BP OIL

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. Susan Hugo
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway Room 250
Alameda CA 94542-6577

3878

RE: BP OIL FACILITY #11132
3201 - 35th Street
Oakland, CA

Dear Ms Hugo:

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED JUNE 10, 1997** for the above referenced facility. Plans for the following quarter include additional groundwater monitoring.

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\ERM11132

cc: Mr. Eddy So, California Regional Water Quality Control Board, San Francisco Bay Region, 2101 Webster St. Suite 500, Oakland CA 94612 (without attachment)

Mr. Brady Nagle, Alisto Engineering Group, 1777 Oakland Blvd., Suite 200, Walnut Creek, CA 94596

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

Site File

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11132
3201 35th Street
Oakland, California

Project No. 10-024-09-004

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 10, 1997

Ken Simas
Project Manager

Al Sevilla, P.E.
Principal

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11132
3201 35th Street
Oakland, California

Project No. 10-024-09-004

June 10, 1997

INTRODUCTION

This report presents the results and findings of the April 29 to April 30, 1997 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11132, 3201 35th Street, 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.

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.

FREE PRODUCT MONITORING AND RECOVERY

Product recovery canisters have been installed in Monitoring Wells MW-1, MW-2, MW-8, MW-9, and MW-10 to recover liquid-phase product. Product thicknesses measured during this and previous monitoring events are presented in Table 1. The volume of free product recovered from the wells is presented in Table 2.

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-1	07/09/90	169.75	---	0.22	---	---	---	---	---	---	---	---	---
MW-1	12/21/90	169.75	---	0.58	---	---	---	---	---	---	---	---	---
MW-1	03/07/91	169.75	20.59	---	---	---	---	---	---	---	---	---	---
MW-1	06/27/91	169.75	---	0.18	---	---	---	---	---	---	---	---	---
MW-1	09/27/91	169.75	---	0.27	---	---	---	---	---	---	---	---	---
MW-1	12/18/91	169.75	---	0.28	---	---	---	---	---	---	---	---	---
MW-1	04/01/91	169.75	16.51	0.15	153.35	---	---	---	---	---	---	---	---
MW-1	07/03/92	169.75	22 30	0 27	147.65	---	---	---	---	---	---	---	---
MW-1	10/05/92	169.75	23.98	0 24	145.95	---	---	---	---	---	---	---	---
MW-1	01/13/93	169.75	17.03	0 24	152.90	---	---	---	---	---	---	---	---
MW-1	04/23/93	169.75	18 10	0.42	151.97	---	---	---	---	---	---	---	---
MW-1	07/12/93	169.75	22.02	0.49	148.10	---	---	---	---	---	---	---	---
MW-1	10/21/93	169.75	25 12	1.09	145.45	---	---	---	---	---	---	---	---
MW-1	01/21/94	169.75	23 02	0.76	147.30	---	---	---	---	---	---	---	---
MW-1	04/20/94	169.75	24 54	1.80	146.56	---	---	---	---	---	---	---	---
MW-1	08/01/94	169.75	24 11	0.35	145 90	---	---	---	---	---	---	---	---
MW-1	12/23/94	169 75	18 19	0.29	151.78	---	---	---	---	---	---	---	---
MW-1	01/26/95	169 75	16 25	1.10	154 33	---	---	---	---	---	---	---	---
MW-1	06/08/95	169 75	22 92	1.20	147 73	---	---	---	---	---	---	---	---
MW-1	08/22/95	169.75	24.45	0.85	145 94	---	---	---	---	---	---	---	---
MW-1	10/27/95	169.75	25.41	0.69	144 86	---	---	---	---	---	---	---	---
MW-1	01/25/96	169 75	18.20	1.40	152.60	---	---	---	---	---	---	---	---
MW-1	04/19/96	169 75	19.06	1.22	151 61	---	---	---	---	---	---	---	---
MW-1	07/23/96	169.75	22.98	0.89	147.44	---	---	---	---	---	---	---	---
MW-1	11/11/96	169.75	23.99	0.98	146 50	---	---	---	---	---	---	---	---
MW-1	01/21/97	169 75	16.80	0.90	153.63	---	---	---	---	---	---	---	---
MW-1	04/29/97	169 75	21 90	0.85	148 49	---	---	---	---	---	---	---	---
MW-1	04/30/97	169.75	---	---	---	100000	3600	8000	4000	21300	7700	5.2	SPL
QC-1 (c)	04/30/97	169 75	---	---	---	92000	3500	8100	4400	23800	6900	---	SPL
MW-2	07/09/90	168.14	---	0.10	---	---	---	---	---	---	---	---	---
MW-2	12/21/90	168.14	---	0.48	---	---	---	---	---	---	---	---	---
MW-2	03/07/91	168 14	19.18	---	---	---	---	---	---	---	---	---	---
MW-2	06/27/91	168 14	---	0.19	---	---	---	---	---	---	---	---	---
MW-2	09/27/91	168.14	---	0.15	---	---	---	---	---	---	---	---	---
MW-2	12/18/91	168 14	---	0.36	---	---	---	---	---	---	---	---	---
MW-2	04/01/91	168.14	15.21	0.10	153 01	---	---	---	---	---	---	---	---
MW-2	07/03/92	168.14	20.93	0.03	147.23	---	---	---	---	---	---	---	---
MW-2	10/05/92	168.14	22.74	0.21	145.56	---	---	---	---	---	---	---	---
MW-2	01/13/93	168 14	15.55	0.02	152 61	---	---	---	---	---	---	---	---
MW-2	04/23/93	168 14	16 54	0.21	151 76	---	---	---	---	---	---	---	---
MW-2	07/12/93	168.14	20.46	0.06	147.73	---	---	---	---	---	---	---	---
MW-2	10/21/93	168.14	24 91	0.31	143.46	---	---	---	---	---	---	---	---
MW-2	01/21/94	168.14	21 20	---	146.94	---	---	---	---	---	---	---	---
MW-2	04/20/94	168.14	22 44	---	145.70	1800	140	370	54	290	1.7	17	PACE
MW-2	08/01/94	168.14	22 24	0 04	145.93	---	---	---	---	---	---	---	---
MW-2	12/23/94	168.14	16 25	0 03	151.91	---	---	---	---	---	---	---	---
MW-2	01/26/95	168.14	14 55	0 39	153.88	---	---	---	---	---	---	---	---
MW-2	06/08/95	168.14	21.18	0 43	147.28	---	---	---	---	---	---	---	---
MW-2	08/22/95	168 14	22.76	0 36	145.65	---	---	---	---	---	---	---	---
MW-2	10/27/95	168.14	23.61	0 30	144.76	---	---	---	---	---	---	---	---
MW-2	01/25/96	168 14	15.95	0 15	152.30	---	---	---	---	---	---	---	---
MW-2	04/19/96	168.14	17.33	0.07	150 86	---	---	---	---	---	---	---	---
MW-2	07/23/96	168.14	21.25	0.05	146 93	---	---	---	---	---	---	---	---
MW-2	11/11/96	168 14	22.27	0.01	145.88	---	---	---	---	---	---	---	---
MW-2	01/21/97	168 14	15.19	0.01	152.96	---	---	---	---	---	---	---	---
MW-2	04/29/97	168 14	20 22	0.01	147.93	---	---	---	---	---	---	---	---
MW-2	04/30/97	168 14	---	---	---	130000	4600	15000	6000	37000	ND<5000	5.0	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO 11132
3201 95TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO 10-024

