJECT NUMBER	10-018-5-3
CONSULTANT PROJECT MANAGER	Brady Nagle
PHONE NUMBER	(510) 295-1650
FAX NUMBER	295-1823
CONSULTANT CONTRACT NUMBER	G797409
BP CONTACT	Scott Hooton
BP ADDRESS	Renton, WA
PHONE NUMBER	
FAX NO.	
LAB CONTACT	SPL
LABORATORY ADDRESS	Texas
PHONE NUMBER	
FAX NO.	
SAMPLED BY (Please Print Name)	Larry Buenavenida
SAMPLED BY (Signature)	[signature]
SHIPMENT DATE	4-29-97
SHIPMENT METHOD	Fed Ex
AIRBILL NUMBER	3848470113

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

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE / COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH-G/BTEX	MTBE								COMMENTS
S-1	4/28/97	W	3	HCl		X	X								
S-2	↓	↓	↓	↓		↓	↓								
S-3	↓	↓	↓	↓		↓	↓								
S-4	↓	↓	↓	↓		↓	↓								
S-5	↓	↓	↓	↓		↓	↓								
S-6	↓	↓	↓	↓		↓	↓								
S-7	↓	↓	↓	↓		↓	↓								
S-8	↓	↓	↓	↓		↓	↓								
S-9	↓	↓	↓	↓		↓	↓								

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	4/29/97		[signature]	4-29-97	
[signature]	4-29-97		[signature] /SPL	4/30/97	0930

ADDITIONAL COMMENTS

5° c Rec'd intact

CLV-16722
PKG/50

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

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
4-30-97	0930

SPL Sample ID:
9704F44

			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:		5° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	384 847 011 3	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	4/30/97

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

BP Site Number:	11117
ERM Contact:	G797409
Sampling Date:	04/28/97
Matrix Description:	Water
Date Final Report Received:	05/12/97
Laboratory & Location:	SPL, Houston, Texas

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

Notes: 4-Bromofluorobenzene conc. in sample HP-W1705 F10:400 recovery outside of control limits (see lab rpt p. 6)

Data Validation Completed by: Ken Simas

(signature): K Simas

Date: 6/5/97