BP OIL

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

January 26, 1998

Alameda County Health Care Services Agency
Attention Ms. Susan Hugo
1131 Harbor Bay Parkway, Ste. 250
Alameda, CA 94502-6577

RE: BP Oil Site No. 11132
3201 35th Street (at I-580)
Oakland, CA

Dear Ms. Hugo:

Enclosed please find a report titled Groundwater Monitoring and Sampling Report, dated 17 December 1997.

The report shows that aromatic petroleum constituents were detected in groundwater samples collected from seven of the eleven wells sampled this quarter. The highest benzene concentration (7,800 ug/l) was reported in a sample obtained from well MW-2, located south of the underground storage tanks.

Plans for the coming quarter include product removal and groundwater monitoring.

Please give me a call if you have any questions, comments or concerns regarding this matter. I can be reached at (425) 251-0689.

Sincerely,

Scott Hooton
Environmental Remediation Management

attachment

cc: B. Nagle - Alisto
K. Graves - CRWQCB-SFBR

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-024-10-002

Prepared for:

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

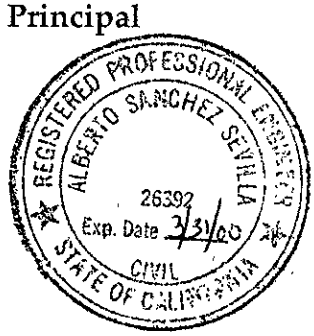
Prepared by:

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

December 17, 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. 10-024-10-002

December 17, 1997

INTRODUCTION

This report presents the results and findings of the November 5, 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-1		08/21/97	169.75	23.40	0.87	147.00	140000	3000	8500	3900	22100	5700	5.3	SPL
QC-1	(c)	08/21/97	169.75	---	---	---	120000	3200	8100	3800	19600	5200	---	SPL
MW-1		11/05/97	169.75	23.70	0.54	146.46	68000	6200	4400	3300	14300	8000	4.7	SPL
QC-1	(c)	11/05/97	169.75	---	---	---	88000	7300	4800	3600	16900	8200	---	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-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	1.7	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
MW-2	08/21/97	168.14	21.74	0.01	146.41	110000	6000	16000	4700	28000	ND<500	4.6	SPL
MW-2	11/05/97	168.14	21.61	0.01	146.54	120000	7800	18000	4900	28100	ND<2500	4.6	SPL

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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-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	ND<5.0 (d)	6.6	ATI
MW-3	10/27/95	167.17	22.43	---	144.74	---	---	---	---	---	---	---	---
MW-3	10/30/95	167.17	---	---	---	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-3	08/21/97	167.17	19.64	---	147.53	ND<50	ND<0 5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.9	SPL
MW-3	11/05/97	167.17	19.95	---	147.22	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	4.5	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
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	ND<5.0 (d)	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
MW-4	08/21/97	170.36	22.91	—	147.45	—	—	—	—	—	—	—	—
MW-4	11/05/97	170.36	22.34	—	148.02	60	ND<0.5	ND<1.0	ND<1.0	ND<1.0	76	4.9	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	ND<130 (d)	7.3	ATI
MW-5	10/27/95	165.14	20.94	---	144.20	---	---	---	---	---	---	---	---
MW-5	10/30/95	165.14	---	---	---	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-5	08/21/97	165.14	18.26	---	146.88	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.9	SPL
MW-5	11/05/97	165.14	18.84	---	146.30	120	13	ND<1.0	ND<1.0	ND<1.0	ND<10	4.4	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-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 (e)	03/07/91	165.40	—	—	—	—	—	—	—	—	—	—	—
MW-6 (e)	06/27/91	165.40	—	—	—	—	—	—	—	—	—	—	—
MW-6 (e)	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	ND<5.0 (d)	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
MW-6	08/21/97	165.40	18.58	—	146.82	—	—	—	—	—	—	—	—
MW-6	11/05/97	165.40	19.17	—	146.23	70	ND<0.5	ND<1.0	ND<1.0	ND<1.0	85	4.3	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	ND<5.0 (d)	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-7	08/21/97	167.61	21.59	—	146.02	—	—	—	—	—	—	—	—
MW-7	11/05/97	167.61	20.05	—	147.56	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.4	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-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 (e)	04/29/97	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8	08/21/97	165.74	19.61	---	146.13	240000	1100	9300	4100	31100	ND<1000	5.2	SPL
MW-8	11/05/97	165.74	19.45	0.10	146.37	57000	790	2700	2300	15200	ND<1000	5.0	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-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	740 (d)	---	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 (e)	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-9	08/21/97	166.20	19.56	0.01	146.65	110000	2100	3400	2300	18800	ND<500	5.1	SPL
MW-9	11/05/97	166.20	20.59	0.01	145.62	59000	1400	1700	2200	17000	ND<500	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-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	1600 (d)	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	38000	4700	30500	ND<5000	5.6	SPL
MW-10	08/21/97	167.01	20.19	0.14	146.93	170000	9500	35000	4300	27100	ND<5000	5.3	SPL
MW-10	11/05/97	167.01	20.52	0.02	146.51	80000	3800	12000	2700	15700	ND<500	4.4	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
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	0.08	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	1200 (d)	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	ND<25 (d)	6.6	ATI
QC-1 (c)	08/22/95	---	---	---	---	2800	210	9.3	4.3	250	ND<25 (d)	---	ATI
RW-1	10/27/95	168.01	32.00	---	136.01	---	---	---	---	---	---	---	---
RW-1	10/30/95	168.01	---	---	---	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
RW-1	08/21/97	168.01	20.67	---	147.34	7600	730	58	370	1780	9500	4.7	SPL
RW-1	11/05/97	168.01	21.01	---	147.00	39000	2300	86	1300	3840	56000	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
QC-2 (f)	10/05/92	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (f)	01/13/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	04/23/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	07/12/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	10/21/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	01/21/94	---	---	---	---	ND<50	ND<0.5	2.1	ND<0.5	2.1	---	---	PACE
QC-2 (f)	04/20/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	04/20/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	12/23/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ATI
QC-2 (f)	01/26/95	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	ATI
QC-2 (f)	06/08/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (f)	08/22/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0 (d)	---	ATI
QC-2 (f)	10/30/95	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (f)	01/25/96	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	CEI
QC-2 (f)	04/19/96	---	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
---	Not analyzed/available/applicable/measurable
ND	Not detected above reported detection limit
PACE	Pace, Inc.
ANA	Anametrix, Inc.
ATI	Analytical Technologies, Inc.
CEI	Ceimic 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) A copy of the documentation for this data is included in Appendix C of Alisto report 10-024-10-001.