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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-3	07/09/90	167.17	---	---	---	140	5 3	4 6	2 0	3 8	---	---	---
MW-3	12/21/90	167.17	---	---	---	0 19	100	6 0	0 9	27	---	---	---
MW-3	03/07/91	167.17	17.40	---	149 77	0 4	69	22	6 1	57	---	---	---
MW-3	06/27/91	167.17	---	---	---	380	28	26	13	46	---	---	---
MW-3	09/27/91	167.17	---	---	---	0 07	7 9	ND	0 4	1 1	---	---	---
MW-3	12/18/91	167.17	---	---	---	0.26	34	24	0 8	28	---	---	---
MW 3	04/01/91	167.17	13.69	---	153 48	ND	ND	ND	ND	ND	---	---	---
MW 3	07/03/92	167.17	19 59	---	147 58	71	9 4	0 9	5 0	13	---	---	ANA
MW-3	10/05/92	167 17	21.22	---	145 95	67	5 1	1.1	6 1	8.1	---	---	ANA
QC-1 (c)	10/05/92	---	---	---	---	ND<50	2.2	ND<0.5	1 5	2.8	---	---	ANA
MW-3	01/13/93	167 17	13.63	---	153 54	830	50	34	42	89	---	---	PACE
MW-3	04/23/93	167 17	15 02	---	152.15	ND<50	ND<0 5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-1 (c)	04/23/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	07/12/93	167.17	19.16	---	148.01	250	12	4.2	12	16	---	---	PACE
MW-3	10/21/93	167 17	21 81	---	145.36	52	4 4	1 4	4 7	3.3	---	---	PACE
QC-1 (c)	10/21/93	---	---	---	---	65	7 4	1.0	6 9	4.2	---	---	PACE
MW-3	01/21/94	167 17	19 94	---	147.23	57	3 0	3.4	3 6	9.0	---	---	PACE
MW-3	04/20/94	167 17	20.24	---	146.93	600	26	23	33	88	---	1.8	PACE
MW-3	08/01/94	167 17	20 74	---	146.43	99	6.2	1 1	4 5	5.2	---	1 4	PACE
QC-1 (c)	08/01/94	---	---	---	---	120	7 7	1 6	5 9	6.7	---	---	PACE
MW-3	12/23/94	167 17	14 70	---	152 47	ND<50	ND<0 5	0 78	ND<0 5	ND<0.5	---	1.7	PACE
QC-1 (c)	12/23/94	---	---	---	---	ND<50	ND<0 5	ND<0 5	ND<0 5	ND<0.5	---	---	PACE
MW-3	01/26/95	167.17	12 89	---	154 28	190	16	0 5	35	24	---	6 6	ATI
MW-3	06/08/95	167 17	19 95	---	147 22	330	21	4 0	34	32	---	7 0	ATI
MW-3	08/22/95	167.17	21 41	---	145 76	150	14	ND<0 50	ND<0 50	1.6	---	6 6	ATI
MW-3	10/27/95	167 17	22.43	---	144 74	---	---	---	---	---	---	---	---
MW-3	10/30/95	---	---	---	---	51	2.4	ND<0 50	ND<0 50	ND<1 0	ND<5 0	6 9	ATI
MW-3	01/25/96	167.17	14 03	---	153 14	ND<50	ND<0 50	ND<0 50	ND<0 50	ND<1 0	5 1	---	CEI
MW-3	04/19/96	167.17	15.26	---	151 91	460	55	4	33	63	ND<10	9 4	SPL
MW-3	07/23/96	167.17	19 19	---	147 98	ND<50	ND<0.5	ND<0.5	ND<0 5	ND<0 5	ND<10	9.2	SPL
MW-3	11/11/96	167.17	20.24	---	146 93	ND<250	ND<2.5	ND<5 0	ND<5 0	ND<5 0	ND<50	8 4	SPL
MW-3	01/21/97	167.17	13 09	---	154 08	ND<50	ND<0.5	ND<1.0	ND<1 0	ND<1 0	ND<10	5.4	SPL
MW-3	04/29/97	167 17	18.14	---	149 03	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1 0	ND<10	4 3	SPL
MW-4	07/09/90	170 36	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-4	12/21/90	170 36	---	---	---	ND	ND	ND	ND	0 8	---	---	---
MW-4	03/07/91	170 36	20 72	---	149 64	ND	2.2	3.8	1 5	2 8	---	---	---
MW-4	06/27/91	170 36	---	---	---	ND	6 3	1 8	0 4	1.0	---	---	---
MW-4	09/27/91	170 36	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-4	12/18/91	170.36	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-4	04/01/91	170 36	17 49	---	152 87	ND	ND	ND	ND	ND	---	---	---
MW-4	07/03/92	170.36	22.16	---	148 20	ND<50	ND<0 5	ND<0.5	ND<0 5	ND<0 5	---	---	ANA
MW-4	10/05/92	170.36	23.38	---	146 98	ND<50	ND<0.5	ND<0.5	ND<0 5	ND<0 5	---	---	ANA
MW-4	01/13/93	170 36	17.58	---	152 78	ND<50	ND<0.5	ND<0.5	ND<0 5	ND<0 5	---	---	PACE
MW-4	04/23/93	170 36	15 72	---	154 64	ND<50	ND<0.5	ND<0.5	ND<0 5	ND<0 5	---	---	PACE
MW-4	07/12/93	170 36	21 74	---	148 62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	10/21/93	170 36	23 84	---	146.52	ND<50	ND<0 5	ND<0 5	ND<0 5	ND<0.5	---	---	PACE
MW-4	01/21/94	170 36	22 42	---	147.94	ND<50	ND<0 5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	04/20/94	170 36	22 66	---	147.70	ND<50	ND<0 5	ND<0 5	ND<0 5	ND<0.5	---	2.2	PACE
MW-4	08/01/94	170 36	23 01	---	147 35	ND<50	ND<0 5	ND<0.5	ND<0 5	ND<0.5	---	1 9	PACE
MW-4	12/23/94	170 36	17 03	---	153.33	---	---	---	---	---	---	---	---
MW-4	01/26/95	170 36	17.42	---	152 94	ND<50	ND<0 5	ND<0 5	ND<0 5	ND<1	---	7 5	ATI
MW-4	06/08/95	170 36	21.55	---	148.81	---	---	---	---	---	---	---	---
MW-4	08/22/95	170 36	23 47	---	146.89	ND<50	ND<0.50	ND<0.50	ND<0 50	ND<1.0	---	6.4	ATI
MW-4	10/27/95	170 36	24 50	---	145 86	---	---	---	---	---	---	---	---
MW-4	01/25/96	170 36	18 74	---	151 62	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1 0	58	---	CEI
MW-4	04/19/96	170 36	18 63	---	151 73	---	---	---	---	---	---	---	---
MW-4	07/23/96	170 36	22.56	---	147 80	---	---	---	---	---	---	---	---
MW-4	11/11/96	170 36	23 63	---	146.73	ND<50	ND<1 0	ND<1 0	ND<1 0	ND<1.0	34	8.2	SPL
MW-4	01/21/97	170 36	16 59	---	153.77	---	---	---	---	---	---	---	---
MW-4	04/29/97	170 36	21 43	---	148.93	ND<50	ND<0 5	ND<1 0	ND<1 0	ND<1.0	ND<10	4 7	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO 10-024

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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-5	07/09/90	165.14	---	---	---	280	200	210	46	290	---	---	---
MW-5	12/21/90	165.14	---	---	---	0.69	300	34	8.4	39	---	---	---
MW-5	03/07/91	165.14	16.60	---	148.54	ND	17	0.9	0.7	1.6	---	---	---
MW-5	06/27/91	165.14	---	---	---	330	120	10	12	8	---	---	---
MW-5	09/27/91	165.14	---	---	---	0.73	230	16	20	22	---	---	---
MW-5	12/18/91	165.14	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	04/01/91	165.14	11.99	---	153.15	800	250	54	11	60	---	---	---
MW-5	07/03/92	165.14	18.65	---	146.49	150	36	ND<0.5	ND<0.5	1.1	---	---	ANA
MW-5	10/05/92	165.14	20.32	---	144.82	270	79	4	1.7	2.9	---	---	ANA
MW-5	01/13/93	165.14	13.03	---	152.11	180	59	6.0	1.8	7.6	---	---	PACE
MW-5	04/23/93	165.14	13.51	---	151.63	8700	440	96	35	136	---	---	PACE
MW-5	07/12/93	165.14	18.06	---	147.08	250	57	2.9	2.1	6.0	---	---	PACE
MW-5	10/21/93	165.14	20.41	---	144.73	210	82	1.5	ND<0.5	1.4	---	---	PACE
MW-5	01/21/94	165.14	18.86	---	146.28	110	36	1.2	ND<0.5	0.7	---	---	PACE
MW-5	04/20/94	165.14	17.30	---	147.84	690	230	4.5	1.6	11	---	1.3	PACE
MW-5	08/01/94	165.14	17.53	---	147.61	170	44	1.6	0.9	2.7	---	0.9	PACE
MW-5	12/23/94	165.14	11.63	---	153.51	630	180	1.9	0.66	1.9	---	1.4	PACE
MW-5	01/26/95	165.14	11.25	---	153.89	160	68	ND<0.5	ND<0.5	22	---	5.9	ATI
MW-5	06/08/95	165.14	16.80	---	148.34	2000	630	58	61	180	---	6.5	ATI
QC-1 (c)	06/08/95	---	---	---	---	1700	560	51	55	170	---	---	ATI
MW-5	08/22/95	165.14	19.02	---	146.12	3700	1100	18	27	59	---	7.3	ATI
MW-5	10/27/95	165.14	20.94	---	144.20	---	---	---	---	---	---	---	---
MW-5	10/30/95	---	---	---	---	6500	2200	55	180	270	ND<250	7.5	ATI
MW-5	01/25/96	165.14	13.30	---	151.84	590	37	0.70	ND<0.50	ND<1.0	ND<5.0	---	CEI
QC-1 (c)	01/25/96	---	---	---	---	540	37	0.66	ND<0.50	ND<1.0	ND<5.0	---	CEI
MW-5	04/19/96	165.14	13.63	---	151.51	1500	470	38	49	210	ND<50	8.1	SPL
MW-5	07/23/96	165.14	17.61	---	147.53	140	4.6	ND<0.5	ND<0.5	ND<0.5	ND<10	8.0	SPL
MW-5	11/11/96	165.14	18.70	---	146.44	140	40	ND<1.0	ND<1.0	ND<1.0	ND<10	7.9	SPL
MW-5	01/21/97	165.14	11.63	---	153.51	730	300	ND<5.0	7.8	26	ND<50	5.0	SPL
MW-5	04/29/97	165.14	16.74	---	148.40	340	530	ND<5.0	ND<5.0	ND<5.0	ND<50	4.8	SPL
MW-6	07/09/90	165.40	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-6	12/21/90	165.40	---	---	---	0.17	2.6	7.0	4.9	26	---	---	---
MW-6 (d)	03/07/91	165.40	---	---	---	---	---	---	---	---	---	---	---
MW-6 (d)	06/27/91	165.40	---	---	---	---	---	---	---	---	---	---	---
MW-6 (d)	09/27/91	165.40	---	---	---	---	---	---	---	---	---	---	---
MW-6	12/18/91	165.40	---	---	---	ND	1.3	22	ND	2.7	---	---	---
MW-6	04/01/91	165.40	11.79	---	153.61	ND	ND	ND	ND	ND	---	---	---
MW-6	07/03/92	165.40	17.77	---	147.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	10/05/92	165.40	19.46	---	145.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	01/13/93	165.40	11.34	---	154.06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	04/23/93	165.40	12.92	---	152.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	07/12/93	165.40	17.36	---	148.04	ND<50	ND<0.5	ND<0.5	ND<0.5	0.7	---	---	PACE
MW-6	10/21/93	165.40	19.98	---	145.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	01/21/94	165.40	18.10	---	147.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	04/20/94	165.40	18.68	---	146.72	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	2.0	PACE
MW-6	08/01/94	165.40	18.90	---	146.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	1.5	PACE
MW-6	12/23/94	165.40	12.94	---	152.46	---	---	---	---	---	---	---	---
MW-6	01/26/95	165.40	10.46	---	154.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	7.3	ATI
MW-6	06/08/95	165.40	16.84	---	148.56	---	---	---	---	---	---	---	---
MW-6	08/22/95	165.40	19.48	---	145.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.7	ATI
MW-6	10/27/95	165.40	20.39	---	145.01	---	---	---	---	---	---	---	---
MW-6	01/25/96	165.40	12.24	---	153.16	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	9.9	---	CEI
MW-6	04/19/96	165.40	13.90	---	151.50	---	---	---	---	---	---	---	---
MW-6	07/23/96	165.40	17.83	---	147.57	---	---	---	---	---	---	---	---
MW-6	11/11/96	165.40	18.90	---	146.50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	7.7	SPL
MW-6	01/21/97	165.40	11.97	---	153.43	---	---	---	---	---	---	---	---
MW-6	04/29/97	165.40	17.04	---	148.36	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.5	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP Oil COMPANY SERVICE STATION NO 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO 10-024

