BP OIL

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

November 4, 1997

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 October 1997.

The report shows that aromatic petroleum constituents were detected in groundwater samples collected from six of the seven wells sampled this quarter. The highest benzene concentration (9,500 ug/l) was reported in a sample obtained from well MW-9, located offsite and downgradient of the underground storage tanks and the product dispensers.

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 (206) 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. 10-024-10-001

OCT 2 8 1997
BP OIL CO.
ENVIRONMENTAL DEPT.
WEST COAST REGION OFFICE

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

October 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. 10-024-10-001

October 17, 1997

INTRODUCTION

This report presents the results and findings of the August 21, 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. Historical methyl tert butyl ether (MTBE) laboratory analysis data not previously tabulated are now included in Table 1. Copies of the MTBE documentation are included in Appendix C of this report only.

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

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

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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-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	---	---	---	---	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

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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	---	---	---	---	---	---	---	---

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	---	---	---	---	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

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	—	—	—	—	—	—	—	—

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	---	---	---	---	---	---	---	---

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

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	04/30/97	166.20	19.56	0.01	146.65	110000	2100	3400	2300	18800	ND<500	5.1	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-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

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	---	---	---	---	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

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

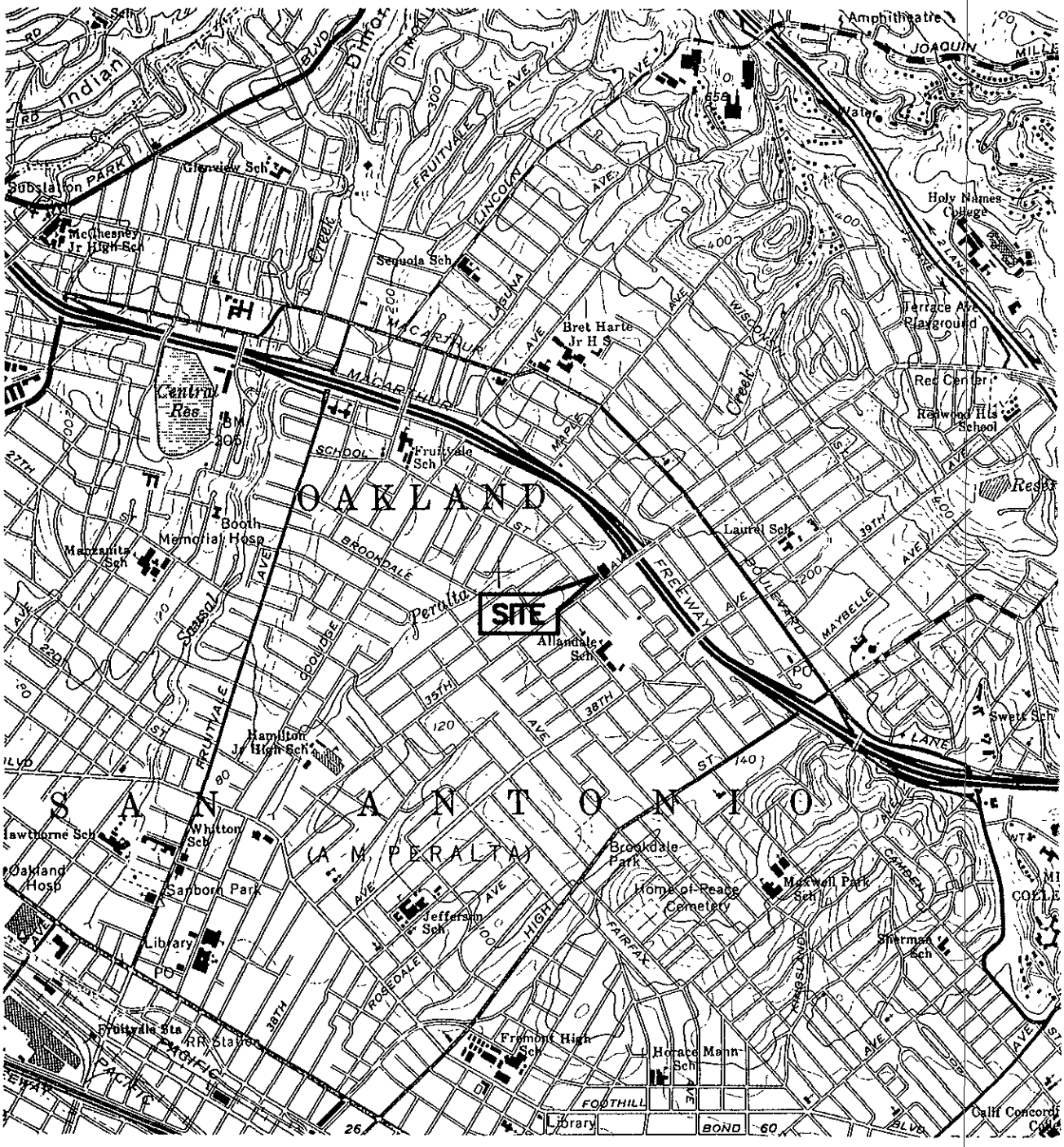
ALISTO PROJECT NO. 10-024

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
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.

