BP OIL

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

Reduce to Annual sampling of all of subseq. years.

September 24, 1997

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

RE: Former BP Oil Site No. 11266
1541 Park Street (at Lincoln)
Alameda, CA

Dear Ms. Chu:

This letter transmits a groundwater monitoring and sampling report dated 28 August 1997 prepared on behalf of BP by Alisto Engineering Group.

A petroleum release was documented during the replacement of underground storage tanks by Mobil Oil Corporation during 1987. BP purchased the site from Mobil in 1989, and Mobil later transferred management of the cleanup to BP. BP subsequently sold the site to the current operator (Tosco Corporation) during 1994. To comply with 1998 requirements for leak detection and prevention, the current tanks are understood to require spill buckets around the fill ports, containment sumps around the turbine risers, containment pans beneath the dispensers, and overfill prevention. The current tanks are believed to be constructed of double-wall fiberglass, and installed in the excavation dug to remove the former tanks.

The enclosed groundwater monitoring and sampling report includes laboratory data for samples collected on 9 July 1997. You will note that aromatic petroleum hydrocarbons were detected in samples obtained from monitoring well MW-1. The highest benzene concentrations this quarter (93 µg/l and 42 µg/l) were detected in replicate samples obtained from well MW-1, located to the north of the tanks, lines, and dispensers.

MTBE concentration data is now shown in Figure 3, replacing the dissolved oxygen measurements shown in past reports. You should note that estimated MTBE concentrations for samples analyzed during 1993 and 1994 are also shown on Table 1 - Summary of Results of Groundwater Sampling. Prior laboratory documentation is appended to the enclosed report; I have no other information regarding the suspected or confirmed presence of MTBE in groundwater other than the data summarized in this report. It is my understanding that PACE included MTBE in the gasoline standard used to determine the retention time of various gasoline components, however, MTBE was not included in the calibration standards used to calculate sample concentrations. This is why Pace refers to the MTBE concentrations for samples analyzed during 1993 and 1994 as estimates. You will note that

MTBE was reported to be present in samples obtained prior to the sale of the site to Tosco in 1994.

Please give me a call at (425) 251-0689 if you have any questions or comments regarding this submittal.

Sincerely,

Scott Hooton
Environmental Remediation Management

attachment

cc: site file
Brady Nagle - Alisto
T. Berry - Tosco

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11266
1541 Park Street
Alameda, California

Project No. 10-050-07-004

Prepared for:

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

Prepared by:

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

August 28, 1997

William Howell
Project Manager

Dan Salaices
Registered Geologist

REGISTERED GEOLOGIST
DANIEL J.
SALAICES
No. 5162
STATE OF CALIFORNIA

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11266
1541 Park Street
Alameda, California

Project No. 10-050-07-004

August 28, 1997

INTRODUCTION

This report presents the results and findings of the July 9, 1997 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11266, 1541 Park Street, Alameda, California. A site vicinity map is shown on Figure 1.

FIELD PROCEDURES

Field activities were performed in accordance with the procedures and guidelines of the Alameda County Health Care Services Agency and the California Regional Water Quality Control Board, San Francisco Bay Region.

Before purging and sampling, the groundwater level in each well was measured from a permanent mark on top of the casing to the nearest 0.01 foot using an electronic sounder. The depth to groundwater and top of casing elevation data were used to calculate the groundwater elevation in each well in reference to mean sea level. The survey data and groundwater elevation measurements collected to date are presented in Table 1.

Before sample collection, each well was purged of 3 casing volumes, while recording field readings of pH, temperature, electrical conductivity, and dissolved oxygen. Groundwater samples were collected for laboratory analysis by lowering a bottom-fill, disposable bailer to just below the water level in the well. The samples were transferred from the bailer into laboratory-supplied containers. The water sampling field survey forms are presented in Appendix A.

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.

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11266
1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (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		03/04/88	19.19	---	---	95000	2000	5900	1100	10000	---		---	---
MW-1		03/29/89	19.19	---	---	25000	930	2600	24	3100	---		---	---
MW-1		11/28/89	19.19	---	---	15000	280	880	340	1200	---		---	---
MW-1		02/13/91	19.19	---	---	25000	680	2700	1100	3200	---		---	---
MW-1		01/08/92	19.19	---	---	10000	260	1100	570	2000	---		---	---
MW-1		03/30/92	19.19	8.15	11.04	5800	290	570	500	1100	---		---	PACE
MW-1		07/02/92	19.19	9.38	9.81	2500	170	60	310	300	---		---	ANA
MW-1		07/22/92	19.19	9.62	9.57	---	---	---	---	---	---		---	---
MW-1		10/02/92	19.19	9.98	9.21	4000	86	190	270	350	---		---	ANA
QC-1	(c)	10/02/92	---	---	---	3600	89	180	270	340	---		---	ANA
MW-1		12/14/92	19.19	9.90	9.29	6800	75	540	200	670	---		---	ANA
QC-1	(c)	12/14/92	---	---	---	5900	68	480	190	600	---		---	ANA
MW-1		03/24/93	19.19	8.52	10.67	6400	150	310	370	710	1400	(d)	---	PACE
MW-1		06/17/93	19.19	9.37	9.82	3800	110	160	310	480	220	(d)	---	PACE
MW-1		09/29/93	19.19	10.80	8.39	1100	22	16	54	110	320	(d)	---	PACE
MW-1		12/28/93	19.19	9.27	9.92	1800	26	110	77	300	220	(d)	---	PACE
MW-1		03/29/94	19.19	8.77	10.42	22000	990	560	970	2000	---		3.1	PACE
MW-1		07/07/94	19.19	9.18	10.01	18000	67	32	250	140	30000	(d)	---	PACE
MW-1		10/18/94	19.19	9.85	9.34	270	1.9	0.6	ND<0.5	3.2	---		3.6	PACE
MW-1		02/01/95	19.19	7.04	12.15	5400	260	350	1100	980	---		6.5	ATI
MW-1		04/12/95	19.19	7.74	11.45	13000	260	620	960	2600	---		5.0	ATI
MW-1		09/13/95	19.19	9.58	9.61	5800	110	110	510	830	4300		5.2	ATI
QC-1	(c)	09/13/95	---	---	---	5800	110	100	490	800	4500		---	ATI
MW-1		01/11/96	19.19	8.95	10.24	5400	91	130	510	1000	1700		5.2	ATI
QC-1	(c)	01/11/96	---	---	---	5100	89	120	490	950	2000		---	ATI
MW-1		04/18/96	19.19	8.40	10.79	12000	190	420	1100	1560	2100		4.5	SPL
QC-1	(c)	04/18/96	---	---	---	12000	190	390	1100	1440	2000		---	SPL
MW-1		06/28/96	19.19	9.08	10.11	11000	100	130	670	1180	4600		---	SPL
QC-1	(c)	06/28/96	---	---	---	11000	100	140	690	1290	4600		---	SPL
MW-1		11/05/96	19.19	9.81	9.38	8800	55	28	520	430	5700		5.5	SPL
QC-1	(c)	11/05/96	---	---	---	8800	48	ND<25	490	413	5600		---	SPL
MW-1		01/17/97	19.19	7.81	11.38	12000	180	160	1200	1650	3200		8.0	SPL
QC-1	(c)	01/17/97	---	---	---	13000	190	160	1200	1770	3200		---	SPL
MW-1		05/01/97	19.19	9.13	10.06	8600	160	49	950	850	3200		7.0	SPL
QC-1	(c)	05/01/97	---	---	---	9000	160	39	940	820	3100		---	SPL
MW-1		07/09/97	19.19	9.55	9.64	10000	93	27	720	476	4500		6.3	SPL
QC-1	(c)	07/09/97	---	---	---	7600	42	13	340	175	4300		---	SPL