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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-7	07/09/90	167 61	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-7	12/21/90	167 61	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-7	03/07/91	167 61	19 04	---	148.57	ND	ND	0 4	0 3	2.4	---	---	---
MW-7	06/27/91	167 61	---	---	---	70	17	4	0 8	2.2	---	---	---
MW-7	09/27/91	167 61	---	---	---	ND	0 4	ND	ND	0 4	---	---	---
MW-7	12/18/91	167 61	---	---	---	ND	0 7	2.9	0 8	3.3	---	---	---
MW-7	04/01/91	167 61	15.18	---	152 43	ND	ND	ND	ND	ND	---	---	---
MW-7	07/03/92	167 61	20.28	---	147.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-7	10/05/92	167 61	21.56	---	146 05	ND<50	ND<0.5	ND<0.5	ND<0.5	1.5	---	---	ANA
MW-7	01/13/93	167 61	15 41	---	152.20	ND<50	ND<0.5	ND<0.5	ND<0 5	ND<0.5	---	---	PACE
MW-7	04/23/93	167.61	15 84	---	151.77	ND<50	ND<0 5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	07/12/93	167.61	19 84	---	147.77	ND<50	ND<0.5	ND<0.5	ND<0 5	ND<0.5	---	---	PACE
MW-7	10/21/93	167.61	21 61	---	146 00	ND<50	ND<0 5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	01/21/94	167 61	20 49	---	147.12	ND<50	ND<0 5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-1 (c)	01/21/94	---	---	---	---	ND<50	ND<0 5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	04/20/94	167 61	20.54	---	147 07	ND<50	ND<0 5	ND<0.5	ND<0.5	ND<0.5	---	1.5	PACE
MW-7	08/01/94	167.61	20 99	---	146 62	ND<50	0 7	ND<0.5	ND<0.5	ND<0.5	---	1 9	PACE
MW-7	12/23/94	167 61	15 00	---	152 61	---	---	---	---	---	---	---	---
MW-7	01/26/95	167 61	14.69	---	152 92	ND<50	ND<0.5	ND<0.5	ND<0 5	ND<1	---	7 0	ATI
MW-7	06/08/95	167 61	19 87	---	147 74	---	---	---	---	---	---	---	---
MW-7	08/22/95	167 61	21 49	---	146.12	ND<50	ND<0.50	ND<0 50	ND<0.50	ND<1 0	---	6 4	ATI
MW-7	10/27/95	167 61	22 53	---	145 08	---	---	---	---	---	---	---	---
MW-7	01/25/96	167 61	17.21	---	150 40	ND<50	ND<0 50	ND<0 50	ND<0 50	ND<1 0	ND<5 0	---	CEI
MW-7	04/19/96	167 61	17 09	---	150.52	---	---	---	---	---	---	---	---
MW-7	07/23/96	167.61	21 02	---	146.59	---	---	---	---	---	---	---	---
MW-7	11/11/96	167.61	22 03	---	145 58	ND<50	ND<0 5	ND<1 0	ND<1 0	ND<1.0	ND<10	7.8	SPL
MW-7	01/21/97	167.61	15 06	---	152 55	---	---	---	---	---	---	---	---
MW-7	04/29/97	167 61	20 11	---	147 50	ND<50	ND<0 5	ND<1.0	ND<1 0	ND<1.0	ND<10	4 4	SPL
MW-8	03/07/91	165 74	16 72	---	149 02	2.7	780	450	64	310	---	---	---
MW-8	06/27/91	165 74	---	---	---	12000	3400	1100	240	750	---	---	---
MW-8	09/27/91	165 74	---	---	---	41	5700	5200	1100	4300	---	---	---
MW-8	12/18/91	165 74	---	---	---	3 2	990	150	120	250	---	---	---
MW-8	04/01/91	165 74	12 54	---	153.20	15000	3600	2600	410	1900	---	---	---
MW-8	07/03/92	165 74	18.78	---	146 96	72000	19000	32000	3000	15000	---	---	ANA
MW-8	10/05/92	165 74	20 48	0 01	145.27	---	---	---	---	---	---	---	---
MW-8	01/13/93	165.74	12 87	0 01	152.88	---	---	---	---	---	---	---	---
MW-8	04/23/93	165.74	13 90	SHEEN	151.84	---	---	---	---	---	---	---	---
MW-8	07/12/93	165.74	18 30	SHEEN	147 44	---	---	---	---	---	---	---	---
MW-8	10/21/93	165.74	21.91	0 95	144 54	---	---	---	---	---	---	---	---
MW-8	01/21/94	165.74	19 12	0 03	146 64	---	---	---	---	---	---	---	---
MW-8	04/20/94	165.74	19.28	0 03	146 48	26000	1700	4100	960	4000	---	1.1	PACE
MW-8	08/01/94	165 74	---	---	---	---	---	---	---	---	---	---	---
MW-8	12/23/94	165 74	13.81	0.03	151 95	---	---	---	---	---	---	---	---
MW-8	01/26/95	165 74	---	---	---	---	---	---	---	---	---	---	---
MW-8	06/08/95	165 74	17.82	0.29	148 14	---	---	---	---	---	---	---	---
MW-8	08/22/95	165 74	19 41	0.20	146 48	---	---	---	---	---	---	---	---
MW-8	10/27/95	165 74	20 47	0.14	145 38	---	---	---	---	---	---	---	---
MW-8	01/25/96	165 74	13.35	0.22	152 56	---	---	---	---	---	---	---	---
MW-8	04/19/96	165 74	14 40	0.20	151.49	---	---	---	---	---	---	---	---
MW-8	07/23/96	165 74	18 35	0 14	147.50	---	---	---	---	---	---	---	---
MW-8	11/11/96	165 74	19 41	0 02	146.35	---	---	---	---	---	---	---	---
MW-8	01/21/97	165 74	12 29	0 01	153.46	---	---	---	---	---	---	---	---
MW-8 (d)	04/29/97	165 74	---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW 9	03/07/91	166.20	16 79	---	149 41	7 1	220	4	2 4	2400	—	—	—
MW-9	06/27/91	166.20	---	---	---	3600	520	400	85	310	---	---	---
MW-9	09/27/91	166.20	---	---	---	3.2	720	150	50	180	---	---	---
MW 9	12/18/91	166.20	---	---	---	ND	2.5	1.1	0.3	5 8	---	---	---
MW 9	04/01/91	166.20	12.89	---	153 31	12000	2000	2600	360	1600	---	---	---
MW-9	07/03/92	166.20	18.89	—	147.31	5700	17000	840	230	800	—	—	ANA
MW-9	10/05/92	166.20	20.52	—	145 68	1400	440	17	14	100	—	—	ANA
MW 9	01/13/93	166.20	12 92	---	153.28	11000	1200	1700	340	1400	—	—	PACE
QC-1 (c)	01/13/93	—	---	---	0 00	11000	1200	1600	330	1300	---	---	PACE
MW-9	04/23/93	166.20	14 08	---	152 12	24000	2800	4500	730	3400	—	—	PACE
MW 9	07/12/93	166.20	18 44	---	147 76	13000	1400	1100	360	1400	---	---	PACE
QC-1 (c)	07/12/93	---	---	---	---	10000	1200	900	310	1200	—	—	PACE
MW-9	10/21/93	166.20	21 81	0 89	145 06	—	—	—	—	—	—	—	—
MW-9	01/21/94	166.20	19.28	—	146 92	—	—	—	—	—	—	—	—
MW-9	04/20/94	166.20	19 72	---	146 48	43000	2800	6800	1300	7900	—	1.7	PACE
QC-1 (c)	04/20/94	---	---	---	---	45000	2700	6800	1200	8200	—	---	PACE
MW-9	08/01/94	166.20	20 18	0 05	146 06	—	—	—	—	—	---	—	---
MW-9	12/23/94	166.20	14.22	0 02	152 00	—	---	---	---	---	---	---	---
MW-9	01/26/95	166.20	11 85	0 13	154 45	—	---	—	—	---	---	—	—
MW-9	06/08/95	166.20	18 33	0 80	148 47	---	---	---	---	---	---	---	---
MW-9	08/22/95	166.20	19.95	0 01	146.26	---	---	—	—	—	—	—	—
MW-9	10/27/95	166.20	20.88	0 01	145 33	—	---	---	---	---	---	---	---
MW-9	01/25/96	166.20	13.84	0 07	152 41	—	---	---	---	---	—	—	—
MW-9 (d)	04/19/96	166.20	---	---	---	---	---	---	---	---	---	---	---
MW-9	07/23/96	166.20	18.84	0 03	147.38	—	—	—	—	—	—	—	—
MW-9	11/11/96	166.20	19 91	0 01	146.30	—	—	—	—	—	—	—	—
MW-9	01/21/97	166.20	12 93	0 01	153.28	—	—	—	—	—	—	—	—
MW-9	04/29/97	166.20	18 03	SHEEN	148 17	—	—	—	—	—	—	—	—
MW-9	04/30/97	166.20	---	---	---	78000	1900	3600	3100	20600	ND<5000	5 5	SPL
MW-10	03/07/91	167 01	18 09	---	148 92	1.6	120	190	32	230	---	---	---
MW-10	06/27/91	167.01	—	---	---	12000	7300	500	150	300	---	---	---
MW-10	09/27/91	167 01	—	—	---	57	12000	7200	1400	4600	---	---	---
MW-10	12/18/91	167 01	---	---	—	5 3	2500	120	36	79	---	---	---
MW-10	04/01/91	167 01	13 92	—	153 09	ND	ND	ND	ND	ND	---	---	---
MW-10	07/03/92	167 01	19 92	---	147 09	8600	5100	1300	180	690	---	---	ANA
MW-10	10/05/92	167 01	21 92	0 19	145 23	---	---	---	---	---	---	---	---
MW-10	01/13/93	167 01	14 43	0 03	152 60	---	---	---	---	---	---	---	---
MW-10	04/23/93	167 01	15.26	0 06	151 80	---	---	---	---	---	---	---	---
MW-10	07/12/93	167 01	19 78	0 45	147 57	—	---	---	---	---	---	---	---
MW-10	10/21/93	167 01	22 90	0 69	144 63	---	—	---	---	—	---	---	---
MW-10	01/21/94	167 01	20.25	0 06	146 81	—	---	---	---	---	---	---	---
MW-10	04/20/94	167 01	20 74	---	146.27	100000	12000	24000	2400	14000	---	1 0	PACE
MW-10	08/01/94	167 01	22 00	0.28	145 22	---	---	---	---	---	---	---	---
MW-10	12/23/94	167 01	16.08	0.25	151.12	—	—	---	---	---	---	—	—
MW-10	01/26/95	167 01	13.68	0 80	153.93	---	—	—	---	—	---	---	---
MW-10	06/08/95	167 01	19 08	0 75	148.49	---	—	---	—	---	—	—	---
MW-10	08/22/95	167 01	20.73	0 70	146.81	---	—	---	---	---	---	---	—
MW-10	10/27/95	167 01	21 69	0 63	145 79	—	---	—	---	—	—	---	---
MW-10	01/25/96	167 01	15 05	0.81	152.57	—	---	—	---	—	---	---	---
MW-10	04/19/96	167 01	16.26	0.58	151.19	—	---	—	---	—	---	---	---
MW-10	07/23/96	167 01	20.18	0 62	147 30	—	—	---	---	—	—	—	---
MW-10	11/11/96	167.01	21.20	0.20	145 96	—	—	---	—	—	—	—	—
MW-10	01/21/97	167 01	13.66	0 14	153.46	—	---	---	---	—	---	—	—
MW-10	04/29/97	167.01	18 71	0.21	148.30	---	---	—	---	---	---	—	---
MW-10	04/30/97	167 01	---	---	---	170000	9700	39000	4700	30500	ND<5000	5.6	SPL

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BP OIL COMPANY SERVICE STATION NO 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO 10-024