FIGURE 1

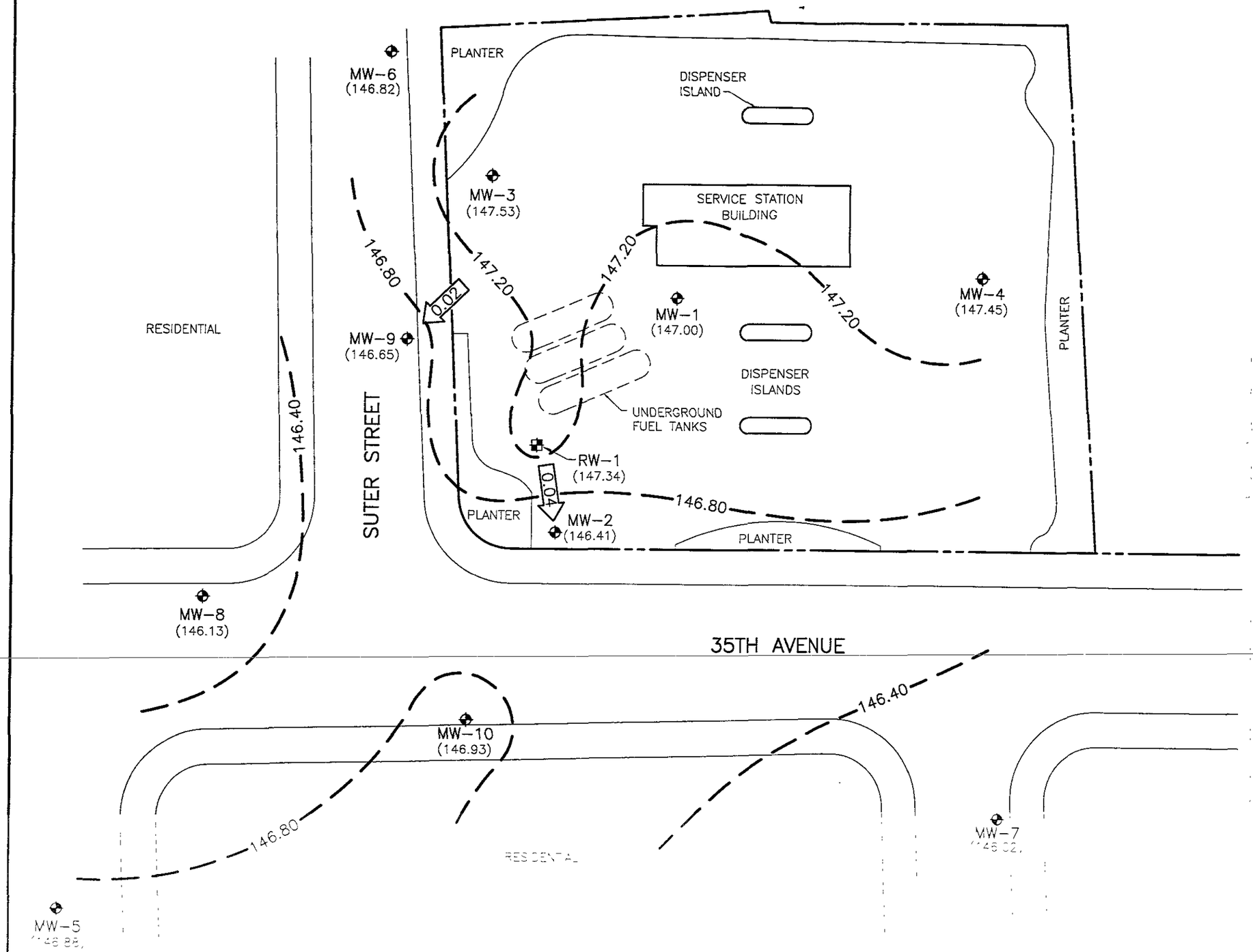
SITE VICINITY MAP

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 Rev 1=1



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0 30 60

SCALE IN FEET

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- (146.65) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 146.80 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–0.40 FOOT)
- 0.02 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

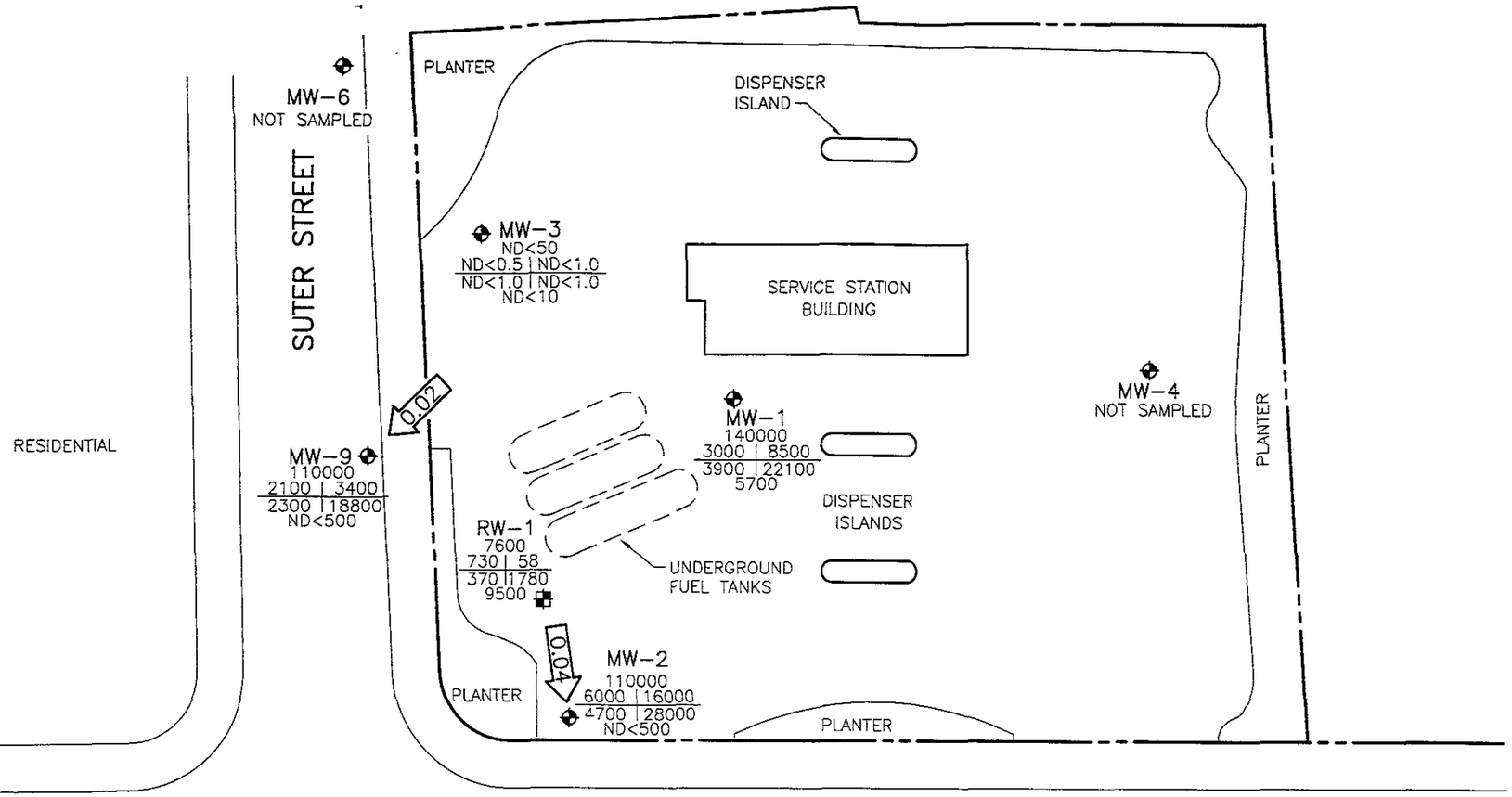
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