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ALISTO PROJECT NO. 10-050

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (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	03/04/88	19.32	---	---	ND	ND	ND	ND	ND	---	---	---
MW-2	03/29/89	19.32	---	---	ND	1.1	0.78	ND	1.7	---	---	---
MW-2	11/28/89	19.32	---	---	170	ND	ND	ND	ND	---	---	---
MW-2	02/13/91	19.32	---	---	150	1.4	ND	ND	0.9	---	---	---
MW-2	01/08/92	19.32	---	---	ND	1.4	ND	ND	1.1	---	---	---
MW-2	03/30/92	19.32	9.03	10.29	91	0.7	ND	ND	ND	---	---	PACE
MW-2	07/02/92	19.32	9.96	9.36	150	3.1	0.6	0.6	1.1	---	---	ANA
MW-2	07/22/92	19.32	10.12	9.20	---	---	---	---	---	---	---	---
MW-2	10/02/92	19.32	10.42	8.90	56	ND<0.5	0.8	0.8	1.2	---	---	ANA
MW-2	12/14/92	19.32	10.77	8.55	210	1.5	ND<0.5	0.9	2.7	---	---	ANA
MW-2	03/24/93	19.32	9.33	9.99	94	0.8	ND<0.5	ND<0.5	0.9	---	---	PACE
QC-1 (c)	03/24/93	---	---	---	150	1.8	0.6	1.3	1.3	---	---	PACE
MW-2	06/17/93	19.32	9.91	9.41	ND<50	ND<0.5	ND<0.5	ND<0.5	0.7	23 (d)	---	PACE
MW-2	09/29/93	19.32	11.39	7.93	68	ND<0.5	0.9	0.7	1.9	59 (d)	---	PACE
MW-2	12/28/93	19.32	9.75	9.57	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1300 (d)	---	PACE
QC-1 (c)	12/28/93	---	---	---	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1100 (d)	---	PACE
MW-2	03/29/94	19.32	9.39	9.93	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1600 (d)	4.9	PACE
QC-1 (c)	03/29/94	---	---	---	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1600 (d)	---	PACE
MW-2	07/07/94	19.32	9.68	9.64	1100	0.6	1.7	0.6	3.2	2000 (d)	---	PACE
MW-2	10/18/94	19.32	10.22	9.10	290	3.1	0.8	ND<0.5	5.1	---	3.3	PACE
MW-2	02/01/95	19.32	8.03	11.29	100	ND<0.5	ND<0.5	ND<0.5	ND<1	---	6.0	ATI
MW-2	04/12/95	19.32	8.71	10.61	1200	ND<1.0	ND<1.0	ND<1.0	ND<2.0	---	8.3	ATI
MW-2	09/13/95	19.32	10.19	9.13	480	ND<2.5	ND<2.5	ND<2.5	ND<5.0	2300	7.8	ATI
MW-2	01/11/96	19.32	9.59	9.73	3400	ND<25	ND<25	ND<25	ND<50	11000	5.4	ATI
MW-2	04/18/96	19.32	9.04	10.28	130	ND<0.5	ND<1	ND<1	ND<1	170	5.5	SPL
MW-2	06/28/96	19.32	9.72	9.60	300	ND<0.5	ND<1	ND<1	ND<1	430	4.9	SPL
MW-2	11/05/96	19.32	10.43	8.89	710	ND<2.5	ND<5.0	ND<5.0	ND<5.0	960	5.3	SPL
MW-2	01/17/97	19.32	8.80	10.52	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	24	5.3	SPL
MW-2	05/01/97	19.32	10.06	9.26	80	ND<0.5	ND<1.0	ND<1.0	ND<1.0	100	5.2	SPL
MW-2	07/09/97	19.32	10.50	8.82	150	ND<0.5	ND<1.0	ND<1.0	ND<1.0	170	4.3	SPL

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MW-3	03/04/88	19.99	---	---	ND	ND	ND	ND	ND	---	---	---
MW-3	03/29/89	19.99	---	---	ND	ND	ND	ND	ND	---	---	---
MW-3	11/28/89	19.99	---	---	ND	ND	ND	ND	ND	---	---	---
MW-3	02/13/91	19.99	---	---	ND	ND	ND	ND	ND	---	---	---
MW-3	01/08/92	19.99	---	---	ND	ND	ND	ND	ND	---	---	---
MW-3	03/30/92	19.99	9.71	10.28	ND	ND	ND	ND	ND	---	---	PACE
MW-3	07/02/92	19.99	10.52	9.47	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-3	07/22/92	19.99	10.62	9.37	---	---	---	---	---	---	---	---
MW-3	10/02/92	19.99	10.86	9.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-3	12/14/92	19.99	10.53	9.46	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-3	03/24/93	19.99	9.06	10.93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	06/17/93	19.99	10.44	9.55	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	09/29/93	19.99	11.06	8.93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	12/28/93	19.99	9.43	10.56	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	03/29/94	19.99	10.01	9.98	---	---	---	---	ND<0.5	---	---	---
MW-3	07/07/94	19.99	10.14	9.85	ND<50	ND<0.5	0.7	ND<0.5	ND<0.5	---	---	PACE
QC-1 (c)	07/07/94	---	---	---	ND<50	ND<0.5	0.7	ND<0.5	ND<0.5	---	---	PACE
MW-3	10/18/94	19.99	10.56	9.43	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	3.2	PACE
MW-3	02/01/95	19.99	8.98	11.01	ND<50	ND<0.5	1.0	0.5	1.9	---	5.9	ATI
MW-3	04/12/95	19.99	9.70	10.29	---	---	---	---	---	---	---	---
MW-3	09/13/95	19.99	10.70	9.29	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	5.7	ATI
MW-3	01/11/96	19.99	10.18	9.81	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	5.5	ATI
MW-3	04/18/96	19.99	9.53	10.46	---	---	---	---	---	---	---	---
MW-3	06/28/96	19.99	9.21	10.78	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.3	SPL
MW-3	11/05/96	19.99	9.94	10.05	---	---	---	---	---	---	---	---
MW-3	01/17/97	19.99	9.29	10.70	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
MW-3	05/01/97	19.99	10.53	9.46	---	---	---	---	---	---	---	---
MW-3	07/09/97	19.99	10.92	9.07	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.0	SPL