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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
RW-1	07/09/90	168.01	---	1.21	---	---	---	---	---	---	---	---	---
RW-1	12/21/90	168.01	---	0.01	---	---	---	---	---	---	---	---	---
RW-1	03/07/91	168.01	17.62	SHEEN	150.39	---	---	---	---	---	---	---	---
RW-1	06/27/91	168.01	---	0.04	---	---	---	---	---	---	---	---	---
RW-1	09/27/91	168.01	---	0.02	---	---	---	---	---	---	---	---	---
RW-1	12/18/91	168.01	---	0.02	---	---	---	---	---	---	---	---	---
RW-1	04/01/91	168.01	14.40	0.11	153.69	---	---	---	---	---	---	---	---
RW-1	07/03/92	168.01	20.66	SHEEN	147.35	---	---	---	---	---	---	---	---
RW-1	10/05/92	168.01	23.34	0.06	144.73	---	---	---	---	---	---	---	---
RW-1	01/13/93	168.01	16.59	0.05	151.46	---	---	---	---	---	---	---	---
RW-1	04/23/93	168.01	16.17	0.18	151.98	---	---	---	---	---	---	---	---
RW-1	07/12/93	168.01	20.18	0.06	147.88	---	---	---	---	---	---	---	---
RW-1	10/21/93	168.01	25.70	0.56	142.73	---	---	---	---	---	---	---	---
RW-1	01/21/94	168.01	21.24	0.40	147.07	---	---	---	---	---	---	---	---
RW-1	04/20/94	168.01	32.20	---	135.81	---	---	---	---	---	---	---	---
RW-1	08/01/94	168.01	21.70	---	146.31	29000	580	950	300	7800	---	1.1	PACE
RW-1	12/23/94	168.01	16.02	---	151.99	1300	25	8.6	1.4	69	---	1.8	PACE
RW-1	01/26/95	168.01	13.78	---	154.23	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	ATI
QC-1 (c)	01/26/95	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	ATI
RW-1	06/08/95	168.01	20.05	---	147.96	1300	130	ND<1.0	ND<1.0	36	---	---	ATI
RW-1	08/22/95	168.01	21.74	---	146.27	3300	230	13	4.9	280	---	6.6	ATI
QC-1 (c)	08/22/95	---	---	---	---	2800	210	9.3	4.3	250	---	---	ATI
RW-1	10/27/95	168.01	32.00	---	136.01	---	---	---	---	---	---	---	---
RW-1	10/30/95	---	---	---	---	230	1.4	ND<1.0	ND<1.0	ND<2.0	650	6.9	ATI
QC-1 (c)	10/30/95	---	---	---	---	240	1.6	ND<1.0	ND<1.0	ND<2.0	630	---	ATI
RW-1	01/25/96	168.01	15.41	---	152.60	15000	3400	930	330	2500	5300	---	CEI
RW-1	04/19/96	168.01	16.83	---	151.18	35000	5500	3300	1700	9400	14000	7.6	SPL
QC-1 (c)	04/19/96	---	---	---	---	33000	5600	3200	1700	8800	15000	---	SPL
RW-1	07/23/96	168.01	20.76	---	147.25	46000	3600	2300	900	5100	36000	7.4	SPL
QC-1 (c)	07/23/96	---	---	---	---	47000	3700	2500	930	5300	35000	---	SPL
RW-1	11/11/96	168.01	21.73	---	146.28	34000	3000	1200	880	4600	22000	8.3	SPL
QC-1 (c)	11/11/96	---	---	---	---	31000	2900	1000	860	4600	22000	---	SPL
RW-1	01/21/97	168.01	14.20	---	153.81	260	40	16	2.7	34	1500	6.1	SPL
QC-1 (c)	01/21/97	---	---	---	---	270	42	17	2.7	36	1500	---	SPL
RW-1	04/29/97	168.01	19.15	---	148.86	32000	3100	590	1300	6000	46000	5.3	SPL
QC-2 (e)	10/05/92	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (e)	01/13/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	04/23/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	07/12/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	10/21/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	01/21/94	---	---	---	---	ND<50	ND<0.5	2.1	ND<0.5	2.1	---	---	PACE
QC-2 (e)	04/20/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	04/20/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	12/23/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ATI
QC-2 (e)	01/26/95	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	ATI
QC-2 (e)	06/08/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (e)	08/22/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (e)	10/30/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (e)	01/25/96	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	CEI
QC-2 (e)	04/19/96	---	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO 10-024

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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB

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 analyzed/available/applicable/measurable
ND	Not detected above reported detection limit
PACE	Pace, Inc.
ANA	Anametrix, Inc
ATI	Analytical Technologies, Inc
CEI	Celmic Corporation
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) Blind duplicate

(d) Well inaccessible.

(e) Travel blank.

F:\0\10-024\024-9-4 WQ2

TABLE 2 - PRODUCT REMOVAL STATUS
BP OIL COMPANY SERVICE STATION NO. 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

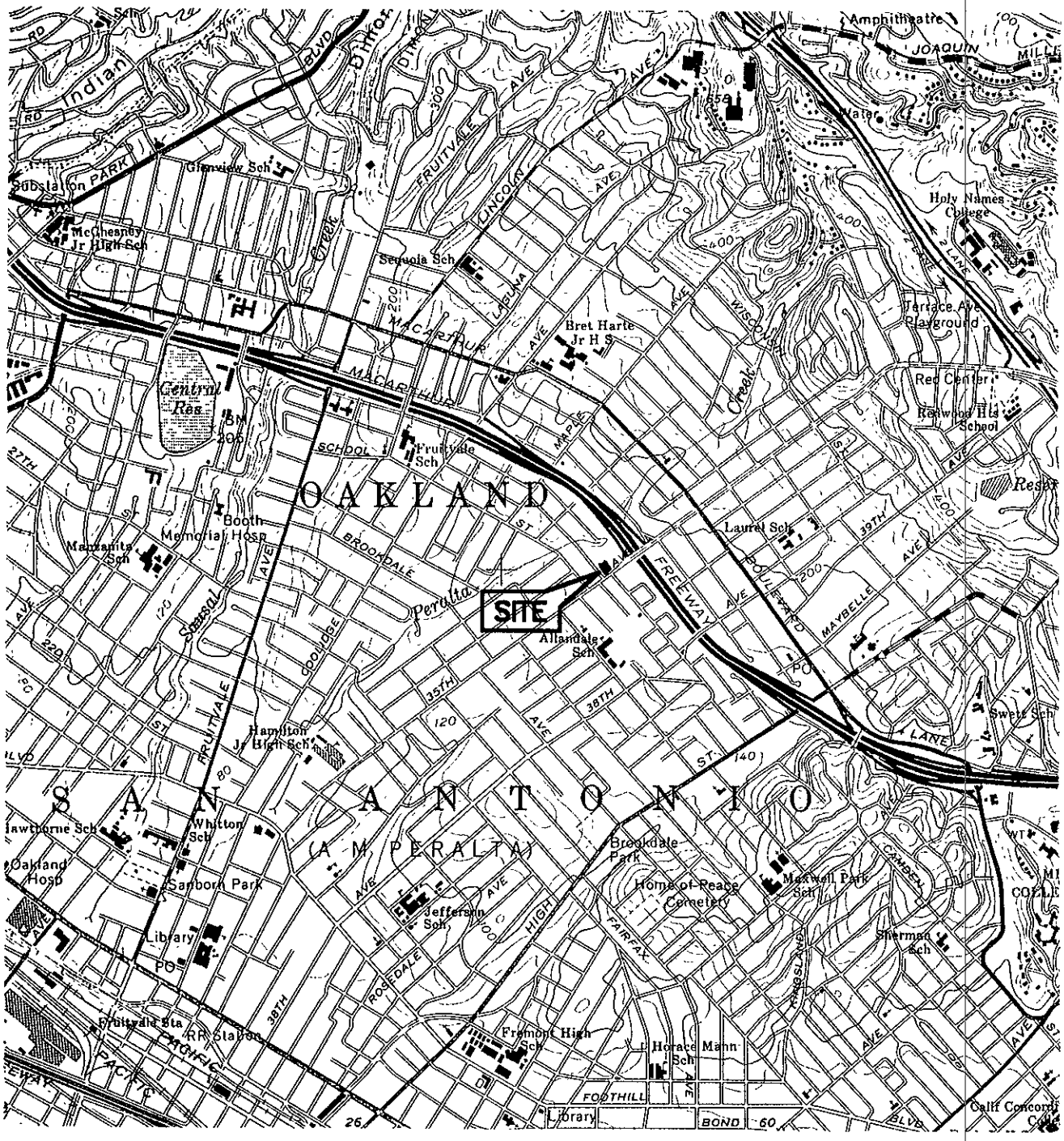
ALISTO PROJECT NO. 10-024

WELL ID	DATE	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)
MW-1	01/26/95	3.00	3.00
	06/08/95	0.60	3.60
	06/28/95	0.10	3.70
	08/22/95	0.15	3.85
	10/30/95	0.11	3.96
	01/25/96	1.00	4.96
	02/16/95	0.08	5.04
	04/19/96	0.75	5 79
	07/23/96	0	5.79
	11/11/96	0.98	6.77
	01/21/97	0.20	6.97
	04/29/97	0.25	7.22
MW-2	09/29/93	0.10	0.10
	10/05/93	0.10	0.20
	10/14/93	0.10	0.30
	10/20/93	0.25	0.55
	11/02/93	0.10	0.65
	12/07/93	0.05	0.70
	12/17/93	<0.01	0.70
	12/23/93	0.30	1.00
	01/12/94	0.05	1.05
	02/02/94	0.01	1.06
	02/11/94	0.01	1.07
	03/18/94	<0.01	1.07
	10/26/94	0.76	1.83
	11/12/94	0.08	1.91
	12/12/94	0.03	1.94
	01/26/95	0.19	2.13
	06/08/95	Sheen	2.13
	06/28/95	0.05	2.18
	08/22/95	0.10	2 28
	10/30/95	0.05	2.33
	01/25/96	Sheen	2 33
	02/16/95	0.04	2.37
	04/19/96	0.01	2.38
	07/23/96	0	2.38
	11/11/96	0.01	2.39
	01/21/97	<0.01	2.39
	04/29/97	<0.01	2.39
MW-8	11/02/93	0.25	0.25
	11/10/93	0.10	0.35
	11/16/93	0.10	0.45
	11/23/93	0.10	0.55
	11/30/93	0.10	0.65
	12/17/93	<0.01	0.65
	12/23/93	<0.01	0.65
	01/12/94	0.01	0.66
	02/02/94	0.05	0.71
	02/11/94	0.08	0.79
	02/18/94	<0.01	0.79
	03/18/94	0.01	0.80
	04/27/94	<0.01	0.80
	05/27/94	<0.01	0.80
	10/26/94	0.10	0.90
	11/12/94	0.02	0.92
	12/12/94	0.01	0.93
	06/08/95	Sheen	0.93
	08/22/95	0.05	0.98
	10/30/95	0.02	1.00
	01/25/96	0.05	1.05
	02/16/95	0.01	1.06
	04/19/96	0.25	1.31
	07/23/96	0	1.31
	11/11/96	0.02	1.33
	01/21/97	<0.01	1.33