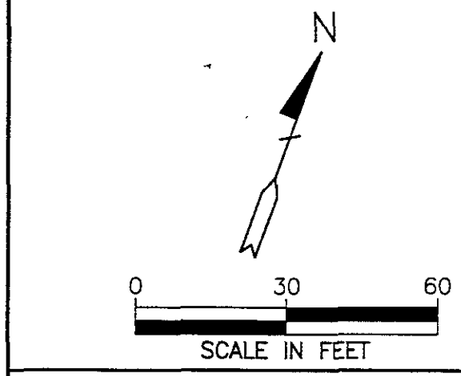
AUGUST 21, 1997

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
⟵ 0.02	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

AUGUST 21, 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. 10-024-10-001 Date: 8/21/97
Address 3201 35th Street Day: M T W TH F
Contract No. H177109 City: Oakland
Station No. BP 11132 Sampler: LB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-1	S-8	2"	~40	23.40	.87	1001	QC-1 (S-9) From this well (PPRS)
MW-2	S-3	"	~40	21.74	.01	0947	(PPRS)
MW-3	S-1	"	34.58	19.64	Ø	0925	
MW-4	N/S	"	N/M	22.91	"	0910	SEMI Sampling
MW-5	S-5	"	30.88	18.26	"	0930	
MW-6	N/S	"	N/M	18.58	"	0913	SEMI Sampling
MW-7	↓	"	N/M	21.59	↓	0917	SEMI Sampling
MW-8	S-7	"	~40	19.61	Ø	0940	
MW-9	S-4	"	~40	19.56	.01	0944	(PPRS)
MW-10	S-6	↓	~40	20.19	.14	0955	(PPRS)
RW-1	S-2	6"	38.41	20.67	Ø	0937	

FIELD INSTRUMENT CALIBRATION DATA

pH METER Tem 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1015
D.O. METER Tem ZERO d.O. SOLUTION ____ BAROMETRIC PRESSURE 760 TEMP 69 WEATHER Cloudy
CONDUCTIVITY METER Tem 10,000 ____ TURBIDITY METER ____ 5.0 NTU ____ OTHER ____
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-5	18.26	2"	O/C	Ø	Y (N)	2	1027	73.3	7.55	1.40 ms	4.3
Total Depth - Water Level=	x Well Vol. Factor=	x#Vol. to Purge	PurgeVol.			4		72.2	7.49	1.53 ms	
30.88 - 18.26 = 12.62 X .16 = 2.02 X 3 =	6.06					6.5	1038	71.6	7.42	1.61 ms	4.9
Purge Method: X Surface Pump O Disp.Tube O Winch O Disp. Bailer(s) ___ O Sys Port											
Comments:											

O EPA 601 ____
X TPH-G/BTEX ___
O TPH Diesel ____
O TOG 5520 ___
TIME/SAMPLE ID
1043

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-3	19.64	2"	O/C	Ø	Y (N)	3	1057	72.4	7.31	797 µS	5.0
Total Depth - Water Level=	x Well Vol. Factor=	x#Vol. to Purge	PurgeVol.			5		71.6	7.24	829 µS	
34.58 - 19.64 = 14.94 X .16 = 2.39 X 3 =	7.17					7.5	1107	71.2	7.16	837 µS	4.9
Purge Method: X Surface Pump O Disp.Tube O Winch O Disp. Bailer(s) ___ O Sys Port											
Comments:											

O EPA 601 ____
X TPH-G/BTEX ___
O TPH Diesel ____
O TOG 5520 ___
TIME/SAMPLE ID
1112

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. 10-024-10-001 Date: 8/21/97
Address 3201 35th Street Day: M T W (Th) F
Contract No. H177109 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.	
RW-1	20.67	6"	O/C	Ø	Y (N)	27	1125	72.7	7.49	1.33ms	4.7	O EPA 601 ___
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			54		71.0	7.36	1.44ms		(X) TPH-G/BTEX ___
38.41-20.67=17.74	X1.47=26.08	X3=78.24				79	1147	70.4	7.31	1.58ms	4.7	O TPH Diesel ___
Purge Method: (X)Surface Pump	ODisp.Tube	OWinch	ODisp. Bailer(s)___	OSys Port								O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1155

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-8	19.61	2"	O/C	Ø	Y (N)	3	1210	73.6	7.31	787µS	5.4	O EPA 601 ___
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		72.4	7.17	827µS		(X) TPH-G/BTEX ___
40-19.61=20.39	X.16=3.26	X3= 9.78				10	1217	71.3	7.12	841µS	5.2	O TPH Diesel ___
Purge Method: (X)Surface Pump	ODisp.Tube	OWinch	ODisp. Bailer(s)___	OSys Port								O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1221

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-2	21.74	2"	O/C	21.73	(Y) N	3	1230	71.9	7.29	888µS	4.3	O EPA 601 ___
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			6		71.3	7.14	899µS		(X) TPH-G/BTEX ___
40-21.74=18.26	X.16=2.92	X3= 8.76				9	1239	70.8	7.09	915µS	4.6	O TPH Diesel ___
Purge Method: (X)Surface Pump	ODisp.Tube	OWinch	ODisp. Bailer(s)___	OSys Port								O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1244

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-9	19.56	2"	O/C	19.55	(Y) N	3	1255	71.4	7.57	742µS	4.7	O EPA 601 ___
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		70.5	7.39	769µS		(X) TPH-G/BTEX ___
40-19.56=20.44	X.16=3.27	X3= 9.81				10	1310	70.1	7.33	774µS	5.1	O TPH Diesel ___
Purge Method: (X)Surface Pump	ODisp.Tube	OWinch	ODisp. Bailer(s)___	OSys Port								O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1311