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MW-4	03/04/88	20.17	---	---	ND	ND	ND	ND	ND	---	---	---
MW-4	03/29/89	20.17	---	---	ND	ND	ND	ND	ND	---	---	---
MW-4	11/28/89	20.17	---	---	430	6.2	0.6	12	3.3	---	---	---
MW-4	02/13/91	20.17	---	---	ND	ND	ND	ND	ND	---	---	---
MW-4	01/08/92	20.17	---	---	ND	ND	ND	ND	ND	---	---	---
MW-4	03/30/92	20.17	8.73	11.44	ND	ND	ND	ND	ND	---	---	PACE
MW-4	07/02/92	20.17	10.04	10.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-4	07/22/92	20.17	10.26	9.91	---	---	---	---	---	---	---	---
MW-4	10/02/92	20.17	10.63	9.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-4	12/14/92	20.17	10.02	10.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-4	03/24/93	20.17	9.08	11.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	06/17/93	20.17	10.03	10.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	09/29/93	20.17	10.96	9.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	12/28/93	20.17	9.33	10.84	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	03/29/94	20.17	9.42	10.75	---	---	---	---	---	---	---	---
MW-4	07/07/94	20.17	9.82	10.35	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	10/18/94	20.17	10.36	9.81	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	3.1	PACE
MW-4	02/01/95	20.17	7.50	12.67	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	9.3	ATI
MW-4	04/12/95	20.17	8.21	11.96	---	---	---	---	---	---	---	---
MW-4	09/13/95	20.17	10.20	9.97	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	4.3	ATI
MW-4	01/11/96	20.17	9.57	10.60	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	5.1	ATI
MW-4	04/18/96	20.17	9.03	11.14	---	---	---	---	---	---	---	---
MW-4	06/28/96	20.17	8.73	11.44	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.6	SPL
MW-4	11/05/96	20.17	9.47	10.70	---	---	---	---	---	---	---	---
MW-4	01/17/97	20.17	8.79	11.38	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.4	SPL
MW-4	05/01/97	20.17	10.08	10.09	---	---	---	---	---	---	---	---
MW-4	07/09/97	20.17	10.52	9.65	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.1	SPL

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MW-5	03/04/88	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	03/29/89	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	11/28/89	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	02/13/91	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	01/08/92	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	03/30/92	19.41	7.85	11.56	ND	ND	ND	ND	ND	---	---	PACE
MW-5	07/02/92	19.41	9.27	10.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-5	07/22/92	19.41	9.55	9.86	---	---	---	---	---	---	---	---
MW-5	10/02/92	19.41	9.97	9.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-5	12/14/92	19.41	9.14	10.27	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-5	03/24/93	19.41	8.17	11.24	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	06/17/93	19.41	8.29	11.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-1 (c)	06/17/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	09/29/93	19.41	10.31	9.10	ND<50	ND<0.5	ND<0.5	ND<0.5	0.6	---	---	PACE
MW-5	12/28/93	19.41	8.91	10.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	03/29/94	19.41	8.50	10.91	---	---	---	---	---	---	---	---
MW-5	07/07/94	19.41	8.99	10.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	10/18/94	19.41	9.61	9.80	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	3.5	PACE
MW-5	02/01/95	19.41	6.55	12.86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	7.6	ATI
MW-5	04/12/95	19.41	7.27	12.14	---	---	---	---	---	---	---	---
MW-5	09/13/95	19.41	9.49	9.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	4.9	ATI
MW-5	01/11/96	19.41	8.82	10.59	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	4.9	ATI
MW-5	04/18/96	19.41	8.30	11.11	---	---	---	---	---	---	---	---
MW-5	06/28/96	19.41	8.96	10.45	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.2	SPL
MW-5	11/05/96	19.41	9.69	9.72	---	---	---	---	---	---	---	---
MW-5	01/17/97	19.41	9.02	10.39	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.2	SPL
MW-5	05/01/97	19.41	10.29	9.12	---	---	---	---	---	---	---	---
MW-5	07/09/97	19.41	10.71	8.70	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.2	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11266
1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (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	03/04/88	19.40	---	---	ND	ND	ND	ND	ND	---	---	---
MW-6	03/29/89	19.40	---	---	ND	ND	ND	ND	ND	---	---	---
MW-6	11/28/89	19.40	---	---	ND	ND	ND	ND	ND	---	---	---
MW-6	02/13/91	19.40	---	---	ND	ND	ND	ND	ND	---	---	---
MW-6	01/08/92	19.40	---	---	ND	ND	ND	ND	ND	---	---	---
MW-6	03/30/92	19.40	8.86	10.54	ND	ND	ND	ND	ND	---	---	PACE
MW-6	07/02/92	19.40	9.94	9.46	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	07/22/92	19.40	10.10	9.30	---	---	---	---	---	---	---	---
MW-6	10/02/92	19.40	10.48	8.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	12/14/92	19.40	10.76	8.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	03/24/93	19.40	9.19	10.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	06/17/93	19.40	9.91	9.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	09/29/93	19.40	11.49	7.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	12/28/93	19.40	9.88	9.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	03/29/94	19.40	9.36	10.04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	5.0	PACE
MW-6	07/07/94	19.40	9.75	9.65	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	38 (d)	---	PACE
MW-6	10/18/94	19.40	10.30	9.10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	3.3	PACE
MW-6	02/01/95	19.40	7.92	11.48	ND<50	ND<0.5	0.9	ND<0.5	1.1	---	5.4	ATI
MW-6	04/12/95	19.40	8.41	10.99	220	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.7	ATI
MW-6	09/13/95	19.40	10.05	9.35	180	ND<1.0	ND<1.0	ND<1.0	ND<2.0	770	4.9	ATI
MW-6	01/11/96	19.40	9.52	9.88	670	ND<2.5	ND<2.5	ND<2.5	ND<5.0	2400	4.6	ATI
MW-6	04/18/96	19.40	9.03	10.37	560	ND<0.5	ND<1	ND<1	ND<1	860	5.1	SPL
MW-6	06/28/96	19.40	8.76	10.64	620	ND<0.5	ND<1	ND<1	ND<1	540	4.9	SPL
MW-6	11/05/96	19.40	9.48	9.92	810	ND<5	ND<10	ND<10	ND<10	970	4.8	SPL
MW-6	01/17/97	19.40	8.58	10.82	830	ND<0.5	ND<1.0	ND<1.0	ND<1.0	960	8.9	SPL
MW-6	05/01/97	19.40	9.92	9.48	780	ND<5	ND<10	ND<10	ND<10	970	7.7	SPL
MW-6	07/09/97	19.40	10.33	9.07	990	ND<0.5	ND<1.0	ND<1.0	ND<1.0	1100	6.0	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11266
1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (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	07/22/92	---	9.66	---	13000	1000	3400	380	2800	---	---	ANA
RW-1	10/02/92	---	10.28	---	---	---	---	---	---	---	---	---
RW-1	12/14/92	---	23.28	---	---	---	---	---	---	---	---	---
RW-1	03/24/93	---	8.93	---	660	21	25	8.3	100	315 (d)	---	PACE
RW-1	06/17/93	---	9.66	---	850	13	1.0	15	100	390 (d)	---	PACE
RW-1	09/29/93	19.27	23.40	-4.13	1200	26	27	11	150	1800 (d)	---	PACE
QC-1 (c)	09/29/93	---	---	---	1200	26	28	11	160	1900 (d)	---	PACE
RW-1	12/28/93	19.27	9.76	9.51	3500	300	220	180	480	1900 (d)	---	PACE
RW-1	03/29/94	19.27	8.93	10.34	12000	640	1700	450	2200	---	6.3	PACE
RW-1	07/07/94	19.27	9.45	9.82	7600	530	1100	380	1800	410 (d)	---	PACE
RW-1	10/18/94	19.27	10.11	9.16	5300	47	100	150	280	2500 (d)	3.4	PACE
QC-1 (c)	10/18/94	---	---	---	430	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
RW-1	02/01/95	19.27	8.54	10.73	27000	2400	6100	1800	5300	---	4.5	ATI
QC-1 (c)	02/01/95	---	---	---	15000	1300	3300	970	2900	---	---	ATI
RW-1	04/12/95	19.27	8.21	11.06	6200	330	910	350	1500	---	5.2	ATI
QC-1 (c)	04/12/95	---	---	---	7600	400	1100	440	1900	---	---	ATI
RW-1	09/13/95	19.27	9.84	9.43	920	140	60	34	110	1200	5.1	ATI
RW-1	01/11/96	19.27	9.25	10.02	ND<50	0.95	0.61	ND<0.50	2.1	43	5.4	ATI
RW-1	04/18/96	19.27	8.73	10.54	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.7	SPL
RW-1	06/28/96	19.27	9.40	9.87	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.5	SPL
RW-1	11/05/96	19.27	10.12	9.15	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.9	SPL
RW-1	01/17/97	19.27	8.10	11.17	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.8	SPL
RW-1	05/01/97	19.27	9.43	9.84	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.6	SPL
RW-1	07/09/97	19.27	10.83	8.44	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.1	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11266
1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (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 (e)	10/02/92	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (e)	12/14/92	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (e)	03/24/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	06/17/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	09/29/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	12/28/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	03/29/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	07/07/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	10/18/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	02/01/95	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	ATI
QC-2 (e)	04/12/95	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (e)	09/13/95	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (e)	01/11/96	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (e)	04/18/96	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL
QC-2 (e)	06/28/96	---	---	---	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 measured/applicable/analyzed
ND	Not detected above reported detection limit
PACE	Pace, Inc.
ANA	Anametrix, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