(e) Well inaccessible.

(f) Travel blank.

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

ALISTO PROJECT NO. 10-024

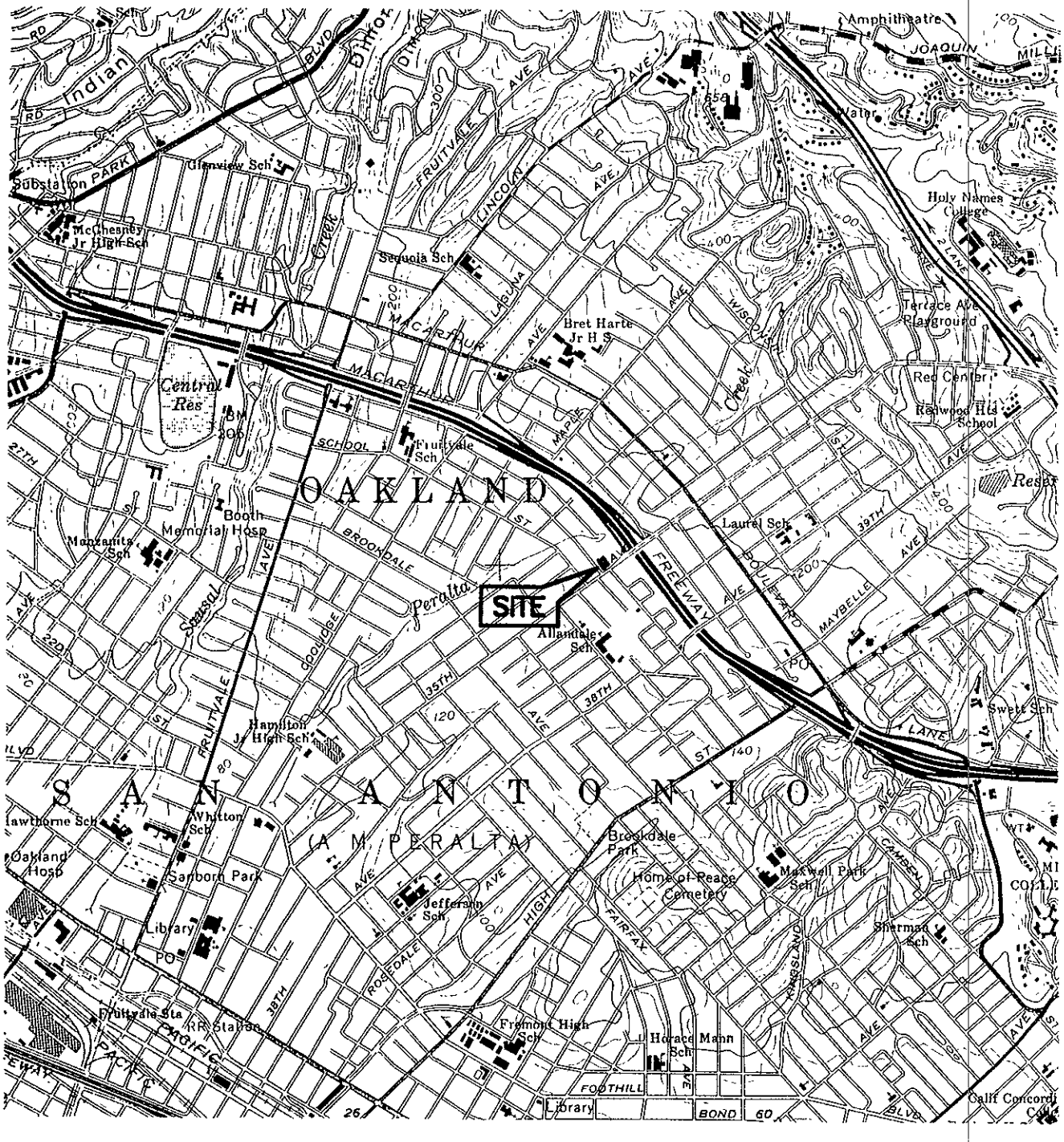
WELL ID	DATE	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)
MW-1	01/26/95	3.00	3.00
	06/08/95	0.60	3.60
	06/28/95	0.10	3.70
	08/22/95	0.15	3.85
	10/30/95	0.11	3.96
	01/25/96	1.00	4.96
	02/16/95	0.08	5.04
	04/19/96	0.75	5.79
	07/23/96	0	5.79
	11/11/96	0.98	6.77
	01/21/97	0.20	6.97
	04/29/97	0.25	7.22
	08/21/97	0.15	7.37
	11/05/97	0.25	7.62
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
	11/05/97	<0.10	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
	11/05/97	0.10	1.43