TABLE 2 - PRODUCT REMOVAL STATUS
BP OIL COMPANY SERVICE STATION NO. 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)
MW-9	11/02/93	0.10	0.10
	11/10/93	0.10	0.20
	11/16/93	0.10	0.30
	12/23/93	<0.01	0.30
	01/12/94	0.01	0.31
	01/20/93	0.05	0.36
	02/02/94	0.05	0.41
	02/11/94	0.01	0.42
	02/18/94	<0.01	0.42
	03/18/94	0.10	0.52
	10/26/94	0.15	0.67
	11/12/94	<0.01	0.67
	12/12/94	<0.01	0.67
	01/26/95	0.10	0.77
	06/28/95	<0.01	0.77
	08/22/95	<0.01	0.77
	10/30/95	<0.01	0.77
	01/25/96	<0.01	0.77
	02/16/95	<0.01	0.77
	04/19/96	<0.01	0.77
	07/23/96	0	0.77
	11/11/96	0.01	0.78
	01/21/97	<0.01	0.78
	04/29/97	Sheen	0.78
MW-10	09/07/93	0.10	0.10
	09/14/93	0.10	0.20
	09/29/93	0.10	0.30
	10/05/93	1.60	1.90
	10/14/93	2.10	4.00
	10/20/93	1.00	5.00
	10/27/93	1.00	6.00
	11/02/93	0.30	6.30
	11/10/93	0.20	6.50
	11/16/93	0.10	6.60
	11/23/93	0.10	6.70
	11/30/93	0.30	7.00
	12/07/93	0.20	7.20
	12/17/93	0.30	7.50
	12/23/93	<0.01	7.50
	01/04/94	0.01	7.51
	01/12/94	0.01	7.52
	01/20/94	0.20	7.72
	02/02/94	0.01	7.73
	02/11/94	0.01	7.74
	02/18/94	0.20	7.94
	05/27/94	<0.01	7.94
	10/26/94	0.60	8.54
	11/12/94	0.43	8.97
	12/12/94	0.26	9.23
	01/26/95	0.13	9.36
	06/28/95	0.10	9.46
	08/22/95	0.15	9.61
	10/30/95	0.10	9.71
	01/25/96	0.25	9.96
	02/16/95	0.10	10.06
	04/19/96	0.50	10.56
	07/23/96	0	10.56
	11/11/96	0.20	10.76
	01/21/97	<0.03	10.76
	04/29/97	0.04	10.80



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

N

0 1000' 2000'

FIGURE 1

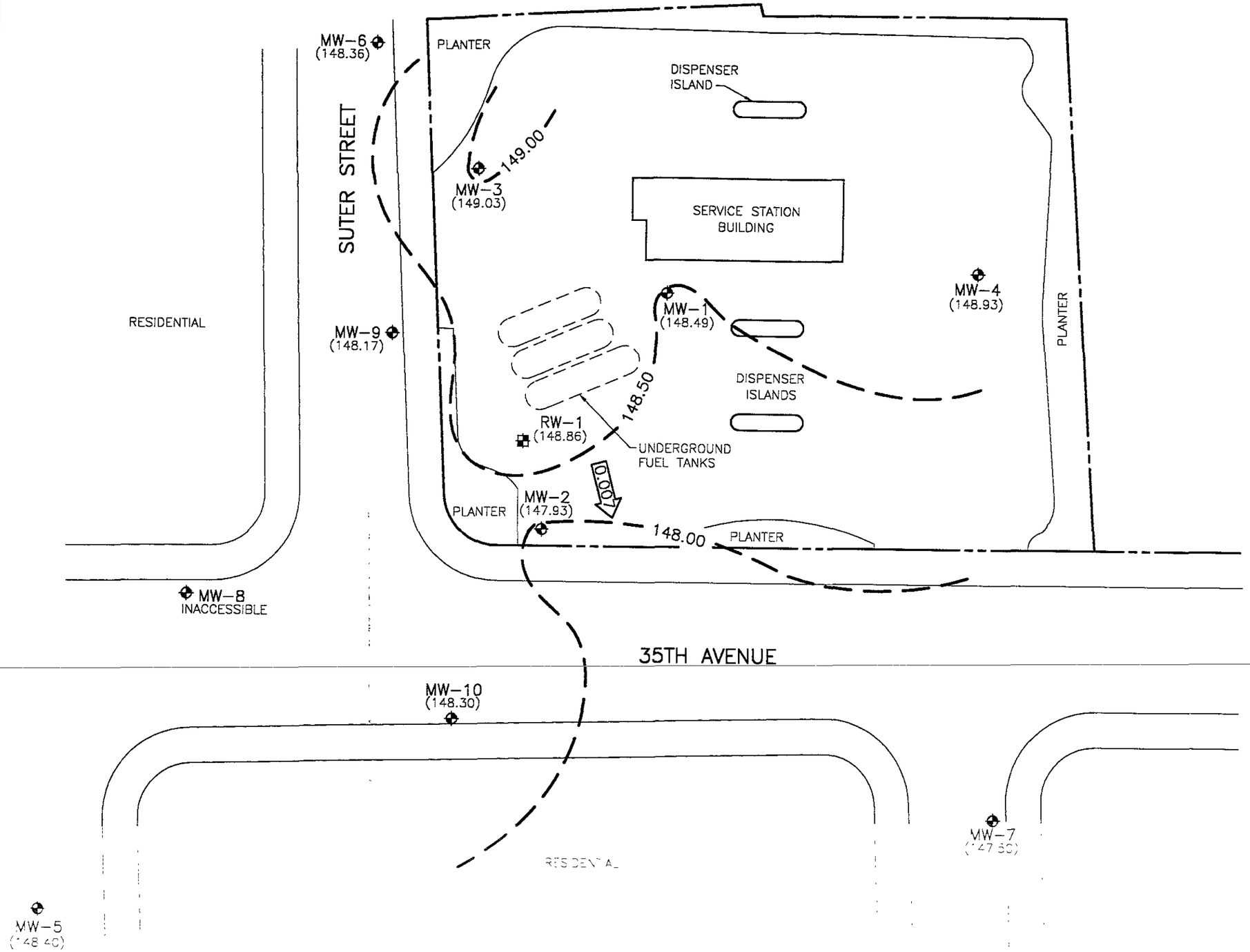
SITE VICINITY MAP

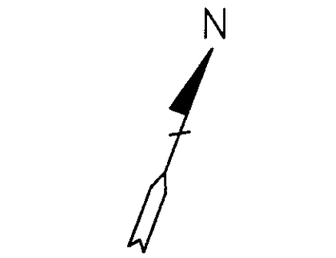
BP OIL SERVICE STATION NO. 11132
3201 35TH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-024

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

100248---.DWG 2-28-94 RKW 1=1





LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- (147.93) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 148.50 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–0.50 FOOT)
- 0.007 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

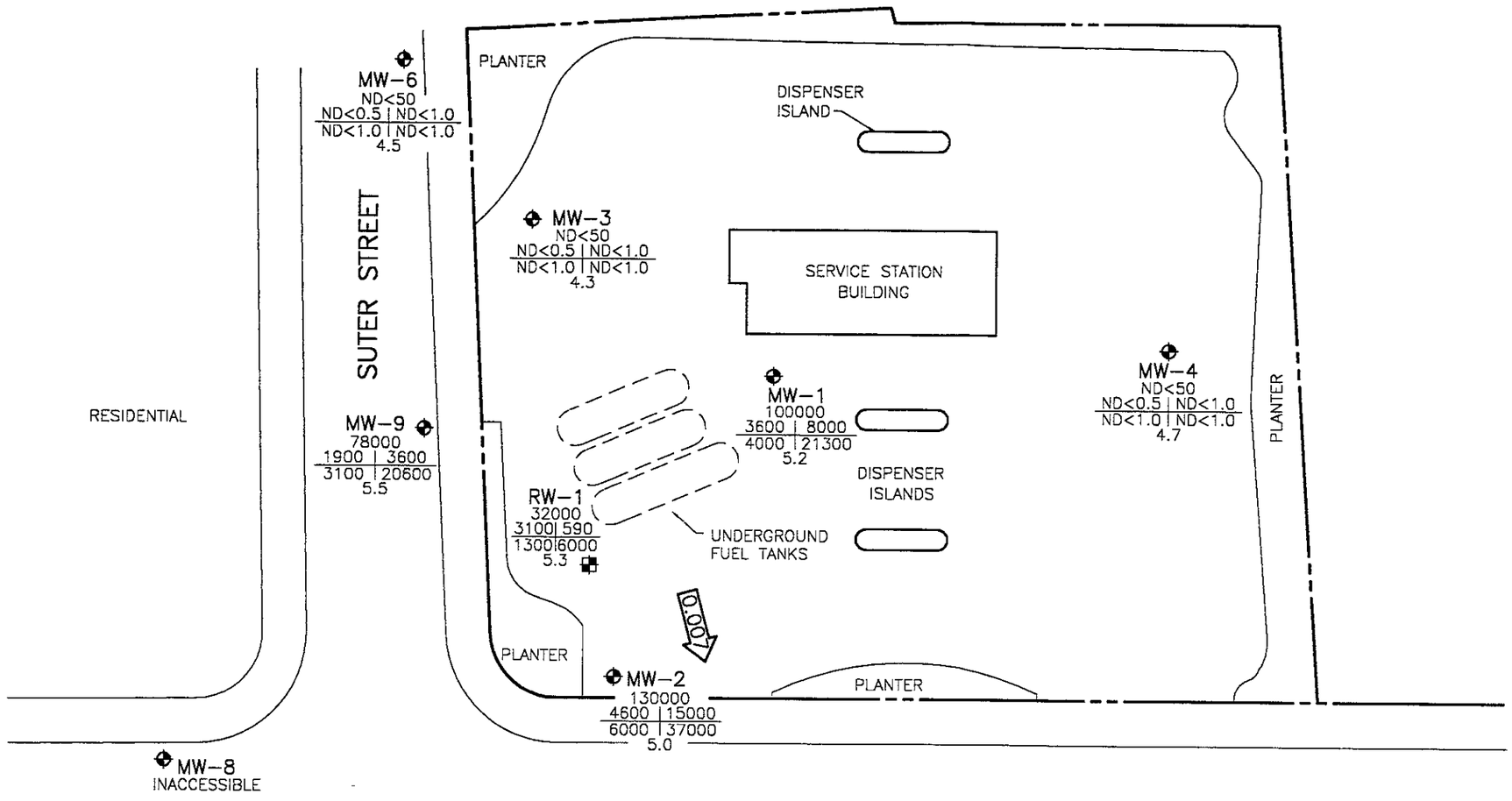
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

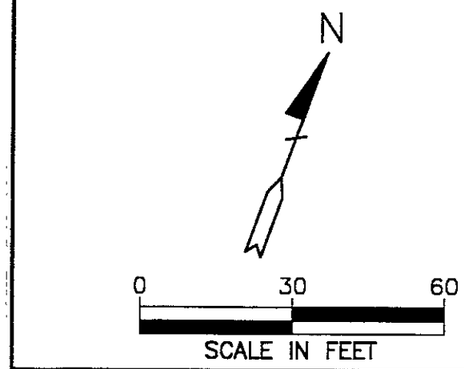
APRIL 29, 1997

BP OIL SERVICE STATION NO. 11132
3201 35TH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10–024