NOTES:

(a) Casing elevations surveyed to nearest 0.01 foot above mean sea level, with an assigned elevation of 22.82 feet (City datum).

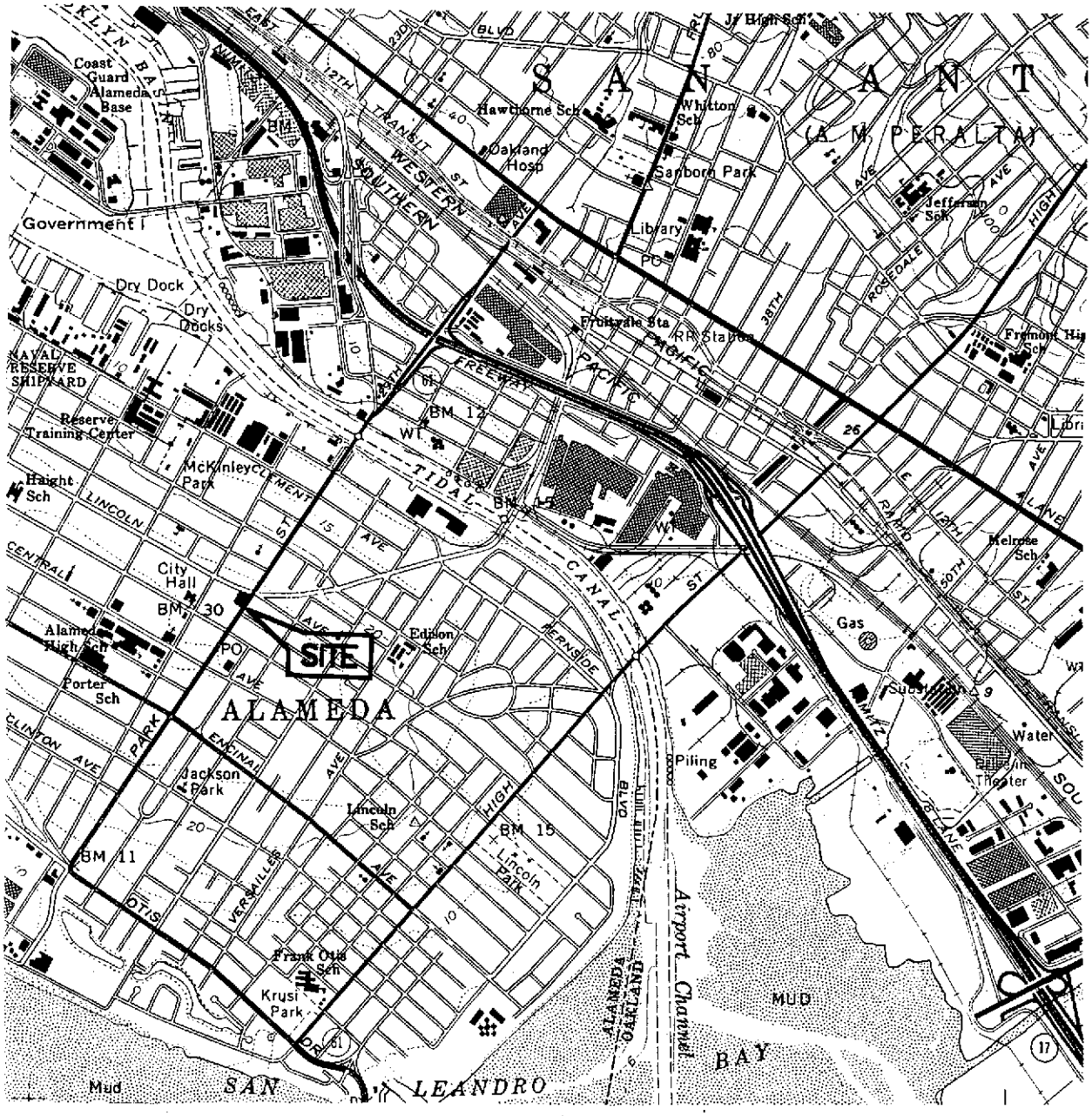
(b) Groundwater elevations in feet above mean sea level.

(c) Blind duplicate.

(d) A copy of the documentation for this data is included in Appendix C of Alisto report 10-050-07-004.

(e) Travel blank.