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
	11/05/97	<0.10	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
	11/05/97	<0.10	10.80

F\0\10-024\PRODUCT.WQ2



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

FIGURE 1

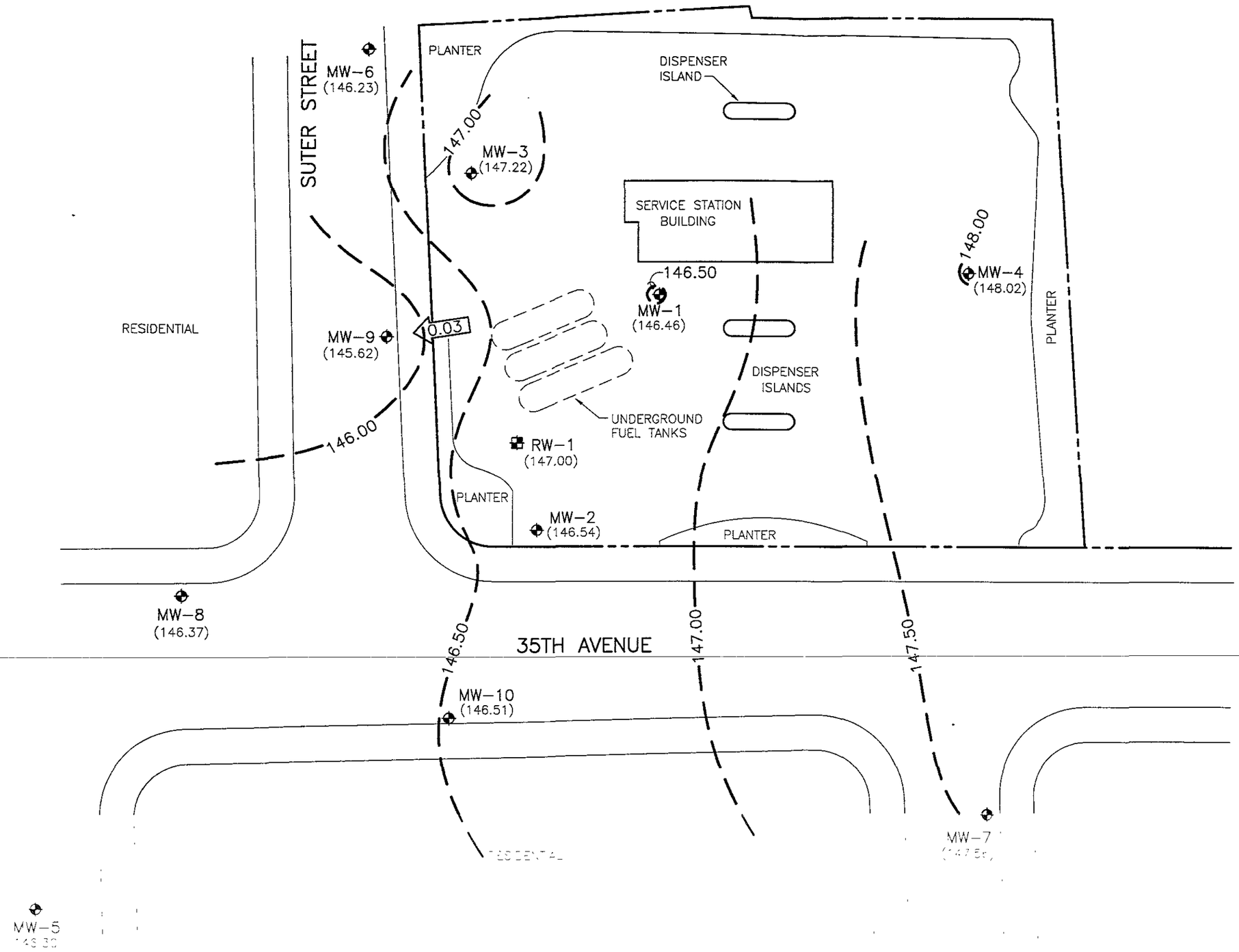
SITE VICINITY MAP

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

PROJECT NO. 10-024

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10024B---.DWG 2-28-94 RKW 1=1



LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- (145.62) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 146.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL—0.50 FOOT)
- 0.03 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

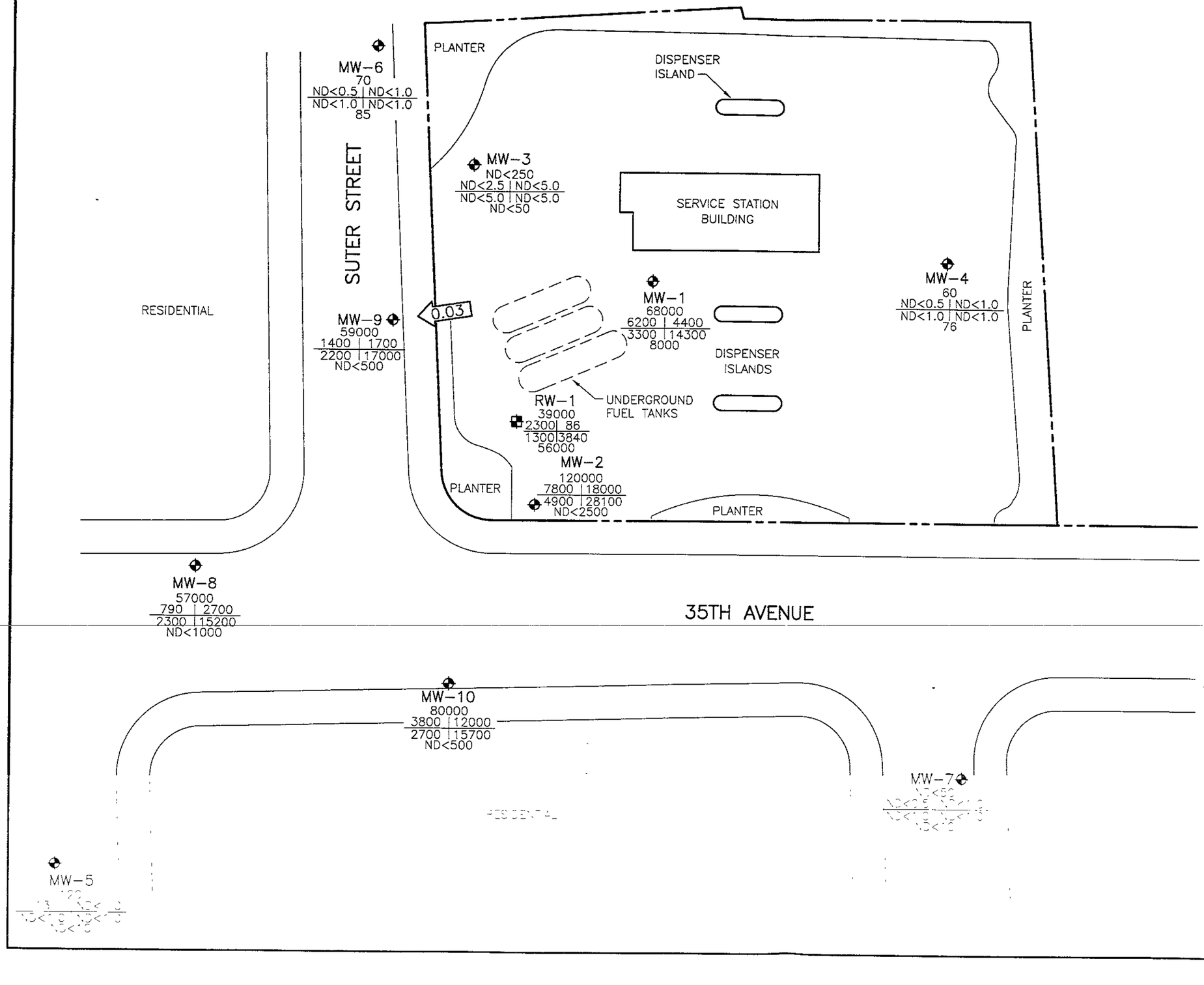
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

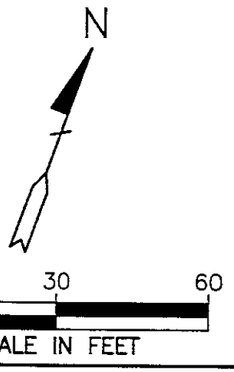
NOVEMBER 5, 1997

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 / MTBE	CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER
TPH-G	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
MTBE	METHYL TERT BUTYL ETHER
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
⇦ 0.03	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