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-10	20.19	2"	O/C	20.05	(Y) N	3	1324	72.4	7.69	807µS	4.6	O EPA 601 ___
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		71.0	7.53	824µS		(X) TPH-G/BTEX ___
40-20.19=19.81	X.16=3.17	X3= 9.51				10	1333	70.9	7.49	831µS	5.3	O TPH Diesel ___
Purge Method: (X)Surface Pump	ODisp.Tube	OWinch	ODisp. Bailer(s)___	OSys Port								O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1337

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. 10-024-10-001 Date: 8/21/97
Address 3201 35th Street Day: M T W (TH) F
Contract No. H177109 City: Oakland
Station No. BP 11132 Sampler: LB

Well ID	Depth to Wate	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-1	23.40	2"	OL	22.53	(Y) N	3	1404	72.4	7.07	1.03ms	4.9
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		71.6	6.97	1.17ms	
40 - 23.40 = 16.60 X .16 = 2.66 X 3 = 7.98						8	1411	71.2	6.89	1.17ms	5.3
Purge Method: XSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port											
Comments: Removed ~.15 gal FP											

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

TIME/SAMPLE ID
1415

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

September 04, 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 August 26, 1997 . The samples were assigned to Certificate of Analysis No.(s)9708A71 and analyzed for all parameters as listed on the chain of custody.

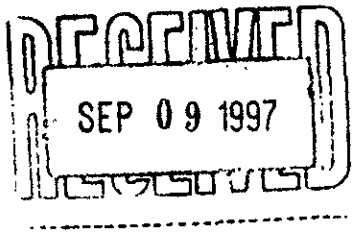
There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

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

Brett VanDelinder
Project Manager



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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number 97-08-A71

Approved for Release by:

Brett VanDelinder, Project Manager

Date: 9-5-97

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

The attached analytical data package may not be reproduced except in full without the express written approval of this laboratory.

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

Certificate of Analysis No. H9-9708A71-01

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

P.O.# H177109 , COC#088262
DATE: 09/04/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

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	97		
Method 8020A***			
Analyzed by: LJ			
Date: 09/01/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	57		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/28/97 11:34:00			

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

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

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

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

Certificate of Analysis No. H9-9708A71-02

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

P.O.# H177109 , COC#088262
DATE: 09/04/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	9500	1000 P	µg/L
Benzene	730	5 P	µg/L
Toluene	58	10 P	µg/L
Ethylbenzene	370	10 P	µg/L
Total Xylene	1780	10 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	107		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: JN			
Date: 09/03/97			
Total Petroleum Hydrocarbons-Gasoline	7.6	0.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	100		
California LUFT Manual			
Analyzed by: LJ			
Date: 08/31/97 08:42:00			

(P) - Practical Quantitation Limit

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

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

Certificate of Analysis No. H9-9708A71-03

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

P.O.# H177109 , COC#088262
DATE: 09/04/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	500 P	µg/L
Benzene	6000	25 P	µg/L
Toluene	16000	50 P	µg/L
Ethylbenzene	4700	50 P	µg/L
Total Xylene	28000	50 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	107		
4-Bromofluorobenzene	107		
Method 8020A***			
Analyzed by: VHZ			
Date: 08/28/97			
Total Petroleum Hydrocarbons-Gasoline	110	2.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	64		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/28/97 09:19:00			

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. H9-9708A71-04

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

P.O.# H177109 , COC#088262
DATE: 09/04/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	500 P	µg/L
Benzene	2100	25 P	µg/L
Toluene	3400	50 P	µg/L
Ethylbenzene	2300	50 P	µg/L
Total Xylene	18800	50 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: LJ			
Date: 09/01/97			
Total Petroleum Hydrocarbons-Gasoline	110	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	59		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/28/97 09:47:00			

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. H9-9708A71-05

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

P.O.# H177109 , COC#088262
DATE: 09/04/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	103

Method 8020A***
Analyzed by: VHZ
Date: 08/28/97

Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L

Surrogate	% Recovery
1,4-Difluorobenzene	57
4-Bromofluorobenzene	93

California LUFT Manual
Analyzed by: VHZ
Date: 08/28/97 07:30:00

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. H9-9708A71-06

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

P.O.# H177109 , COC#088262
DATE: 09/04/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	5000 P	µg/L
Benzene	9500	250 P	µg/L
Toluene	35000	500 P	µg/L
Ethylbenzene	4300	500 P	µg/L
Total Xylene	27100	500 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: LJ			
Date: 08/31/97			
Total Petroleum Hydrocarbons-Gasoline	170	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	100		
California LUFT Manual			
Analyzed by: LJ			
Date: 08/31/97 09:15:00			

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

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

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

Certificate of Analysis No. H9-9708A71-07

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

P.O.# H177109 , COC#088262
DATE: 09/04/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	1000 P	µg/L
Benzene	1100	50 P	µg/L
Toluene	9300	100 P	µg/L
Ethylbenzene	4100	100 P	µg/L
Total Xylene	31100	100 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ			
Date: 09/01/97			
Total Petroleum Hydrocarbons-Gasoline	240	50 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	60		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/29/97 02:14:00			

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

Certificate of Analysis No. H9-9708A71-08

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

P.O.# H177109 , COC#088262
DATE: 09/04/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	5700	5000 P	µg/L
Benzene	3000	250 P	µg/L
Toluene	8500	500 P	µg/L
Ethylbenzene	3900	500 P	µg/L
Total Xylene	22100	500 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: LJ			
Date: 09/01/97			
Total Petroleum Hydrocarbons-Gasoline	140	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	58		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/29/97 02:40:00			

(P) - Practical Quantitation Limit

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

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

Certificate of Analysis No. H9-9708A71-09

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

P.O.# H177109 , COC#088262
DATE: 09/05/97

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

PROJECT NO: 10-024-10-1
MATRIX: WATER
DATE SAMPLED: 08/21/97
DATE RECEIVED: 08/26/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	5200	500 P	µg/L
Benzene	3200	25 P	µg/L
Toluene	8100	50 P	µg/L
Ethylbenzene	3800	50 P	µg/L
Total Xylene	19600	50 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: AA			
Date: 09/03/97			
Total Petroleum Hydrocarbons-Gasoline	120	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	58		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/29/97 03:06:00			

(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

SPL COMPOUND

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

SURROGATE RECOVERY SUMMARY **PAGE 1**
09/04/97 15:03:00

Method 8020A* BATCH#:HP_N970831084200
WORK ORDER: 9708A71-01A **CLIENT SAMPLE ID:** S-1

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	29	97	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A* BATCH#:HP_N970831084200
WORK ORDER: 9708A71-02A **CLIENT SAMPLE ID:** S-2