F:\0\10-050\050-7-4.WQ2



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

N

0 1000' 2000'

FIGURE 1

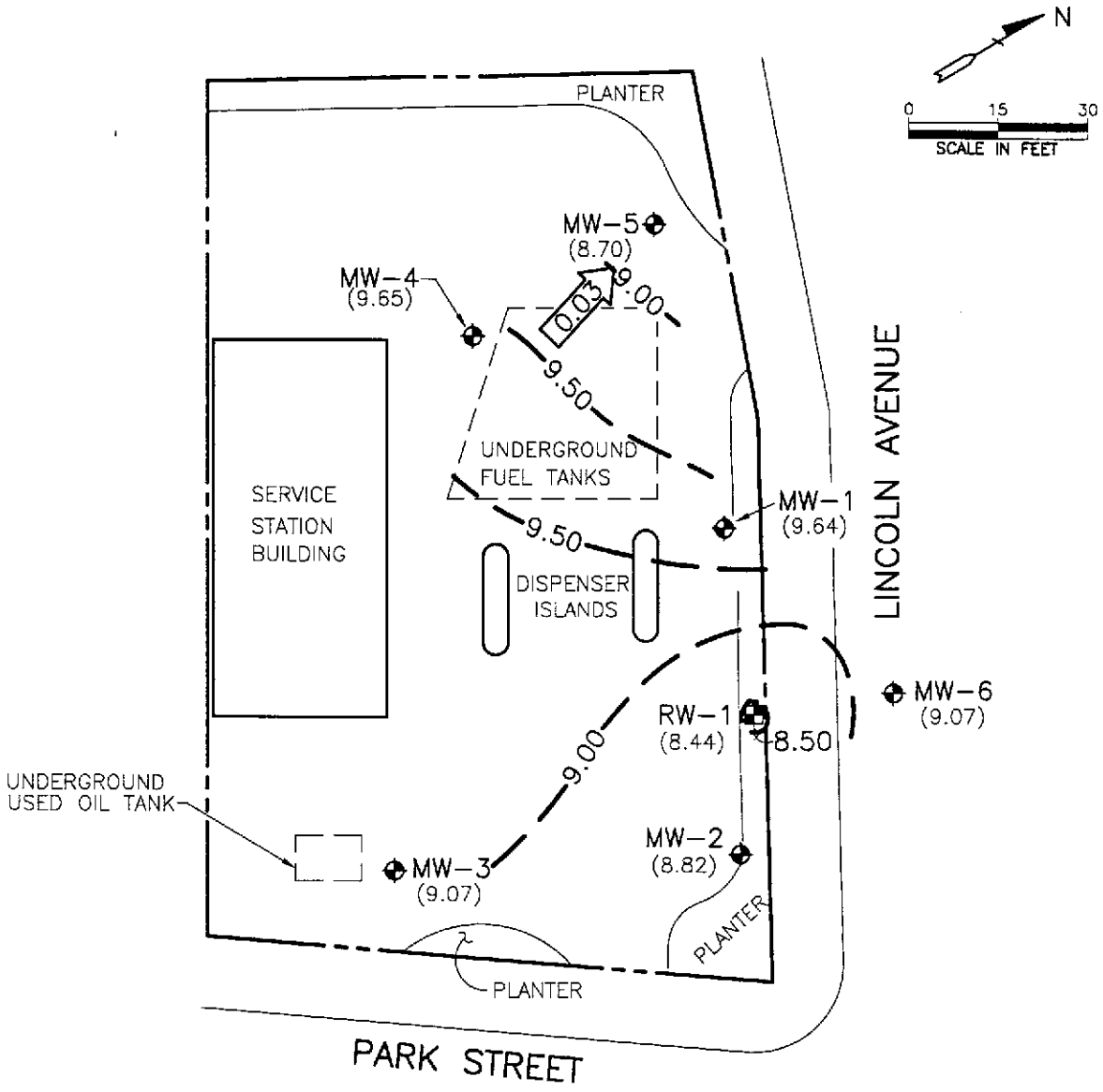
SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11266
1541 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10-050

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10050B---.DWG 8-4-93 KH 1=1



LEGEND

- ⊕ GROUNDWATER MONITORING WELL
- ⊡ GROUNDWATER RECOVERY WELL
- (8.70) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 9.00 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