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA





LEGEND

⊕	GROUNDWATER MONITORING WELL
⊞	GROUNDWATER RECOVERY 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
0.007	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

APRIL 29 – 30, 1997

BP OIL SERVICE STATION NO. 11132
3201 35TH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-024

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201

Project No. 10-024-09-004 Date: 4/29-30/97
Address 3201 35th Street Day: M T W TH F
Contract No. G797457 City: Oakland
Station No. BP 11132 Sampler: LCB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-1	S-11	2"	N/m	21.90	.85	1110	QC-1 (S-12) From this well/Serviced PPLS
MW-2	S-9		N/m	20.22	.01	1057	Serviced PPLS
MW-3	S-4		34.58	18.14	Ø	1035	
*MW-4	S-1		40	21.43		1020	SEMI/OCT-APRIL
MW-5	S-5		30.88	16.74		1040	
*MW-6	S-2		40	17.04		1024	SEMI/OCT-APRIL
*MW-7	S-3		40	20.11		1030	SEMI/OCT-APRIL
MW-8	S-8		—	—	—	—	Car Parked over well Can't Access
*MW-9	S-9		40	18.03	Irredescence	1059	Serviced PPLS
*MW-10	S-10		40	18.71	.21	1109	Serviced PPLS
RW-1	S-6	10"	38.41	19.15	Ø	1050	

FIELD INSTRUMENT CALIBRATION DATA

pH METER Jem 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME
D.O. METER Jem ZERO d.O. SOLUTION BAROMETRIC PRESSURE TEMP 67 WEATHER clear
CONDUCTIVITY METER Jem 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-4	21.43	2"	OIC	Ø	Y (N)	3	1220	69.7	7.61	1.21ms	4.7
Total Depth - Water Level=	x Well Vol. Factor=	x#Vol. to Purge	PurgeVol.			6		68.6	7.43	1.34ms	
~40 - 21.43 = 18.57	X .16 = 2.97	X3 =	8.91			9	1231	68.3	7.40	1.3ms	4.7

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: 1237

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-6	17.04	2"	OIC	Ø	Y (N)	4	249	71.1	7.41	919µs	4.4
Total Depth - Water Level=	x Well Vol. Factor=	x#Vol. to Purge	PurgeVol.			8		70.3	7.22	831µs	
~40 - 17.04 = 22.96	X .16 = 3.67	X3 =	11.01			11.5	1257	69.8	7.14	931µs	4.5

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: 1310

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. 10-024-09-004 Date: 4/29-30/97
Address 3201 35th Street Day: M T W TH F
Contract No. G797457 City: Oakland
Station No. BP 11132 Sampler: LJB

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-7	20.11	2"	OK	Ø	Y (N)	3	1327	71.0	7.98	1.72ms	4.1
						6		70.2	7.77	1.31ms	
						10	1334	69.3	7.69	1.28ms	4.4

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
~40 - 20.11 = 19.89 X .16 = 3.18 X 3 = 9.54
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: 1344

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-3	18.14	2"	OK	Ø	Y (N)	3	1401	70.9	7.20	812µS	3.9
						5		69.6	7.07	822µS	
						8	1412	68.9	7.08	822µS	4.3

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
34.58 - 18.14 = 16.44 X .16 = 2.63 X 3 = 7.89
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: 1414

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-5	16.74	2"	OK	Ø	Y (N)	2	1431	69.3	7.63	1.53ms	4.4
						4		68.4	7.54	1.40ms	
						7	1447	68.1	7.49	1.33ms	4.8

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
30.88 - 16.74 = 14.14 X .16 = 2.26 X 3 = 6.78
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

(X) EPA 601___ (X) TPH-G/BTEX HCl O TPH Diesel___ O TOG 5520___
TIME/SAMPLE ID: 1450

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
RW-1	19.15	6"	OK	Ø	Y (N)	28	1510	71.9	7.69	1.66ms	5.0
						56		71.0	7.49	1.47ms	
						85	1645	70.4	7.43	1.41ms	5.3

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
38.41 - 19.15 = 19.26 X 1.47 = 28.31 X 3 = 84.93
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: 1650

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-2	20.22	2"	OK	20.21	Y N	3	1102	70.4	7.17	897µS	4.7
						6		70.0	7.10	912µS	
						10	1110	69.4	7.03	919µS	5.0

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
~40 - 20.22 = 19.78 X .16 = 3.16 X 3 = 9.48
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: 1114 4/30/97

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. 10-024-09-004 Date: 4/29-30/97
Address 3201 35th Street Day: M T W TH F
Contract No. G797457 City: Oakland
Station No. BP 11132 Sampler: CB

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-9	18.03	2"	OK	Ø	(Y) N	3	1124	70.7	7.47	716 µS	5.4
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		68.3	7.30	747 µS	
~40.00 − 18.03 = 21.97 X .16 = 3.52 X 3 =			10.56			11	1133	67.9	7.21	755 µS	5.5
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments: Removed ~~Est~~ < .001 gal FP											

EPA 601___ TPH-G/BTEX HCl TPH Diesel___ TOG 5520___
TIME/SAMPLE ID: 1135 4/30/97

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-10	18.71	2"	OK	18.50	(Y) N	3	1152	71.6	7.71	812 µS	4.9
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		70.9	7.49	867 µS	
~40.00 − 18.71 = 21.29 X .16 = 3.41 X 3 =			10.23			11	1210	70.2	7.49	874 µS	5.6
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments: Removed ~ .04 gal FP											

EPA 601___ TPH-G/BTEX HCl TPH Diesel___ TOG 5520___
TIME/SAMPLE ID: 1213 4/30/97

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-11	21.90	2"	OK	21.05	(Y) N	3	1221	69.7	6.97	1.17 µS	5.1
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			6		68.4	6.81	1.24 µS	
~40.00 − 21.90 = 18.10 X .16 = 2.90 X 3 =			8.70			9	1230	68.0	6.84	1.31 µS	5.2
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments: Removed ~ .25 gal											

EPA 601___ TPH-G/BTEX HCl TPH Diesel___ TOG 5520___
TIME/SAMPLE ID: 1234 4/30/97

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	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:											

EPA 601___ TPH-G/BTEX___ TPH Diesel___ TOG 5520___
TIME/SAMPLE ID:

* Approx. ~~TW~~ TD Due to Presence of FP & factor of Contaminated Equipment

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

May 13, 1997

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

The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on May 2, 1997. The samples were assigned to Certificate of Analysis No(s).9705111 and analyzed for the parameters specified on the chain of custody.

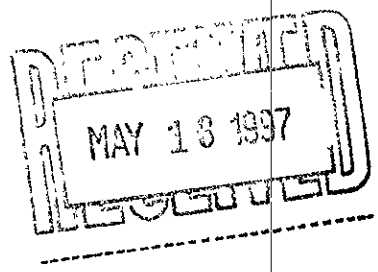
There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

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(s) 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: 97-05-111

Approved for Release by:

Ed Fry, Project Manager

Date: 5/13/97

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. H9-9705111-01

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/02/97

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	90		
4-Bromofluorobenzene	90		
Method 8020A***			
Analyzed by: LJ			
Date: 05/08/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	77		
California LUFT Manual			
Analyzed by: LJ			
Date: 05/08/97 08:57:00			

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. H9-9705111-02

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/02/97

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	93		
Method 8020A***			
Analyzed by: LJ			
Date: 05/08/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	117		
4-Bromofluorobenzene	87		
California LUFT Manual			
Analyzed by: LJ			
Date: 05/08/97 09:26:00			

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.

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

Certificate of Analysis No. H9-9705111-03

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/02/97

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	97		
4-Bromofluorobenzene	87		
Method 8020A***			
Analyzed by: LJ			
Date: 05/08/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	120		
4-Bromofluorobenzene	80		
California LUFT Manual			
Analyzed by: LJ			
Date: 05/08/97 10:25:00			

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.

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

Certificate of Analysis No. H9-9705111-04

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-4

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/02/97

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	97		
4-Bromofluorobenzene	87		
Method 8020A***			
Analyzed by: LJ			
Date: 05/08/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	120		
4-Bromofluorobenzene	83		
California LUFT Manual			
Analyzed by: LJ			
Date: 05/08/97 10:55:00			

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.

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

Certificate of Analysis No. H9-9705111-05

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-5

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	50 P	µg/L
Benzene	530	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	133MI		
4-Bromofluorobenzene	87		
Method 8020A***			
Analyzed by: LJ			
Date: 05/08/97			
Total Petroleum Hydrocarbons-Gasoline	0.34	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	200MI		
4-Bromofluorobenzene	73		
California LUFT Manual			
Analyzed by: LJ			
Date: 05/08/97 11:24:00			

ND - Not detected. (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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8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9705111-06

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-6

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	46000	2500 P	µg/L
Benzene	3100	120 P	µg/L
Toluene	590	250 P	µg/L
Ethylbenzene	1300	250 P	µg/L
Total Xylene	6000	250 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	88		
4-Bromofluorobenzene	99		
Method 8020A***			
Analyzed by: VHZ			
Date: 05/12/97			
Total Petroleum Hydrocarbons-Gasoline	32	12 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	72		
4-Bromofluorobenzene	120		
California LUFT Manual			
Analyzed by: fab			
Date: 05/11/97 11:55:00			

(P) - Practical Quantitation Limit

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

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HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9705111-07

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-7

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	5000 P	µg/L
Benzene	4600	250 P	µg/L
Toluene	15000	500 P	µg/L
Ethylbenzene	6000	500 P	µg/L
Total Xylene	37000	500 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	113		
4-Bromofluorobenzene	120		
Method 8020A***			
Analyzed by: SB			
Date: 05/09/97			
Total Petroleum Hydrocarbons-Gasoline	130	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	133		
4-Bromofluorobenzene	113		
California LUFT Manual			
Analyzed by: SB			
Date: 05/09/97 05:44:00			

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.

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

Certificate of Analysis No. H9-9705111-09

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-9

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/30/97
DATE RECEIVED: 05/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	5000 P	µg/L
Benzene	1900	250 P	µg/L
Toluene	3600	500 P	µg/L
Ethylbenzene	3100	500 P	µg/L
Total Xylene	20600	500 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	107		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: LJ			
Date: 05/09/97			
Total Petroleum Hydrocarbons-Gasoline	78	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	133		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: LJ			
Date: 05/09/97 12:53:00			

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.

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

Certificate of Analysis No. H9-9705111-10

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-10

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/30/97
DATE RECEIVED: 05/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	5000 P	µg/L
Benzene	9700	250 P	µg/L
Toluene	38000	500 P	µg/L
Ethylbenzene	4700	500 P	µg/L
Total Xylene	30500	500 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	113		
4-Bromofluorobenzene	113		
Method 8020A***			
Analyzed by: SB			
Date: 05/09/97			
Total Petroleum Hydrocarbons-Gasoline	170	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	120		
4-Bromofluorobenzene	107		
California LUFT Manual			
Analyzed by: SB			
Date: 05/09/97 11:38:00			

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.