1,4-Difluorobenzene	30	32.0000	107	70- 131
4-Bromofluorobenzene	30	30.0000	100	43- 135

Method 8020A* BATCH#:HP_N970831084200
WORK ORDER: 9708A71-04A **CLIENT SAMPLE ID:** S-4

1,4-Difluorobenzene	30	30.0000	100	70- 131
4-Bromofluorobenzene	30	28.0000	93	43- 135

Method 8020A* BATCH#:HP_N970831084200
WORK ORDER: 9708A71-06A **CLIENT SAMPLE ID:** S-6

1,4-Difluorobenzene	30	30.0000	100	70- 131
4-Bromofluorobenzene	30	30.0000	100	43- 135

Method 8020A* BATCH#:HP_N970831084200
WORK ORDER: 9708A71-07A **CLIENT SAMPLE ID:** S-7

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

Method 8020A* BATCH#:HP_N970831084200
WORK ORDER: 9708A71-08A **CLIENT SAMPLE ID:** S-8

1,4-Difluorobenzene	30	30.0000	100	70- 131
4-Bromofluorobenzene	30	28.0000	93	43- 135

Method 8020A * BATCH#:HP_N970831084200
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_N970831084200
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	31	103	70- 131

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

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	29	96.7	43- 135

Method 8020A *** **BATCH#:**HP_N970831084200
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9708A72-05A

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

Method 8020A *** **BATCH#:**HP_N970831084200
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9708A72-05A

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

California LUFT Manual **BATCH#:**HP_N970831094800
WORK ORDER: 9708A71-02A **CLIENT SAMPLE ID:**S-2

1,4-Difluorobenzene	30	31.0000	103	50- 150
4-Bromofluorobenzene	30	30.0000	100	50- 150

California LUFT Manual **BATCH#:**HP_N970831094800
WORK ORDER: 9708A71-06A **CLIENT SAMPLE ID:**S-6

1,4-Difluorobenzene	30	30.0000	100	50- 150
4-Bromofluorobenzene	30	30.0000	100	50- 150

California LUFT Manual **BATCH#:**HP_N970831094800
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	29	97	50- 150
4-Bromofluorobenzene	30	30	100	50- 150

California LUFT Manual **BATCH#:**HP_N970831094800
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9708A72-06A

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

California LUFT Manual **BATCH#:**HP_N970831094800
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9708A72-06A

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

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS

Method 8020A* BATCH#:HP_N970902154800**
WORK ORDER: 9708A71-09A **CLIENT SAMPLE ID:** S-9

1,4-Difluorobenzene	30	30.0000	100	70- 131
4-Bromofluorobenzene	30	28.0000	93	43- 135

Method 8020A * BATCH#:HP_N970902154800**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	30	29.6	74- 131
4-Bromofluorobenzene	30	29	29.3	43- 135

Method 8020A * BATCH#:HP_N970902154800**
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	31	103	70- 131
4-Bromofluorobenzene	30	29	96.7	43- 135

Method 8020A * BATCH#:HP_N970902154800**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9708D00-12A

1,4-DIFLUOROBENZENE	30	30	100	70- 131
4-BROMOFLUOROBENZENE	30	29	97	43- 135

Method 8020A * BATCH#:HP_N970902154800**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:** 9708D00-12A

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

Method 8020A * BATCH#:HP_N970903154900**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	29	28.8	74- 131
4-Bromofluorobenzene	30	30	29.6	43- 135

Method 8020A * BATCH#:HP_N970903154900**
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	31	103	70- 131
4-Bromofluorobenzene	30	29	96.7	43- 135

Method 8020A * BATCH#:HP_N970903154900**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9708A72-07A

1,4-DIFLUOROBENZENE	30	29	97	70- 131

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

Method 8020A *** **BATCH#:**HP_N970903154900
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9708A72-07A

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

Modified 8015A - Gasoline*** **BATCH#:**HP_S970827112000
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

4-Bromofluorobenzene	30	27	16.9	52- 152
1,4-Difluorobenzene	30	19	19.0	54- 137

Modified 8015A - Gasoline*** **BATCH#:**HP_S970827112000
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9708A68-02A

4-Bromofluorobenzene	30	34	113	52- 152
1,4-Difluorobenzene	30	31	103	54- 137

Modified 8015A - Gasoline*** **BATCH#:**HP_S970827112000
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9708A68-02A

4-Bromofluorobenzene	30	35	117	52- 152
1,4-Difluorobenzene	30	31	103	54- 137

Method 8020A *** **BATCH#:**HP_S970827125000
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	31	30.5	74- 131
4-Bromofluorobenzene	30	32	31.6	43- 135

Method 8020A *** **BATCH#:**HP_S970827125000
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	30	100	70- 131
4-Bromofluorobenzene	30	32	107	43- 135

Method 8020A *** **BATCH#:**HP_S970827125000
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9708A68-01A

1,4-DIFLUOROBENZENE	30	30	100	70- 131
4-BROMOFLUOROBENZENE	30	31	103	43- 135

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Method 8020A *** BATCH#:HP_S970827125000
WORK ORDER: Matrix Spike Dup. CLIENT SAMPLE ID:9708A68-01A

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

Method 8020A*** BATCH#:HP_S970828101200
WORK ORDER: 9708A71-03A CLIENT SAMPLE ID:S-3

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

Method 8020A*** BATCH#:HP_S970828101200
WORK ORDER: 9708A71-05A CLIENT SAMPLE ID:S-5

1,4-Difluorobenzene	30	30	100	70- 131
4-Bromofluorobenzene	30	31	103	43- 135

Method 8020A*** BATCH#:HP_S970828101200
WORK ORDER: 9708A71-08A CLIENT SAMPLE ID:S-8

1,4-Difluorobenzene	30	30.0000	100	70- 131
4-Bromofluorobenzene	30	32.0000	107	43- 135

Method 8020A*** BATCH#:HP_S970828101200
WORK ORDER: 9708A71-09A CLIENT SAMPLE ID:S-9

1,4-Difluorobenzene	30	30.0000	100	70- 131
4-Bromofluorobenzene	30	32.0000	107	43- 135

Method 8020A *** BATCH#:HP_S970828101200
WORK ORDER: Method Blank CLIENT SAMPLE ID:

1,4-Difluorobenzene	30	31	30.8	74- 131
4-Bromofluorobenzene	30	32	31.7	43- 135

Method 8020A *** BATCH#:HP_S970828101200
WORK ORDER: LCS CLIENT SAMPLE ID:

1,4-Difluorobenzene	30	30	100	70- 131
4-Bromofluorobenzene	30	32	107	43- 135

Method 8020A *** BATCH#:HP_S970828101200
WORK ORDER: Matrix Spike CLIENT SAMPLE ID:9708B47-01A

1,4-DIFLUOROBENZENE	30	30	100	70- 131

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-BROMOFLUOROBENZENE	30	32	107	43- 135

Method 8020A *** **BATCH#:**HP_S970828101200
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9708B47-01A

1,4-Difluorobenzene	30	30	100	70- 131
4-Bromofluorobenzene	30	32	107	43- 135

California LUFT Manual **BATCH#:**HP_S970828110700
WORK ORDER: 9708A71-01A **CLIENT SAMPLE ID:**S-1

1,4-Difluorobenzene	30	17	57	50- 150
4-Bromofluorobenzene	30	28	93	50- 150

California LUFT Manual **BATCH#:**HP_S970828110700
WORK ORDER: 9708A71-03A **CLIENT SAMPLE ID:**S-3

1,4-Difluorobenzene	30	19.2000	64	50- 150
4-Bromofluorobenzene	30	28.0000	93	50- 150

California LUFT Manual **BATCH#:**HP_S970828110700
WORK ORDER: 9708A71-04A **CLIENT SAMPLE ID:**S-4

1,4-Difluorobenzene	30	17.6000	59	50- 150
4-Bromofluorobenzene	30	28.0000	93	50- 150

California LUFT Manual **BATCH#:**HP_S970828110700
WORK ORDER: 9708A71-05A **CLIENT SAMPLE ID:**S-5

1,4-Difluorobenzene	30	17	57	50- 150
4-Bromofluorobenzene	30	28	93	50- 150

California LUFT Manual **BATCH#:**HP_S970828110700
WORK ORDER: 9708A71-07A **CLIENT SAMPLE ID:**S-7

1,4-Difluorobenzene	30	18.0000	60	50- 150
4-Bromofluorobenzene	30	28.0000	93	50- 150

California LUFT Manual **BATCH#:**HP_S970828110700
WORK ORDER: 9708A71-08A **CLIENT SAMPLE ID:**S-8

1,4-Difluorobenzene	30	17.4000	58	50- 150
4-Bromofluorobenzene	30	27.8000	93	50- 150

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
California LUFT Manual		**BATCH#:** HP_S970828110700		
WORK ORDER: 9708A71-09A		**CLIENT SAMPLE ID:** S-9		
1,4-Difluorobenzene	30	17.4000	58	50- 150
4-Bromofluorobenzene	30	28.0000	93	50- 150
California LUFT Manual		**BATCH#:** HP_S970828110700		
WORK ORDER: Method Blank		**CLIENT SAMPLE ID:**		
1,4-Difluorobenzene	30	19	19.0	50- 150
4-Bromofluorobenzene	30	28	28.3	50- 150
California LUFT Manual		**BATCH#:** HP_S970828110700		
WORK ORDER: Matrix Spike		**CLIENT SAMPLE ID:** 9708A71-05A		
1,4-Difluorobenzene	30	31	103	50- 150
4-Bromofluorobenzene	30	29	97	50- 150
California LUFT Manual		**BATCH#:** HP_S970828110700		
WORK ORDER: Matrix Spike Dup.		**CLIENT SAMPLE ID:** 9708A71-05A		
1,4-Difluorobenzene	30	33	110	50- 150
4-Bromofluorobenzene	30	29	97	50- 150

« = 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 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_N970831084200

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	46	92.0	63 - 120
Benzene	ND	50	46	92.0	62 - 121
Toluene	ND	50	46	92.0	66 - 136
EthylBenzene	ND	50	45	90.0	70 - 136
O Xylene	ND	50	47	94.0	74 - 134
M & P Xylene	ND	100	92	92.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	160	20.0	180	NC	180	NC	NC	20	39 - 150
BENZENE	ND	20.0	20	100	20	100	0	25	39 - 150
TOLUENE	ND	20.0	20	100	21	105	4.88	26	56 - 134
ETHYLBENZENE	ND	20.0	20	100	20	100	0	38	61 - 128
O XYLENE	ND	20.0	20	100	20	100	0	29	40 - 130
M & P XYLENE	ND	40.0	42	105	41	102	2.90	20	43 - 152

Analyst: LJ
Sequence Date: 08/31/97
SPL ID of sample spiked: 9708A72-05A
Sample File ID: N_H7996.TX0
Method Blank File ID:
Blank Spike File ID: N_H7987.TX0
Matrix Spike File ID: N_H7991.TX0
Matrix Spike Duplicate File ID: N_H7992.TX0

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9708A72-01A 9708A71-07A 9708A71-08A 9708D00-01A
9708A72-05A 9708A72-08A 9708A72-06A 9708A71-02A
9708A71-06A 9708C25-01A 9708C25-02A 9708C62-01A
9708C89-04A 9708A71-01A 9708A71-04A

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_N970903154900

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	45	90.0	63 - 120
Benzene	ND	50	43	86.0	62 - 121
Toluene	ND	50	44	88.0	66 - 136
EthylBenzene	ND	50	42	84.0	70 - 136
O Xylene	ND	50	44	88.0	74 - 134
M & P Xylene	ND	100	88	88.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	180	20	220	NC	220	NC	NC	20	39 - 150
BENZENE	ND	20	21	105	21	105	0	25	39 - 150
TOLUENE	ND	20	21	105	21	105	0	26	56 - 134
ETHYLBENZENE	ND	20	20	100	20	100	0	38	61 - 128
O XYLENE	ND	20	20	100	21	105	4.88	29	40 - 130
M & P XYLENE	ND	40	41	102	41	102	0	20	43 - 152

Analyst: JN
Sequence Date: 09/03/97
SPL ID of sample spiked: 9708A72-07A
Sample File ID: N_I7044.TX0
Method Blank File ID:
Blank Spike File ID: N_I7037.TX0
Matrix Spike File ID: N_I7040.TX0
Matrix Spike Duplicate File ID: N_I7041.TX0