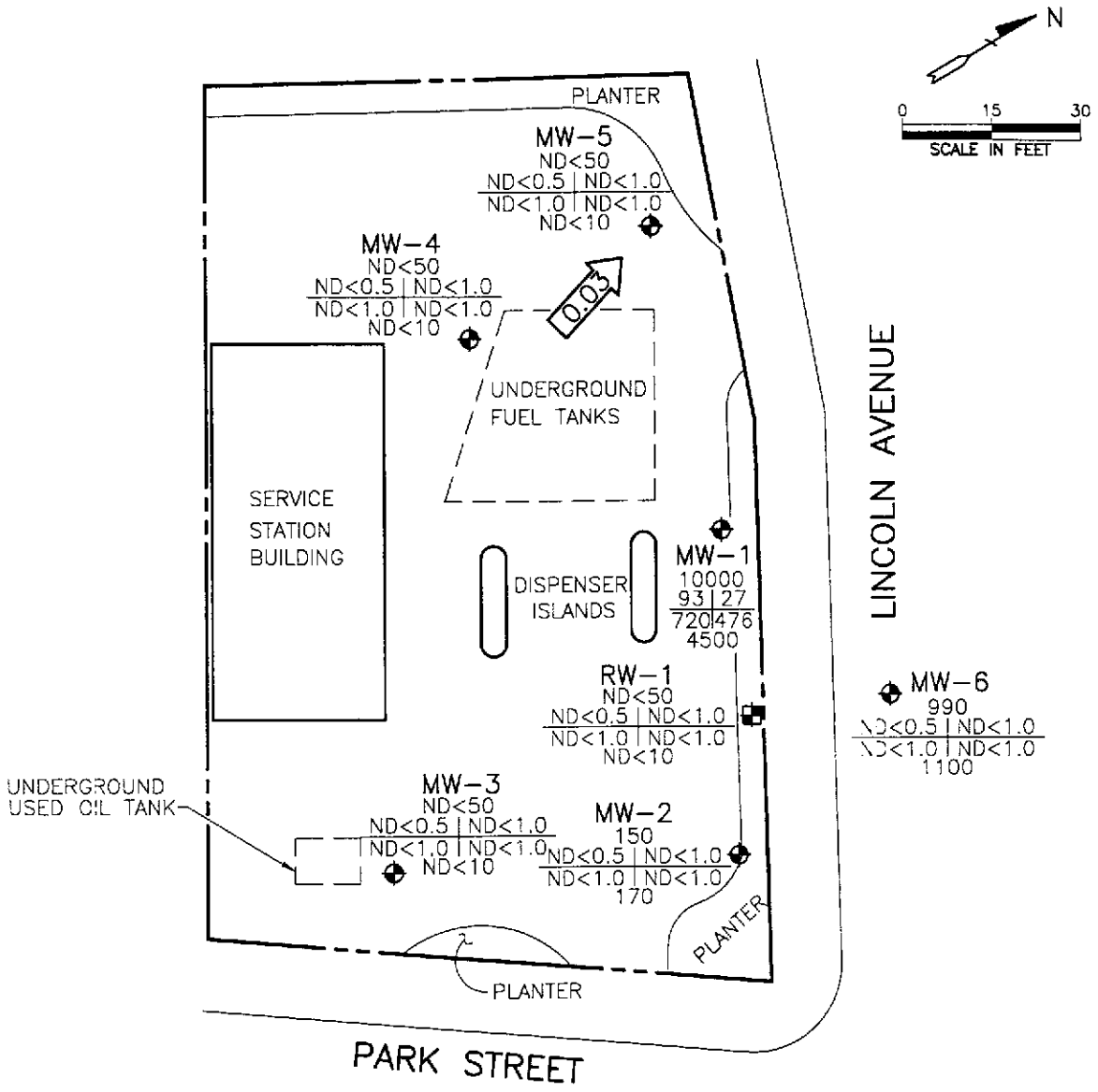
JULY 9, 1997

BP OIL SERVICE STATION NO. 11266
1541 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10–050

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10050D-W.DWG 8-12-97 RKW 1=30



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

JULY 9, 1997

BP OIL SERVICE STATION NO. 11266
1541 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10-050

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10050E-W.DWG 8-12-97 RKW 1=30

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201

Field Report / Sampling Data Sheet

Project No. 10-050-07-004 Date: 7/9/97
Address 1541 Park St. Day: M T W TH F
Contract No. G797621 City: Alameda
Station No. BP 11266 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-7	2"	21.88	9.55	∅	1103	INSTALL ORC QC-1(S-8)
MW-2	S-6	2"	21.88	10.50		1100	
MW-3	S-1	2"	30.00	10.92		1040	SEMI Sampling
MW-4	S-2	2"	30.00	10.52		1044	SEMI Sampling
MW-5	S-3	2"	30.00	10.71		1048	SEMI Sampling
MW-6	S-5	2"	24.24	10.33		1056	INSTALL ORC
RW-1	S-4	6"	29.54	10.83		1052	

FIELD INSTRUMENT CALIBRATION DATA

pH METER Ion 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1210

D.O. METER Ion ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE _____ TEMP 63 WEATHER Clear

CONDUCTIVITY METER Ion 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 Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-3	10.92	2"	OIL	∅	Y (N)	3	1227	66.2	7.79	810 µS	4.0
						6		67.4	7.53	837 µS	
						9.5	1240	67.8	7.48	844 µS	4.0

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
30 − 10.92 = 19.08 X .16 = 3.05 X 3 = 9.15
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: 1243

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-4	10.52	2"	OIL	∅	Y (N)	3	1256	69.4	7.54	777 µS	3.7
						6		68.0	7.40	786 µS	
						9.5	1310	67.2	7.33	799 µS	4.1

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
30 − 10.52 = 19.48 X .16 = 3.12 X 3 = 9.36
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: 1313

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. 10-050-07-004 | Date: 7/9/97
Address 1541 Park St. | Day: M T W TH F
Contract No. G797621 | City: Alameda
Station No. BP 11266 | Sampler: LCB

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-5	10.71	2"	OK	Ø	Y (N)	3	1327	65.7	7.92	740 µS	4.2	O EPA 601 ____
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			6		67.1	7.70	779 µS		X TPH-G/BTEX ___
30 - 10.71 = 19.29 X .16 =	3.09 X 3 =	9.2	3			9.5	1338	68.0	7.63	787 µS	4.2	O TPH Diesel ____
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1344

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
RW-1	10.83	4"	OK	Ø	Y (N)	12	1401	67.2	7.81	707 µS	4.1	O EPA 601 ____
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			24		68.4	7.59	724 µS		X TPH-G/BTEX ___
29.54 - 10.83 = 18.71 X .65 =	12.16 X 3	36.48				37	1429	68.4	7.53	729 µS	4.1	O TPH Diesel ____
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1433

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-6	10.33	2"	OK	Ø	Y (N)	2	1447	69.4	7.57	822 µS	6.0	O EPA 601 ____
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			4		68.1	7.40	844 µS		X TPH-G/BTEX ___
24.24 - 10.33 = 13.91 X .16 =	2.23 X 3 =	6.69				7	1457	67.3	7.40	850 µS	6.0	O TPH Diesel ____
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1504

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-2	10.50	2"	OK	Ø	Y (N)	2	1517	66.6	7.92	720 µS	4.3	O EPA 601 ____
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			4		67.7	7.69	751 µS		X TPH-G/BTEX ___
21.88 - 10.50 = 11.38 X .16 =	1.82 X 3 =	5.46				6	1528	68.1	7.66	755 µS	4.3	O TPH Diesel ____
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1536

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	
MW-1	9.55	2"	OK	Ø	Y (N)	2	1547	66.0	7.79	690 µS	6.3	O EPA 601 ____
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			4		67.4	7.59	710 µS		X TPH-G/BTEX ___
21.88 - 9.55 = 12.33 X .16 =	1.97 X 3 =	5.91				6	1601	68.0	7.52	717 µS	6.3	O TPH Diesel ____
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												O TOG 5520 ___
Comments:												TIME/SAMPLE ID: 1604

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

July 25, 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 July 16, 1997. The samples were assigned to Certificate of Analysis No(s).9707690 and analyzed for the parameters specified on the chain of custody.

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

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis Number(s) during any inquiries.

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

Southern Petroleum Laboratories

Ed Fry
Project Manager

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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 97-07-690

Approved for Release by:

Ed Fry, Project Manager

Date: 7/25/97

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. H9-9707690-01

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

P.O.# G797621, COC#085829
DATE: 07/24/97

PROJECT: BP Oil #11266
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-050
MATRIX: WATER
DATE SAMPLED: 07/09/97
DATE RECEIVED: 07/16/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: YN			
Date: 07/21/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	70		
4-Bromofluorobenzene	97		
California LUFT Manual			
Analyzed by: YN			
Date: 07/21/97 03:08:00			

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. H9-9707690-02

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

P.O.#
G797621, COC#08582
DATE: 07/24/9

PROJECT: BP Oil #11266
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-050
MATRIX: WATER
DATE SAMPLED: 07/09/97
DATE RECEIVED: 07/16/97

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: YN			
Date: 07/21/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	67		
4-Bromofluorobenzene	100		
California LUFT Manual			
Analyzed by: YN			
Date: 07/21/97 03:36:00			

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.