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

Certificate of Analysis No. H9-9705111-11

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-11

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/30/97
DATE RECEIVED: 05/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	7700	500 P	µg/L
Benzene	3600	25 P	µg/L
Toluene	8000	50 P	µg/L
Ethylbenzene	4000	50 P	µg/L
Total Xylene	21300	50 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	123		
4-Bromofluorobenzene	140MI		
Method 8020A***			
Analyzed by: SB			
Date: 05/10/97			
Total Petroleum Hydrocarbons-Gasoline	100	2.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	73		
4-Bromofluorobenzene	113		
California LUFT Manual			
Analyzed by: fab			
Date: 05/12/97 12:24:00			

(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. H9-9705111-12

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

P.O.# G797457 , COC#071209
DATE: 05/13/97

PROJECT: BP Oil #11132
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-12

PROJECT NO: 10-024-9-4
MATRIX: WATER
DATE SAMPLED: 04/30/97
DATE RECEIVED: 05/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	6900	1000 P	µg/L
Benzene	3500	50 P	µg/L
Toluene	8100	100 P	µg/L
Ethylbenzene	4400	100 P	µg/L
Total Xylene	23800	100 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	117		
4-Bromofluorobenzene	117		
Method 8020A***			
Analyzed by: LJ			
Date: 05/09/97			
Total Petroleum Hydrocarbons-Gasoline	92	5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	140		
4-Bromofluorobenzene	113		
California LUFT Manual			
Analyzed by: LJ			
Date: 05/09/97 03:20:00			

(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

SURROGATE RECOVERY SUMMARY **PAGE 1**
05/13/97 10:16:12

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
Method 8020A ***			**BATCH#:** HP_N970511100600	
WORK ORDER: Method Blank		**CLIENT SAMPLE ID:**		
1,4-Difluorobenzene	30	28	93	74- 131
4-Bromofluorobenzene	30	29	97	43- 135
Method 8020A ***			**BATCH#:** HP_N970511100600	
WORK ORDER: Matrix Spike		**CLIENT SAMPLE ID:** 9705417-01A		
1,4-DIFLUOROBENZENE	30	27	90	70- 131
4-BROMOFLUOROBENZENE	30	29	97	43- 135
Method 8020A ***			**BATCH#:** HP_N970511100600	
WORK ORDER: Matrix Spike Dup.		**CLIENT SAMPLE ID:** 9705417-01A		
1,4-Difluorobenzene	30	26	87	70- 131
4-Bromofluorobenzene	30	30	100	43- 135
California LUFT Manual			**BATCH#:** HP_N970511103400	
WORK ORDER: 9705111-06A		**CLIENT SAMPLE ID:** S-6		
1,4-Difluorobenzene	30	21.6000	72	50- 150
4-Bromofluorobenzene	30	36.0000	120	50- 150
California LUFT Manual			**BATCH#:** HP_N970511103400	
WORK ORDER: 9705111-11A		**CLIENT SAMPLE ID:** S-11		
1,4-Difluorobenzene	30	22.0000	73	50- 150
4-Bromofluorobenzene	30	34.0000	113	50- 150
Modified 8015A - Gasoline***			**BATCH#:** HP_N970511103400	
WORK ORDER: Method Blank		**CLIENT SAMPLE ID:**		
4-Bromofluorobenzene	30	36	120	52- 152
1,4-Difluorobenzene	30	22	73	54- 137
Modified 8015A - Gasoline***			**BATCH#:** HP_N970511103400	
WORK ORDER: LCS		**CLIENT SAMPLE ID:**		
4-Bromofluorobenzene	30	35	117	52- 152
1,4-Difluorobenzene	30	24	80.0	54- 137
Modified 8015A - Gasoline***			**BATCH#:** HP_N970511103400	
WORK ORDER: Matrix Spike		**CLIENT SAMPLE ID:** 9705417-02A		
4-Bromofluorobenzene	30	35	117	52- 152

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

SURROGATE RECOVERY SUMMARY **PAGE 2**
05/13/97 10:16:12

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	26	87	54- 137

Modified 8015A - Gasoline* BATCH#:HP_N970511103400**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9705417-02A

4-Bromofluorobenzene	30	35	117	52- 152
1,4-Difluorobenzene	30	28	93	54- 137

Method 8020A* BATCH#:HP_R970508012700**
WORK ORDER: 9705111-01A **CLIENT SAMPLE ID:**S-1

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

Method 8020A* BATCH#:HP_R970508012700**
WORK ORDER: 9705111-02A **CLIENT SAMPLE ID:**S-2

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

Method 8020A* BATCH#:HP_R970508012700**
WORK ORDER: 9705111-03A **CLIENT SAMPLE ID:**S-3

1,4-Difluorobenzene	30	29	97	70- 131
4-Bromofluorobenzene	30	26	87	43- 135

Method 8020A* BATCH#:HP_R970508012700**
WORK ORDER: 9705111-04A **CLIENT SAMPLE ID:**S-4

1,4-Difluorobenzene	30	29	97	70- 131
4-Bromofluorobenzene	30	26	87	43- 135

Method 8020A* BATCH#:HP_R970508012700**
WORK ORDER: 9705111-05A **CLIENT SAMPLE ID:**S-5

1,4-Difluorobenzene	30	40.0000	133 «	70- 131
4-Bromofluorobenzene	30	26.0000	87	43- 135

Method 8020A* BATCH#:HP_R970508012700**
WORK ORDER: 9705111-09A **CLIENT SAMPLE ID:**S-9

1,4-Difluorobenzene	30	32.0000	107	70- 131
4-Bromofluorobenzene	30	28.0000	93	43- 135

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SURROGATE RECOVERY SUMMARY **PAGE 3**
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COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
Method 8020A* **		**BATCH#:** HP_R970508012700		
WORK ORDER: 9705111-12A		**CLIENT SAMPLE ID:** S-12		
1,4-Difluorobenzene	30	35.0000	117	70- 131
4-Bromofluorobenzene	30	35.0000	117	43- 135
Method 8020A* **		**BATCH#:** HP_R970508012700		
WORK ORDER: Method Blank		**CLIENT SAMPLE ID:**		
1,4-Difluorobenzene	30	30	29.9	70- 131
4-Bromofluorobenzene	30	25	24.7	43- 135
Method 8020A* **		**BATCH#:** HP_R970508012700		
WORK ORDER: LCS		**CLIENT SAMPLE ID:**		
1,4-Difluorobenzene	30	33	110	70- 131
4-Bromofluorobenzene	30	29	96.7	43- 135
Method 8020A* **		**BATCH#:** HP_R970508012700		
WORK ORDER: Matrix Spike		**CLIENT SAMPLE ID:** 9705111-01A		
1,4-DIFLUOROBENZENE	30	32	107	70- 131
4-BROMOFLUOROBENZENE	30	34	113	43- 135
Method 8020A* **		**BATCH#:** HP_R970508012700		
WORK ORDER: Matrix Spike Dup.		**CLIENT SAMPLE ID:** 9705111-01A		
1,4-Difluorobenzene	30	31	103	70- 131
4-Bromofluorobenzene	30	28	93	43- 135
California LUFT Manual		**BATCH#:** HP_R970508032000		
WORK ORDER: 9705111-01A		**CLIENT SAMPLE ID:** S-1		
1,4-Difluorobenzene	30	29	97	50- 150
4-Bromofluorobenzene	30	23	77	50- 150
California LUFT Manual		**BATCH#:** HP_R970508032000		
WORK ORDER: 9705111-02A		**CLIENT SAMPLE ID:** S-2		
1,4-Difluorobenzene	30	35	117	50- 150
4-Bromofluorobenzene	30	26	87	50- 150
California LUFT Manual		**BATCH#:** HP_R970508032000		
WORK ORDER: 9705111-03A		**CLIENT SAMPLE ID:** S-3		
1,4-Difluorobenzene	30	36	120	50- 150

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COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	24	80	50- 150

California LUFT Manual **BATCH#:**HP_R970508032000
WORK ORDER: 9705111-04A **CLIENT SAMPLE ID:**S-4

1,4-Difluorobenzene	30	36	120	50- 150
4-Bromofluorobenzene	30	25	83	50- 150

California LUFT Manual **BATCH#:**HP_R970508032000
WORK ORDER: 9705111-05A **CLIENT SAMPLE ID:**S-5

1,4-Difluorobenzene	30	60.0000	200 «	50- 150
4-Bromofluorobenzene	30	22.0000	73	50- 150

California LUFT Manual **BATCH#:**HP_R970508032000
WORK ORDER: 9705111-09A **CLIENT SAMPLE ID:**S-9

1,4-Difluorobenzene	30	40.0000	133	50- 150
4-Bromofluorobenzene	30	28.0000	93	50- 150

California LUFT Manual **BATCH#:**HP_R970508032000
WORK ORDER: 9705111-12A **CLIENT SAMPLE ID:**S-12

1,4-Difluorobenzene	30	42.0000	140	50- 150
4-Bromofluorobenzene	30	34.0000	113	50- 150

California LUFT Manual **BATCH#:**HP_R970508032000
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	33	33.3	50- 150
4-Bromofluorobenzene	30	23	23.5	50- 150

California LUFT Manual **BATCH#:**HP_R970508032000
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9705111-02A

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

California LUFT Manual **BATCH#:**HP_R970508032000
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9705111-02A

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

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SURROGATE RECOVERY SUMMARY **PAGE 3**
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Method 8020A* BATCH#:HP_R970509115900**
WORK ORDER: 9705111-10A **CLIENT SAMPLE ID:** S-10

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	34.0000	113	70- 131
4-Bromofluorobenzene	30	34.0000	113	43- 135

Method 8020A* BATCH#:HP_R970509115900**
WORK ORDER: 9705111-11A **CLIENT SAMPLE ID:** S-11

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	37.0000	123	70- 131
4-Bromofluorobenzene	30	42.0000	140 «	43- 135

Method 8020A * BATCH#:HP_R970509115900**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	32	31.6	74- 131
4-Bromofluorobenzene	30	29	29.2	43- 135

Method 8020A * BATCH#:HP_R970509115900**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9704F39-02A

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-DIFLUOROBENZENE	30	35	117	70- 131
4-BROMOFLUOROBENZENE	30	33	110	43- 135

Method 8020A * BATCH#:HP_R970509115900**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:** 9704F39-02A

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	34	113	70- 131
4-Bromofluorobenzene	30	32	107	43- 135

California LUFT Manual BATCH#:HP_R970509122200
WORK ORDER: 9705111-07A **CLIENT SAMPLE ID:** S-7

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	40.0000	133	50- 150
4-Bromofluorobenzene	30	34.0000	113	50- 150