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9708A71-02A 9709004-01A 9708C25-01A 9708C25-02A
9708D00-02A 9708D00-03A 9708D00-07A 9708D00-08A
9708D00-09A 9708D00-10A 9708D00-15A 9708D00-16A
9708D28-01A 9708D28-02A 9708A72-07A 9708C82-01A

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_S970828101200

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	39	78.0	63 - 120
Benzene	ND	50	41	82.0	62 - 121
Toluene	ND	50	42	84.0	66 - 136
EthylBenzene	ND	50	43	86.0	70 - 136
O Xylene	ND	50	43	86.0	74 - 134
M & P Xylene	ND	100	84	84.0	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	391	20	380	NC	390	NC	NC	20	39 - 150
BENZENE	ND	20	19	95.0	19	95.0	0	25	39 - 150
TOLUENE	ND	20	19	95.0	18	90.0	5.41	26	56 - 134
ETHYLBENZENE	ND	20	18	90.0	18	90.0	0	38	61 - 128
O XYLENE	ND	20	18	90.0	18	90.0	0	29	40 - 130
M & P XYLENE	ND	40	37	92.5	36	90.0	2.74	20	43 - 152

Analyst: VHZ
Sequence Date: 08/28/97
SPL ID of sample spiked: 9708B47-01A
Sample File ID: S_H7465.TX0
Method Blank File ID:
Blank Spike File ID: S_H7454.TX0
Matrix Spike File ID: S_H7459.TX0
Matrix Spike Duplicate File ID: S_H7460.TX0

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9708856-05A 9708A68-02A 9708A71-03A 9708A68-03A
9708A71-08A 9708A71-09A 9708B26-02A 9708B44-01A
9708B26-01A 9708B48-02A 9708B48-03A 9708854-04A
9708B47-01A 9708A71-05A

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_N970902154800

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	49	98.0	62 - 121
Toluene	ND	50	50	100	66 - 136
EthylBenzene	ND	50	49	98.0	70 - 136
O Xylene	ND	50	49	98.0	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	16	20	36	100	35	95.0	5.13	20	39 - 150
BENZENE	6.7	20	25	91.5	25	91.5	0	25	39 - 150
TOLUENE	5.8	20	24	91.0	24	91.0	0	26	56 - 134
ETHYLBENZENE	3.1	20	21	89.5	21	89.5	0	38	61 - 128
O XYLENE	2.2	20	21	94.0	21	94.0	0	29	40 - 130
M & P XYLENE	5.3	40	43	94.2	42	91.8	2.58	20	43 - 152

Analyst: AA
Sequence Date: 09/02/97
SPL ID of sample spiked: 9708D00-12A
Sample File ID: N_I7008.TX0
Method Blank File ID:
Blank Spike File ID: N_I7001.TX0
Matrix Spike File ID: N_I7003.TX0
Matrix Spike Duplicate File ID: N_I7004.TX0

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9708D00-05A 9708D00-06A 9708D00-20A 9708D00-13A
9708D00-15A 9708D00-16A 9708D00-17A 9708D00-18A
9708D00-19A 9708D00-11A 9708A71-09A 9708D00-12A
9708D00-14A 9708D00-08A 9708D00-04A

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** SPL BATCH QUALITY CONTROL REPORT **

CA LUFT

Matrix: Aqueous

Batch Id: HP_N970831094800

Units: mg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Gas	ND	1.0	0.83	83.0	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	0.90	0.93	103	0.91	101	1.96	50	50 - 150

Analyst: LJ

Sequence Date: 08/31/97

SPL ID of sample spiked: 9708A72-06A

Sample File ID: NNH7997.TX0

Method Blank File ID:

Blank Spike File ID: NNH7989.TX0

Matrix Spike File ID: NNH7993.TX0

Matrix Spike Duplicate File ID: NNH7994.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: Temporary Limits

(***) = Source: Temporary Limits

SAMPLES IN BATCH(SPL ID):

9708A72-01A 9708A72-05A 9708A72-06A 9708A71-02A
9708A71-06A 9708A72-07A 9708A72-08A 9708C25-01A
9708C25-02A 9708D00-01A

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HOUSTON, TEXAS 77054
PHONE (713)660-0901

** SPL BATCH QUALITY CONTROL REPORT **

CA LUFT

Matrix: Aqueous
Units: mg/L

Batch Id: HP_S970828110700

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	0.76	76.0	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	1.03	114	1.11	123	7.59	50	50 - 150

Analyst: VHZ
Sequence Date: 08/28/97
SPL ID of sample spiked: 9708A71-05A ✓
Sample File ID: SSH7466.TX0
Method Blank File ID:
Blank Spike File ID: SSH7456.TX0
Matrix Spike File ID: SSH7461.TX0
Matrix Spike Duplicate File ID: SSH7462.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: Temporary Limits
(***) = Source: Temporary Limits

SAMPLES IN BATCH(SPL ID): 9708A71-03A 9708A71-04A 9708A68-03A 9708A71-01A 9708A71-07A 9708A71-08A 9708A71-09A 9708A71-05A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9708A71

CHAIN OF CUSTODY

No. 088262

Page 1 of 1

CONSULTANT'S NAME: Alisto Engineering	CONSULTANT'S ADDRESS: 1575 Treat Blvd #201 Walnut Creek, CA 94598		
BP SITE NUMBER: 11132	BP SITE / FACILITY ADDRESS: Oakland, CA		CONSULTANT PROJECT NUMBER: 10-024-10-1
CONSULTANT PROJECT MANGER: Brady Nagle	PHONE NUMBER: (510) 295-1650	FAX NUMBER: 295-1823	CONSULTANT CONTRACT NUMBER: H177109
BP CONTACT: Scott Hooton	BP ADDRESS: Renton, WA	PHONE NUMBER: —	FAX NO.: —
LAB CONTACT: SPL	LABORATORY ADDRESS: Texas	PHONE NUMBER: —	FAX NO.: —
BP CONTACT REQUESTING RUSH TAT (Print BP Contact Name)	RUSH REQUESTED OF (Print Consultant Contact Name)	DATE/TIME	SHIPMENT DATE: 8/25/97