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

Certificate of Analysis No. H9-9707690-03

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

P.O.#
G797621, COC#085829
DATE: 07/24/97

PROJECT: BP Oil #11266
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-050
MATRIX: WATER
DATE SAMPLED: 07/09/97
DATE RECEIVED: 07/16/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: YN			
Date: 07/21/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	73		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: YN			
Date: 07/21/97 05:26:00			

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

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

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

Certificate of Analysis No. H9-9707690-04

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

P.O.#
G797621, COC#08582
DATE: 07/24/9

PROJECT: BP Oil #11266
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-4

PROJECT NO: 10-050
MATRIX: WATER
DATE SAMPLED: 07/09/97
DATE RECEIVED: 07/16/97

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: YN			
Date: 07/21/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	67		
4-Bromofluorobenzene	100		
California LUFT Manual			
Analyzed by: YN			
Date: 07/21/97 05:54:00			

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.

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PHONE (713)660-0901

Certificate of Analysis No. H9-9707690-05

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

P.O.# G797621, COC#085829
DATE: 07/24/97

PROJECT: BP Oil #11266
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-5

PROJECT NO: 10-050
MATRIX: WATER
DATE SAMPLED: 07/09/97
DATE RECEIVED: 07/16/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	1100	100 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: DN			
Date: 07/21/97			
Total Petroleum Hydrocarbons-Gasoline	0.99	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	67		
4-Bromofluorobenzene	100		
California LUFT Manual			
Analyzed by: YN			
Date: 07/21/97 06:21:00			

(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.

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PHONE (713)660-0901

Certificate of Analysis No. H9-9707690-06

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

P.O.# G797621, COC#08582
DATE: 07/24/9

PROJECT: BP Oil #11266
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-6

PROJECT NO: 10-050
MATRIX: WATER
DATE SAMPLED: 07/09/97
DATE RECEIVED: 07/16/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	170	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: DN			
Date: 07/21/97			
Total Petroleum Hydrocarbons-Gasoline	0.15	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	67		
4-Bromofluorobenzene	100		
California LUFT Manual			
Analyzed by: YN			
Date: 07/21/97 06:49:00			

(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.

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PHONE (713)660-0901

Certificate of Analysis No. H9-9707690-07

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

P.O.# G797621, COC#085829
DATE: 07/24/97

PROJECT: BP Oil #11266
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-7

PROJECT NO: 10-050
MATRIX: WATER
DATE SAMPLED: 07/09/97
DATE RECEIVED: 07/16/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	4500	250 P	µg/L
Benzene	93	2.5 P	µg/L
Toluene	27	5.0 P	µg/L
Ethylbenzene	720	5.0 P	µg/L
Total Xylene	476	5.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	107		
Method 8020A***			
Analyzed by: DN			
Date: 07/21/97			
Total Petroleum Hydrocarbons-Gasoline	10	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	67		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: YN			
Date: 07/21/97 07:16:00			

(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.

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Certificate of Analysis No. H9-9707690-08

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

P.O.#
G797621, COC#08582
DATE: 07/24/9

PROJECT: BP Oil #11266
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-8

PROJECT NO: 10-050
MATRIX: WATER
DATE SAMPLED: 07/09/97
DATE RECEIVED: 07/16/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	4300	500 P	µg/L
Benzene	42	0.5 P	µg/L
Toluene	13	1.0 P	µg/L
Ethylbenzene	340	1.0 P	µg/L
Total Xylene	175	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: DN			
Date: 07/23/97			
Total Petroleum Hydrocarbons-Gasoline	7.6	2.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	65		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: DN			
Date: 07/23/97 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.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
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QUALITY CONTROL

DOCUMENTATION

COMPOUND

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

SURROGATE RECOVERY SUMMARY
07/24/97 15:08:53

Method 8020A* ** **BATCH#:**HP_S970720112600
WORK ORDER: 9707690-01A **CLIENT SAMPLE ID:**S-1

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A* ** **BATCH#:**HP_S970720112600
WORK ORDER: 9707690-02A **CLIENT SAMPLE ID:**S-2

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A* ** **BATCH#:**HP_S970720112600
WORK ORDER: 9707690-03A **CLIENT SAMPLE ID:**S-3

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

Method 8020A* ** **BATCH#:**HP_S970720112600
WORK ORDER: 9707690-04A **CLIENT SAMPLE ID:**S-4

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A* ** **BATCH#:**HP_S970720112600
WORK ORDER: 9707690-05A **CLIENT SAMPLE ID:**S-5

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A* ** **BATCH#:**HP_S970720112600
WORK ORDER: 9707690-06A **CLIENT SAMPLE ID:**S-6

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

Method 8020A* ** **BATCH#:**HP_S970720112600
WORK ORDER: 9707690-07A **CLIENT SAMPLE ID:**S-7

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	30.0000	100	70- 131
4-Bromofluorobenzene	30	32.0000	107	43- 135

Method 8020A* ** **BATCH#:**HP_S970720112600
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	29	28.5	70- 131

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	30	30.0	43- 135

Method 8020A* BATCH#:HP_S970720112600**
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	28	93.3	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

Method 8020A* BATCH#:HP_S970720112600**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**970769-01A

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

Method 8020A* BATCH#:HP_S970720112600**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9707690-01A

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

California LUFT Manual BATCH#:HP_S970721122100
WORK ORDER: 9707690-01A **CLIENT SAMPLE ID:**S-1

1,4-Difluorobenzene	30	21	70	50- 150
4-Bromofluorobenzene	30	29	97	50- 150

California LUFT Manual BATCH#:HP_S970721122100
WORK ORDER: 9707690-02A **CLIENT SAMPLE ID:**S-2

1,4-Difluorobenzene	30	20	67	50- 150
4-Bromofluorobenzene	30	30	100	50- 150

California LUFT Manual BATCH#:HP_S970721122100
WORK ORDER: 9707690-03A **CLIENT SAMPLE ID:**S-3

1,4-Difluorobenzene	30	22	73	50- 150
4-Bromofluorobenzene	30	28	93	50- 150

California LUFT Manual BATCH#:HP_S970721122100
WORK ORDER: 9707690-04A **CLIENT SAMPLE ID:**S-4