NOVEMBER 5, 1997

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

PROJECT NO. 10-024

ALISTO ENGINEERING GROUP

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

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. 10-024-10-002 Date: 11/5/97
Address 3201 35th Street Day: M T W TH F
Contract No. H177109 City: Oakland
Station No. BP 11132 Sampler: LS

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"	40	23.70	.54	1113	QC-1 From this well, Serviced PPRS
MW-2	S-7	"	40	21.61	.01	1027	Serviced PPRS
MW-3	S-5	"	34.58	19.95	Ø	1010	
MW-4	S-1	"	38.74	22.34	"	0942	SEMI-Sample this event
MW-5	S-4	"	30.88	18.84	"	1002	
MW-6	S-2	"	34.56	19.17	"	0950	SEMI-Sample this event
MW-7	S-3	"	34.49	20.05	"	0955	SEMI-Sample this event
MW-8	S-10	"	40	19.45	.10	1100	
MW-9	S-8	"	40	20.59	.01	1036	Serviced PPRS
MW-10	S-9	"	40	20.52	.02	1050	Serviced PPRS
RW-1	S-6	6"	38.41	21.01	Ø	1020	

DUP (S-12)

FIELD INSTRUMENT CALIBRATION DATA

pH METER Aqua Check 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1126
D.O. METER ~~Aqua Check~~ ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE 760 TEMP 69 WEATHER clear
CONDUCTIVITY METER Aqua Check 10,000 _____ TURBIDITY METER _____ 5.0 NTU _____ ~~OTHER~~ X
LEAK DETECTOR : _____ ALARM MODE _____ 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	22.34	2"	Locked	Ø	Y (N)	3	1210	71.7	7.43	719 µS	4.6
						5		71.3	7.25	752 µS	
						8	1217	70.6	7.20	771 µS	4.9

Total Depth - Water Level= x Well Vol. Factor= x#Vol. to Purge PurgeVol.
38.74-22.34=16.40x.16=2.62x3=7.86
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
(X) TPH-G/BTEX___
O TPH Diesel_____
O TOG 5520 ___
TIME/SAMPLE ID
1227

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-6	19.17	2"	OK	Ø	Y (N)	3	1240	72.0	7.27	813 µS	4.0
						5		71.3	7.19	851 µS	
						8	1247	70.1	7.12	860 µS	4.3

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
34.56-19.17=15.39x.16=2.46x3=7.38
Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601_____
(X) TPH-G/BTEX___
O TPH Diesel_____
O TOG 5520 ___
TIME/SAMPLE ID
1256

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. 10-024-10-002 Date: 11/5/97
Address 3201 35th Street Day: M T W TH F
Contract No. H177109 City: Oakland
Station No. BP 11132 Sampler: WB

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-7	20.05	2"	OIL	Ø	Y (N)	3	1309	71.3	7.61	1.01ms	3.7
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			5		70.7	7.32	1.17ms	
34.41-20.05=14.41X.16=2.31X3=6.93						7	1317	70.2	7.25	1.23ms	4.4
Purge Method: (Surface Pump) ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel____
O TOG 5520 ___
TIME/SAMPLE ID
1322

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-5	18.84	2"	OK	Ø	Y (N)	2	1394	72.2	7.42	1.33ms	4.0
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			4		71.3	7.30	1.47ms	
30.88-18.84=12.04X.16=1.93X3=5.79						6	1343	71.0	7.21	1.55ms	4.4
Purge Method: (Surface Pump) ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel____
O TOG 5520 ___
TIME/SAMPLE ID
1350

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-3	19.95	2"	OIL	Ø	Y (N)	3	1402	71.9	7.37	810µs	4.2
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			5		71.0	7.21	833µs	
34.58-19.95=14.63X.16=2.34X3=7.02						7.5	1415	70.3	7.15	841µs	4.5
Purge Method: (Surface Pump) ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel____
O TOG 5520 ___
TIME/SAMPLE ID
1426

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
RW-1	21.01	6"	OIL	Ø	Y N	27	1457	72.0	7.71	1.39ms	4.3
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			54		71.4	7.42	1.50ms	
38.41-21.01=17.40X1.47=25.58X3=76.74						77	1559	70.6	7.24	1.59ms	4.5
Purge Method: (Surface Pump) ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments:											

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel____
O TOG 5520 ___
TIME/SAMPLE ID
1603

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-2	21.61	2"	OIL	Ø	(Y) N	3	1611	71.3	7.47	852µs	4.0
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		70.0	7.20	901µs	
~40.00-21.61=18.39X.16=2.94X3=8.82						9	1620	69.5	7.14	911µs	4.6
Purge Method: (Surface Pump) ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments: Removed ~1.10 gal FP											