California LUFT Manual BATCH#:HP_R970509122200
WORK ORDER: 9705111-10A **CLIENT SAMPLE ID:** S-10

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	36.0000	120	50- 150
4-Bromofluorobenzene	30	32.0000	107	50- 150

California LUFT Manual BATCH#:HP_R970509122200
WORK ORDER: 9705111-11A **CLIENT SAMPLE ID:** S-11

COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	48.0000	160 «	50- 150

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COMPOUND	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	42.0000	140	50- 150

Modified 8015A - Gasoline* BATCH#:HP_R970509122200**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

4-Bromofluorobenzene	30	31	31.1	52- 152
1,4-Difluorobenzene	30	38	38.1	54- 137

Modified 8015A - Gasoline* BATCH#:HP_R970509122200**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9704F39-04A

4-Bromofluorobenzene	30	38	127	52- 152
1,4-Difluorobenzene	30	31	103	54- 137

Modified 8015A - Gasoline* BATCH#:HP_R970509122200**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9704F39-04A

4-Bromofluorobenzene	30	36	120	52- 152
1,4-Difluorobenzene	30	19	63	54- 137

Method 8020A * BATCH#:VARE970512073900**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	20	67 «	74- 131
4-Bromofluorobenzene	30	26	87	43- 135

Method 8020A * BATCH#:VARE970512073900**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9705410-10A

1,4-DIFLUOROBENZENE	30	25	83	70- 131
4-BROMOFLUOROBENZENE	30	29	97	43- 135

Method 8020A * BATCH#:VARE970512073900**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9705410-10A

1,4-Difluorobenzene	30	26	87	70- 131
4-Bromofluorobenzene	30	29	97	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**

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

Matrix: Aqueous **Batch Id:** HP_R970508012700
Units: µg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	49	98.0	20 - 110
Benzene	ND	50	44	88.0	62 - 121
Toluene	ND	50	46	92.0	66 - 136
Ethyl_Benzene	ND	50	44	88.0	70 - 136
O-Xylene	ND	50	47	94.0	74 - 134
M and P Xylene	ND	100	94	94.0	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	21	105	24	120	13.3	20	39 - 150
BENZENE	ND	20	25	125	20	100	22.2	25	39 - 150
TOLUENE	ND	20	26	130	20	100	26.1 *	26	56 - 134
ETHYL_BENZENE	ND	20	25	125	18	90.0	32.6	38	61 - 128
O-XYLENE	ND	20	25	125	18	90.0	32.6 *	29	40 - 130
M AND P XYLENE	ND	40	51	128	37	92.5	32.2 *	20	43 - 152

Analyst: LJ
Sequence Date: 05/08/97
SPL ID of sample spiked: 9705111-01A
Sample File ID: R_E7254.TXO
Method Blank File ID:
Blank Spike File ID: R_E7247.TXO
Matrix Spike File ID: R_E7283.TXO
Matrix Spike Duplicate File ID: R_E7250.TXO

* = 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 (4th Q '95)
(***) = Source: SPL-Houston Historical Data (3rd Q '96)

SAMPLES IN BATCH(SPL ID):

9705111-09A	9705111-12A	9705112-01A	9705112-02A
9705112-03A	9705112-04A	9705112-05A	9705112-06A
9705112-07A	9705112-08A	9705111-01A	9705111-02A
9705111-03A	9705111-04A	9705111-05A	

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

Matrix: Aqueous
Units: µg/L

Batch Id: VARE970512073900

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	48	96.0	63 - 120
Benzene	ND	50	47	94.0	62 - 121
Toluene	ND	50	54	108	66 - 136
EthylBenzene	ND	50	53	106	70 - 136
O Xylene	ND	50	54	108	74 - 134
M & P Xylene	ND	100	100	100	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	17	85.0	18	90.0	5.71	20	39 - 150
BENZENE	ND	20	18	90.0	19	95.0	5.41	25	39 - 150
TOLUENE	ND	20	20	100	20	100	0	26	56 - 134
ETHYLBENZENE	ND	20	18	90.0	18	90.0	0	38	61 - 128
O XYLENE	ND	20	19	95.0	19	95.0	0	29	40 - 130
M & P XYLENE	1.3	40	40	96.8	40	96.8	0	20	43 - 152

Analyst: VHZ
Sequence Date: 05/12/97
SPL ID of sample spiked: 9705410-10A
Sample File ID: E_E7402.TXO
Method Blank File ID:
Blank Spike File ID: E_E7397.TXO
Matrix Spike File ID: E_E7399.TXO
Matrix Spike Duplicate File ID: E_E7400.TXO

* = 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): 9705111-06A 9705410-10A 9705365-27A 9705492-03A 9705492-04A

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_R970509115900

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	47	94.0	63 - 120
Benzene	ND	50	51	102	62 - 121
Toluene	ND	50	55	110	66 - 136
EthylBenzene	ND	50	55	110	70 - 136
O Xylene	ND	50	59	118	74 - 134
M & P Xylene	ND	100	110	110	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	1.1	20	19	89.5	27	130	36.9 *	20	39 - 150
BENZENE	ND	20	20	100	21	105	4.88	25	39 - 150
TOLUENE	ND	20	21	105	20	100	4.88	26	56 - 134
ETHYLBENZENE	ND	20	21	105	19	95.0	10.0	38	61 - 128
O XYLENE	ND	20	21	105	19	95.0	10.0	29	40 - 130
M & P XYLENE	ND	40	43	108	39	97.5	10.2	20	43 - 152

Analyst: SB
Sequence Date: 05/09/97
SPL ID of sample spiked: 9704F39-02A
Sample File ID: R_E7301.TXO
Method Blank File ID:
Blank Spike File ID: R_E7279.TXO
Matrix Spike File ID: R_E7297.TXO
Matrix Spike Duplicate File ID: R_E7298.TXO

* = 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):

9705118-10A 9705111-07A 9705112-09A 9705112-11A
9704F39-02A 9704F39-04A 9705111-10A 9705111-11A
9705112-10A 9704F39-01A 9704F39-03A 9704F39-05A
9704F39-07A 9705118-02A 9705118-07A 9705118-09A
9705118-10A 9705118-11A 9705118-09A

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** SPL BATCH QUALITY CONTROL REPORT **
CA LUFT

Matrix: Aqueous
Units: mg/L

Batch Id: HP_R970508032000

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Gas	ND	1.0	0.67	67.0	50 - 150

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	0.70	77.8	0.70	77.8	0	50	50 - 150

Analyst: LJ
Sequence Date: 05/08/97
SPL ID of sample spiked: 9705111-02A
Sample File ID: RRE7255.TXO
Method Blank File ID:
Blank Spike File ID: RRE7248.TXO
Matrix Spike File ID: RRE7251.TXO
Matrix Spike Duplicate File ID: RRE7252.TXO

* = 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: Temporary Limits
(***) = Source: Temporary Limits

SAMPLES IN BATCH(SPL ID): 9705111-04A 9705111-05A 9705111-09A 9705111-12A
9705112-01A 9705112-02A 9705112-03A 9705112-04A
9705112-05A 9705112-06A 9705112-07A 9705112-08A
9705111-01A 9705111-02A 9705231-32A 9705111-03A

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

Matrix: Aqueous
Units: mg/L

Batch Id: HP_N970511103400

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	0.77	77.0	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	0.79	87.8	0.77	85.6	2.54	22	37 - 169

Analyst: fab
Sequence Date: 05/11/97
SPL ID of sample spiked: 9705417-02A
Sample File ID: NNE7323.TX0
Method Blank File ID:
Blank Spike File ID: NNE7317.TX0
Matrix Spike File ID: NNE7320.TX0
Matrix Spike Duplicate File ID: NNE7321.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): 9704F39-13A 9704F39-09A 9704F39-06A 9705111-06A 9705111-11A 9705280-01A

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

Matrix: Aqueous
Units: mg/L

Batch Id: HP_R970509122200

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	0.82	82.0	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	1.3	136	1.2	124	14.9	22	37 - 169

Analyst: SB
Sequence Date: 05/09/97
SPL ID of sample spiked: 9704F39-04A
Sample File ID: RRE7302.TXO
Method Blank File ID:
Blank Spike File ID: RRE7280.TXO
Matrix Spike File ID: RRE7299.TXO
Matrix Spike Duplicate File ID: RRE7300.TXO

* = 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):

9705112-09A 9705112-11A 9704F39-02A 9704F39-04A
9705111-10A 9705111-11A 9705112-10A 9704F39-01A
9704F39-03A 9704F39-05A 9704F39-07A 9705118-02A
9705118-07A 9705118-09A 9705118-10A 9705118-11A
9705111-07A

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SAMPLE RECEIPT CHECKLIST

9705111

BP

CHAIN OF CUSTODY

No. 071209 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: 11132	BP CORNER ADDRESS/CITY: Oakland, Ca		CONSULTANT PROJECT NUMBER: 10-024-9-4	
CONSULTANT PROJECT MANAGER: Brady Nagle	PHONE NUMBER: (510) 295-1650	FAX NUMBER: 295-1823	CONSULTANT CONTRACT NUMBER: 6797457	
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 Buenavida	SAMPLED BY (Signature): [signature]	SHIPMENT DATE: 5-1-97	SHIPMENT METHOD: Fed Ex	

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

AIRBILL NUMBER:

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE / COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	TYPE (VOL.)	PRESERVATIVE / LAB SAMPLE #	TPH-G	BTEX 8015									COMMENTS
S-1	4/29/97	W	3	HCL		X	X									
S-2	↓	↓	↓	↓		↓	↓									
S-3	↓	↓	↓	↓		↓	↓									
S-4	↓	↓	↓	↓		↓	↓									
S-5	↓	↓	↓	↓		↓	↓									
S-6	↓	↓	↓	↓		↓	↓									
S-7	4/30/97	↓	↓	↓		↓	↓									
~~S-8~~																NO S-8 Sample
S-9	↓	↓	↓	↓		↓	↓									
S-10	↓	↓	↓	↓		↓	↓									
S-11	↓	↓	↓	↓		↓	↓									
S-12	4/30/97	W	3	HCL		X	X									

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
[signature]	4/30/97		[signature]	5-1-97		
[signature]	5-1-97		[signature]	5/2/97	1000	2°C

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:
5/2/97	1000

SPL Sample ID:
9705111

			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:		2° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	384847080	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
S. West	5/2/97

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

BP Site Number:	11132
ERM Contact:	G797457
Sampling Date:	04/29/97 to 04/30/97
Matrix Description:	Water
Date Final Report Received:	05/16/97
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?	✗	✓ 2	
9.	Are MS/MSD acceptable using laboratory criteria?		✓ 1	
10.	Are LCS results acceptable using laboratory criteria?	✓		

Notes: 1) MS & MSD were outside QC range (see lab report).
2) 5 surrogates recoveries were outside control ranges (see lab rpt.)

Data Validation Completed by: Ken Simas

(signature): K Simas

Date: 6/5/97