SHIPMENT METHOD: FedEx

AIRBILL NUMBER: 38484 71454

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

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH-D (8015)	BTEX (8020)	COMMENTS
S-1	8/21/97		W	3	HCL		X	X	
S-2	"		"	"	"		"	"	
S-3	"		"	"	"		"	"	
S-4	"		"	"	"		"	"	
S-5	"		"	"	"		"	"	
S-6	"		"	"	"		"	"	
S-7	"		"	"	"		"	"	
S-8	"		"	"	"		"	"	
S-9	↓		↓	↓	↓		↓	↓	Intact ROI 4C

SAMPLED BY (Please Print Name)

SAMPLED BY (Signature)

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION (Print Name / Signature)	DATE	TIME	ACCEPTED BY / AFFILIATION (Print Name / Signature)	DATE	TIME
Patricia Yelton	8/25/97	0800	Patricia Yelton	8/25/97	0805
Patricia Yelton	8/25/97	1500	Fedex	8/26/97	0945

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

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

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
8-26-97	0945

SPL Sample ID:
9708A71

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.			
3	If no, Non-Conformance Worksheet has been completed.		✓	
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		4° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	3148711454	
		Other:		
11	Method of sample disposal:	SPL Disposal		✓
		HOLD		
		Return to Client		

Name:	Date:
[signature]	8-26-97

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

BP Site Number:	11132
ERM Contact:	G797457
Sampling Date:	08/21/97
Matrix Description:	Water
Date Final Report Received:	09/09/97
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: _____

Data Validation Completed by: Ken Simas

(signature): _____

Date: 6/17/97

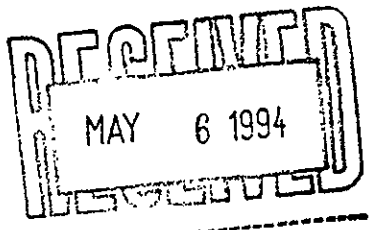
APPENDIX C

HISTORICAL MTBE DOCUMENTATION

pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS

May 05, 1994



Mr. Bill Howell
Alisto Engineering Group
1777 Oakland Blvd., Ste. 200
Walnut Creek, CA 94596

RE: PACE Project No. 440428.510
Client Reference: BP Site #11132/10-024-03-004

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received April 28, 1994.

Please note that a peak eluting earlier than Benzene and suspected to be Methyl Tert Butyl Ether was detected in the following samples at the approximated levels:

700312523/MW-10	1600 ug/L
700312531/QC-1 (mw-9)	740 ug/L

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,

Ronald M. Chew
Project Manager

Enclosures

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX: 415-883-2673

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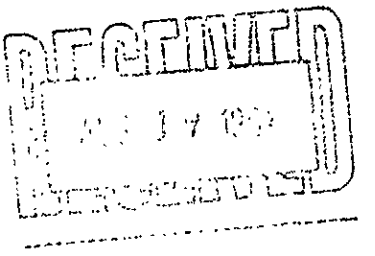
pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS



August 15, 1994

Mr. Bill Howell
Alisto Engineering Group
1777 Oakland Blvd., Ste. 200
Walnut Creek, CA 94596

RE: PACE Project No. 440805.535
Client Reference: BP Site #11132/10-024~~-04-001~~ 05-001

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received August 05, 1994.

Please note 1) that a peak eluting earlier than Benzene and suspected to be Methyl Tert Butyl Ether was detected in the following sample at the approximated level:

700367018/S-7	1200 ug/L

and 2) your sample ID# S-9 (PACE ID# 700367034) was lost in storage in the laboratory. There was only one vial of sample provide to the laboratory, therefore there is not analytical results available.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,

Ronald M. Chew

Ronald M. Chew
Project Manager

Enclosures

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX: 415-883-2673

An Equal Opportunity Employer

Analytical Technologies, Inc. **GAS CHROMATOGRAPHY RESULTS**

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING
Project # : G602109/10-024-08-001
Project Name: BP SITE#11132/OAKLAND, CA

ATI I.D. : 508239

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	S-1	WATER	22-AUG-95	N/A	30-AUG-95	1.00
2	S-2	WATER	22-AUG-95	N/A	30-AUG-95	1.00
3	S-3	WATER	22-AUG-95	N/A	30-AUG-95	1.00

Parameter	Units	1	2	3
METHYL T-BUTYL ETHER	UG/L	<5.0	<5.0	<5.0
BENZENE	UG/L	<0.50	<0.50	<0.50
TOLUENE	UG/L	<0.50	<0.50	<0.50
ETHYLBENZENE	UG/L	<0.50	<0.50	<0.50
XYLENES (TOTAL)	UG/L	<1.0	<1.0	<1.0
FUEL HYDROCARBONS	UG/L	<50	<50	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
SURROGATES				
TRIFLUOROTOLUENE	%	94	95	97

Analytical Technologies, Inc. GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING
Project # : G602109/10-024-08-001
Project Name: BP SITE#11132/OAKLAND, CA
ATI I.D. : 508239

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	S-4	WATER	22-AUG-95	N/A	30-AUG-95	1.00
5	S-5	WATER	22-AUG-95	N/A	31-AUG-95	25.00
6	S-6	WATER	22-AUG-95	N/A	31-AUG-95	5.00

Parameter	Units	4	5	6
METHYL T-BUTYL ETHER	UG/L	<5.0	<130	<25
BENZENE	UG/L	14	1100	230
TOLUENE	UG/L	<0.50	18	13
ETHYLBENZENE	UG/L	<0.50	27	4.9
XYLENES (TOTAL)	UG/L	1.6	59	280
FUEL HYDROCARBONS	UG/L	150	3700	3300
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
SURROGATES				
TRIFLUOROTOLUENE	%	102	101	119

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING ATI I.D. : 508239
Project # : G602109/10-024-08-001
Project Name: BP SITE#11132/OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
7	S-7	WATER	22-AUG-95	N/A	31-AUG-95	5.00
8	S-8	WATER	22-AUG-95	N/A	30-AUG-95	1.00

Parameter	Units	7	8
METHYL T-BUTYL ETHER	UG/L	<25	<5.0
BENZENE	UG/L	210	<0.50
TOLUENE	UG/L	9.3	<0.50
ETHYLBENZENE	UG/L	4.3	<0.50
XYLENES (TOTAL)	UG/L	250	<1.0
FUEL HYDROCARBONS	UG/L	2800	<50
HYDROCARBON RANGE		C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE
SURROGATES			
TRIFLUOROTOLUENE	%	111	94