O EPA 601_____
X TPH-G/BTEX___
O TPH Diesel____
O TOG 5520 ___
TIME/SAMPLE ID
1624

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. 10-024-10-002 Date:
Address 3201 35th Street Day: M T W TH F
Contract No. H177109 City: Oakland
Station No. BP 11132 Sampler:

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-9	20.59	2"	OK	20.58	Y N	3	1631	71.7	7.47	724 µS	4.5	EPA 601 / TPH-G/BTEX / TPH Diesel / TOG 5520
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			6		71.2	7.32	767 µS		
~40.00-20.59=19.41X.16=3.11X3=9.33						10	1640	70.6	7.26	774 µS	4.5	
Purge Method: XSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												TIME/SAMPLE ID
Comments: Removed ~.10 gal FP												1647

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-10	20.52	2"	OK	20.50	Y N	3	1655	71.7	7.57	797 µS	4.4	EPA 601 / TPH-G/BTEX / TPH Diesel / TOG 5520
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		70.9	7.41	817 µS		
~40.00-20.52=19.48X.16=3.12X3=9.36						10	1711	70.3	7.36	824 µS	4.4	
Purge Method: XSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												TIME/SAMPLE ID
Comments: Removed ~.10 gal FP												1718

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-8	19.45	2"	OK	19.35	Y N	3	1724	72.5	7.27	747 µS	5.2	EPA 601 / TPH-G/BTEX / TPH Diesel / TOG 5520
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		71.6	7.11	787 µS		
~40.00-19.45=20.55X.16=3.29X3=9.87						10	1730	71.4	7.03	807 µS	5.0	
Purge Method: XSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												TIME/SAMPLE ID
Comments: Removed ~.10 gal FP												1734

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-1	23.70	2"	OK	23.16	Y N	3	1510	71.7	7.01	1.00ms	4.4	EPA 601 / TPH-G/BTEX / TPH Diesel / TOG 5520
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			5		71.4	6.80	1.11ms		
~40.00-23.70=16.30X.16=2.61X3=7.83						8	1525	70.8	6.77	1.14ms	4.7	
Purge Method: XSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												TIME/SAMPLE ID
Comments: Removed ~1/4 gal FP												1537

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

November 18, 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 November 7, 1997. The samples were assigned to Certificate of Analysis No.(s) 9711294 and analyzed for all parameters as listed on the chain of custody.

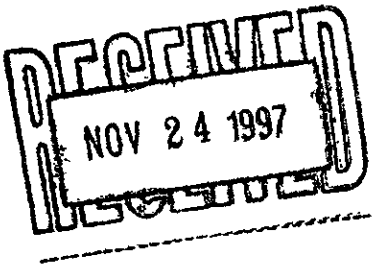
There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

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 No. during any inquiries.

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

Southern Petroleum Laboratories

James P. Adams
Client Services Manager



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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 97-11-294

Approved for Release by:

James P. Adams, Client Services Manager

Date: 11/18/97

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. H9-9711294-01

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	76	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	100		
Method 8020A***			
Analyzed by: LJ			
Date: 11/16/97			
Gasoline Range Organics	0.060	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	87		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/16/97 06:25:00			

(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. H9-9711294-02

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	85	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	100		
Method 8020A***			
Analyzed by: LJ			
Date: 11/16/97			
Gasoline Range Organics	0.070	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	90		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/16/97 06:52:00			

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

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

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

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

Certificate of Analysis No. H9-9711294-03

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

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: LJ			
Date: 11/16/97			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	87		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/16/97 04:08:00			

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. H9-9711294-04

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	13	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ			
Date: 11/16/97			
Gasoline Range Organics	0.12	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	120		
4-Bromofluorobenzene	87		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/16/97 04:36:00			

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. H9-9711294-05

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	50 P	µg/L
Benzene	ND	2.5 P	µg/L
Toluene	ND	5.0 P	µg/L
Ethylbenzene	ND	5.0 P	µg/L
Total Xylene	ND	5.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: LJ			
Date: 11/16/97			
Gasoline Range Organics	ND	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/16/97 07:20:00			

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. H9-9711294-06

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	56000	2500 P	µg/L
Benzene	2300	12 P	µg/L
CHLOROBENZENE	ND	25 P	µg/L
1,2-DICHLOROBENZENE	ND	25 P	µg/L
1,3-DICHLOROBENZENE	ND	25 P	µg/L
1,4-DICHLOROBENZENE	ND	25 P	µg/L
Toluene	86	25 P	µg/L
Ethylbenzene	1300	25 P	µg/L
Total Xylene	3840	25 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	117		
4-Bromofluorobenzene	111		
Method 8020A***			
Analyzed by: LJ			
Date: 11/16/97			
Gasoline Range Organics	39	1.2 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	123		
4-Bromofluorobenzene	115		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/16/97 07:47:00			

(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. H9-9711294-07

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	2500 P	µg/L
Benzene	7800	120 P	µg/L
Toluene	18000	250 P	µg/L
Ethylbenzene	4900	250 P	µg/L
Total Xylene	28100	250 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	99		
4-Bromofluorobenzene	109		
Method 8020A***			
Analyzed by: LJ			
Date: 11/16/97			
Gasoline Range Organics	120	12 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	109		
4-Bromofluorobenzene	109		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/16/97 08:14:00			

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. H9-9711294-08

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

P.O.# H177109, COC#072086
DATE: 11/18/97

PROJECT: #11132, NA
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-8

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	500 P	µg/L
Benzene	1400	25 P	µg/L
Toluene	1700	50 P	µg/L
Ethylbenzene	2200	50 P	µg/L
Total Xylene	17000	50 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	87		
4-Bromofluorobenzene	120		
Method 8020A***			
Analyzed by: LJ			
Date: 11/17/97			
Gasoline Range Organics	59	2.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	107		
4-Bromofluorobenzene	127		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/17/97 12:27:00			

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. H9-9711294-09

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	500 P	µg/L
Benzene	3800	25 P	µg/L
Toluene	12000	50 P	µg/L
Ethylbenzene	2700	50 P	µg/L
Total Xylene	15700	50 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	87		
4-Bromofluorobenzene	120		
Method 8020A***			
Analyzed by: LJ			
Date: 11/17/97			
Gasoline Range Organics	80	2.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	113		
4-Bromofluorobenzene	120		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/17/97 12:54:00			

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. H9-9711294-10

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	1000 P	µg/L
Benzene	790	50 P	µg/L
Toluene	2700	100 P	µg/L
Ethylbenzene	2300	100 P	µg/L
Total Xylene	15200	100 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	113		
Method 8020A***			
Analyzed by: LJ			
Date: 11/17/97			
Gasoline Range Organics	57	5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	117		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/17/97 01:21:00			

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. H9-9711294-11

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	8000	1000 P	µg/L
Benzene	6200	50 P	µg/L
Toluene	4400	100 P	µg/L
Ethylbenzene	3300	100 P	µg/L
Total Xylene	14300	100 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	107		
4-Bromofluorobenzene	113		
Method 8020A***			
Analyzed by: LJ			
Date: 11/17/97			
Gasoline Range Organics	68	5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	123		
4-Bromofluorobenzene	113		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/17/97 01:49:00			

(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

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

Certificate of Analysis No. H9-9711294-12

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

P.O.# H177109, COC#072086
DATE: 11/18/97

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

PROJECT NO: 10-024-10/002
MATRIX: WATER
DATE SAMPLED: 11/05/97
DATE RECEIVED: 11/07/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	8200	2500 P	µg/L
Benzene	7300	120 P	µg/L
Toluene	4800	250 P	µg/L
Ethylbenzene	3600	250 P	µg/L
Total Xylene	16900	250 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	99		
4-Bromofluorobenzene	108		
Method 8020A***			
Analyzed by: LJ			
Date: 11/17/97			
Gasoline Range Organics	88	12 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	115		
4-Bromofluorobenzene	107		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 11/17/97 02:16:00			

(P) - Practical Quantitation Limit

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

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

QUALITY CONTROL

DOCUMENTATION

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

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_W971116120200

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	50	100	72 - 128
Benzene	ND	50	50	100	61 - 119
Toluene	ND	50	50	100	65 - 125
EthylBenzene	ND	50	48	96.0	70 - 118
O Xylene	ND	50	47	94.0	72 - 117
M & P Xylene	ND	100	95	95.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	20	100	20	100	0	20	39 - 150
BENZENE	ND	20	18	90.0	19	95.0	5.41	21	32 - 164
TOLUENE	ND	20	17	85.0	18	90.0	5.71	20	38 - 159
ETHYLBENZENE	ND	20	15	75.0	16	80.0	6.45	19	52 - 142
O XYLENE	ND	20	16	80.0	17	85.0	6.06	18	53 - 143
M & P XYLENE	ND	40	30	75.0	32	80.0	6.45	17	53 - 144

Analyst: LJ
Sequence Date: 11/16/97
SPL ID of sample spiked: 9711294-03A
Sample File ID: W_K7626.TXO
Method Blank File ID:
Blank Spike File ID: W_K7619.TXO
Matrix Spike File ID: W_K7621.TXO
Matrix Spike Duplicate File ID: W_K7622.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 (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9711294-01A 9711294-02A 9711294-05A 9711294-06A 9711294-07A 9711117-04A 9711299-03A 9711317-05A 9711317-12A 9711317-07A 9711317-08A 9711317-09A 9711317-10A 9711294-06A 9711294-03A 9711294-04A 9711317-09A 9711317-10A

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_W971116185900

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	50	100	72 - 128
Benzene	ND	50	51	102	61 - 119
Toluene	ND	50	52	104	65 - 125
EthylBenzene	ND	50	51	102	70 - 118
O Xylene	ND	50	52	104	72 - 117
M & P Xylene	ND	100	100	100	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	20	100	19	95.0	5.13	20	39 - 150
BENZENE	ND	20	19	95.0	16	80.0	17.1	21	32 - 164
TOLUENE	ND	20	18	90.0	16	80.0	11.8	20	38 - 159
ETHYLBENZENE	ND	20	17	85.0	15	75.0	12.5	19	52 - 142
O XYLENE	ND	20	18	90.0	16	80.0	11.8	18	53 - 143
M & P XYLENE	ND	40	33	82.5	28	70.0	16.4	17	53 - 144

Analyst: LJ
Sequence Date: 11/16/97
SPL ID of sample spiked: 9711348-02A
Sample File ID: W_K7660.TXO
Method Blank File ID:
Blank Spike File ID: W_K7652.TXO
Matrix Spike File ID: W_K7654.TXO
Matrix Spike Duplicate File ID: W_K7655.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 (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9711294-09A 9711294-10A 9711294-11A 9711294-12A 9711348-04A 9711348-05A 9711317-04A 9711348-06A 9711348-07A 9711348-08A 9711348-13A 9711348-14A 9711348-15A 9711440-01A 9711440-02A 9711348-01A 9711348-02A 9711348-03A 9711294-08A

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

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

Matrix: Aqueous
Units: mg/L

Batch Id: HP_W971116123000

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	0.78	78.0	64 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
GASOLINE RANGE ORGANICS	0.12	0.90	0.62	55.6	0.58	51.1	8.43	36	36 - 160

Analyst: LJ
Sequence Date: 11/16/97
SPL ID of sample spiked: 9711294-04A
Sample File ID: WWK7627.TXO
Method Blank File ID:
Blank Spike File ID: WWK7620.TXO
Matrix Spike File ID: WWK7623.TXO
Matrix Spike Duplicate File ID: WWK7624.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 (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9711317-12A 9711294-01A 9711294-02A 9711294-05A 9711294-06A 9711294-07A 9711317-08A 9711294-03A 9711294-04A 9711317-09A 9711317-10A

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

** SPL BATCH QUALITY CONTROL REPORT **
Method Modified 8015A*** for Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_W971116192600

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	0.73	73.0	64 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
GASOLINE RANGE ORGANICS	ND	0.9	0.53	58.9	0.56	62.2	5.45	36	36 - 160

Analyst: LJ
Sequence Date: 11/16/97
SPL ID of sample spiked: 9711348-03A
Sample File ID: WWK7661.TXO
Method Blank File ID:
Blank Spike File ID: WWK7653.TXO
Matrix Spike File ID: WWK7656.TXO
Matrix Spike Duplicate File ID: WWK7657.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 (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9711294-09A	9711294-10A	9711294-11A	9711294-12A
9711348-04A	9711348-05A	9711317-04A	9711348-06A
9711348-07A	9711348-08A	9711348-09A	9711348-13A
9711348-14A	9711348-15A	9711440-01A	9711440-02A
9711348-01A	9711348-02A	9711348-03A	9711294-08A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9711294

CHAIN OF CUSTODY

No. 072086 Page 1 of 1

CONSULTANT'S NAME	ADDRESS	CITY	STATE	ZIP CODE
Alisto Engineering	1575 Treat Blvd #201	W.C.	Ca	94598

BP SITE NUMBER	BP CORNER ADDRESS/CITY	CONSULTANT PROJECT NUMBER
11132	Oakland, Ca	10-024-10/002

CONSULTANT PROJECT MANAGER	PHONE NUMBER	FAX NUMBER	CONSULTANT CONTRACT NUMBER
Brady Nagle	(510) 295-1650	295-1823	H177109
BP CONTACT	**BP ADDRESS**	**PHONE NUMBER**	**FAX NO**
Scott Hooton	Renton, WA	-	-
LAB CONTACT	**LABORATORY ADDRESS**	**PHONE NUMBER**	**FAX NO**
SPL	Texas	-	-

SAMPLED BY (Please Print Name)	SAMPLED BY (Signature)	SHIPMENT DATE	SHIPMENT METHOD
Larry Buenvenida	[signature]	11/6/97	Fed Ex

AIRBILL NUMBER: 384847 1443

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

ANALYSIS REQUIRED

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

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	11/6/97		Patricia Yelton	11/6/97	1200
Patricia Yelton	11/6/97	1500	[signature]	11-7-97	1000

ADDITIONAL COMMENTS: Temp 3°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:
11-7-97	1530

SPL Sample ID:
9711294

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		3 C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	384847143	
		Other:		
11	Method of sample disposal:	SPL Disposal		
		HOLD		
		Return to Client		

Name:	Date:
[signature]	11-7-97

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

BP Site Number:	11132
ERM Contact:	H177109
Sampling Date:	11/05/97
Matrix Description:	Water
Date Final Report Received:	11/24/97
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: Detection limits for sample S-5 (MW-3) are higher than other samples in which TPH-G & BTEX were not detected.

Data Validation Completed by: Ken Simas

(signature): [signature]

Date: 12/11/97