1,4-Difluorobenzene	30	20	67	50- 150
4-Bromofluorobenzene	30	30	100	50- 150

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PHONE (713)660-0901

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
California LUFT Manual **BATCH#:**HP_S970721122100 **WORK ORDER:** 9707690-05A **CLIENT SAMPLE ID:**S-5				
1,4-Difluorobenzene	30	20	67	50- 150
4-Bromofluorobenzene	30	30	100	50- 150
California LUFT Manual **BATCH#:**HP_S970721122100 **WORK ORDER:** 9707690-06A **CLIENT SAMPLE ID:**S-6				
1,4-Difluorobenzene	30	20	67	50- 150
4-Bromofluorobenzene	30	30	100	50- 150
California LUFT Manual **BATCH#:**HP_S970721122100 **WORK ORDER:** 9707690-07A **CLIENT SAMPLE ID:**S-7				
1,4-Difluorobenzene	30	20.0000	67	50- 150
4-Bromofluorobenzene	30	28.0000	93	50- 150
California LUFT Manual **BATCH#:**HP_S970721122100 **WORK ORDER:** Method Blank **CLIENT SAMPLE ID:**				
1,4-Difluorobenzene	30	21	21.1	50- 150
4-Bromofluorobenzene	30	29	29.0	50- 150
California LUFT Manual **BATCH#:**HP_S970721122100 **WORK ORDER:** Matrix Spike **CLIENT SAMPLE ID:**9707690-02A				
1,4-Difluorobenzene	30	29	97	50- 150
4-Bromofluorobenzene	30	30	100	50- 150
California LUFT Manual **BATCH#:**HP_S970721122100 **WORK ORDER:** Matrix Spike Dup. **CLIENT SAMPLE ID:**9707690-02A				
1,4-Difluorobenzene	30	29	97	50- 150
4-Bromofluorobenzene	30	30	100	50- 150
California LUFT Manual **BATCH#:**HP_S970722011100 **WORK ORDER:** Method Blank **CLIENT SAMPLE ID:**				
1,4-Difluorobenzene	30	20	67	50- 150
4-Bromofluorobenzene	30	28	93	50- 150
California LUFT Manual **BATCH#:**HP_S970722011100 **WORK ORDER:** Matrix Spike **CLIENT SAMPLE ID:**9707675-02A				
1,4-Difluorobenzene	30	23	77	50- 150

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	29	97	50- 150

California LUFT Manual **BATCH#:**HP_S970722011100
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9707675-02A

1,4-Difluorobenzene	30	23	77	50- 150
4-Bromofluorobenzene	30	29	97	50- 150

Method 8020A* ** **BATCH#:**HP_S970722081400
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A* ** **BATCH#:**HP_S970722081400
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	27	90.0	70- 131
4-Bromofluorobenzene	30	29	96.7	43- 135

Method 8020A* ** **BATCH#:**HP_S970722081400
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9707675-03A

1,4-DIFLUOROBENZENE	30	28	93	70- 131
4-BROMOFLUOROBENZENE	30	29	97	43- 135

Method 8020A* ** **BATCH#:**HP_S970722081400
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9707675-03A

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

California LUFT Manual **BATCH#:**HP_S970722091100
WORK ORDER: 9707690-08A **CLIENT SAMPLE ID:**S-8

1,4-Difluorobenzene	30	19.6000	65	50- 150
4-Bromofluorobenzene	30	28.0000	93	50- 150

California LUFT Manual **BATCH#:**HP_S970722091100
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	20	67	50- 150
4-Bromofluorobenzene	30	27	90	50- 150

COMPOUND

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

SURROGATE RECOVERY SUMMARY
07/24/97 15:08:53

California LUFT Manual **BATCH#:**HP_S970722091100
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9707746-03A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	26	87	50- 150
4-Bromofluorobenzene	30	29	97	50- 150

California LUFT Manual **BATCH#:**HP_S970722091100
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9707746-03A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	25	83	50- 150
4-Bromofluorobenzene	30	29	97	50- 150

Method 8020A* ** **BATCH#:**HP_S970722121500
WORK ORDER: 9707690-08A **CLIENT SAMPLE ID:**S-8

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A* ** **BATCH#:**HP_S970722121500
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	29	29.1	70- 131
4-Bromofluorobenzene	30	30	29.5	43- 135

Method 8020A* ** **BATCH#:**HP_S970722121500
WORK ORDER: LCS **CLIENT SAMPLE ID:**

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	27	90.0	70- 131
4-Bromofluorobenzene	30	29	96.7	43- 135

Method 8020A* ** **BATCH#:**HP_S970722121500
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9707675-07A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-DIFLUOROBENZENE	30	29	97	70- 131
4-BROMOFLUOROBENZENE	30	30	100	43- 135

Method 8020A* ** **BATCH#:**HP_S970722121500
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9707675-07A

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

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

SURROGATE RECOVERY SUMMARY
07/24/97 15:08:53

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS

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

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

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_S970720112600

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	38	76.0	20 - 110
Benzene	ND	50	38	76.0	62 - 121
Toluene	ND	50	47	94.0	66 - 136
Ethyl_Benzene	ND	50	49	98.0	70 - 136
O-Xylene	ND	50	50	100	74 - 134
M and P Xylene	ND	100	98	98.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	19	95.0	19	95.0	0	20	39 - 150
BENZENE	ND	20	21	105	21	105	0	25	39 - 150
TOLUENE	ND	20	19	95.0	20	100	5.13	26	56 - 134
ETHYL_BENZENE	ND	20	19	95.0	19	95.0	0	38	61 - 128
O-XYLENE	ND	20	19	95.0	19	95.0	0	29	40 - 130
M AND P XYLENE	ND	40	38	95.0	38	95.0	0	20	43 - 152

Analyst: YN
Sequence Date: 07/20/97
SPL ID of sample spiked: 9707690-01A
Sample File ID: S_G7787.TX0
Method Blank File ID:
Blank Spike File ID: S_G7778.TX0
Matrix Spike File ID: S_G7782.TX0
Matrix Spike Duplicate File ID: S_G7783.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 (4th Q '95)
(***) = Source: SPL-Houston Historical Data (3rd Q '96)

SAMPLES IN BATCH(SPL ID):

9707689-15A 9707690-03A 9707690-04A 9707690-05A
9707690-07A 9707566-01A 9707566-01A 9707566-02A
9707689-12A 9707689-13A 9707690-06A 9707690-05A
9707690-07A 9707690-01A 9707690-02A 9707689-16A
9707689-14A

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

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_S970722121500

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	41	82.0	20 - 110
Benzene	ND	50	41	82.0	62 - 121
Toluene	ND	50	49	98.0	66 - 136
Ethyl_Benzene	ND	50	50	100	70 - 136
O-Xylene	ND	50	53	106	74 - 134
M and P Xylene	ND	100	105	105	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	24	120	22	110	8.70	20	39 - 150
BENZENE	ND	20	19	95.0	19	95.0	0	25	39 - 150
TOLUENE	ND	20	17	85.0	17	85.0	0	26	56 - 134
ETHYL_BENZENE	ND	20	17	85.0	17	85.0	0	38	61 - 128
O-XYLENE	ND	20	19	95.0	19	95.0	0	29	40 - 130
M AND P XYLENE	ND	40	35	87.5	34	85.0	2.90	20	43 - 152

Analyst: DN
Sequence Date: 07/22/97
SPL ID of sample spiked: 9707675-07A
Sample File ID: S_G7826.TX0
Method Blank File ID:
Blank Spike File ID: S_G7817.TX0
Matrix Spike File ID: S_G7821.TX0
Matrix Spike Duplicate File ID: S_G7822.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 (4th Q '95)
(***) = Source: SPL-Houston Historical Data (3rd Q '96)

SAMPLES IN BATCH(SPL ID):

9707675-11A 9707675-01A 9707675-08A 9707682-01A
9707690-08A 9707675-13A 9707675-12A 9707675-11A
9707675-10A 9707675-09A 9707675-08A 9707675-06A
9707675-07A 9707675-02A 9707675-09A 9707675-10A

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

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_S970722081400

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	41	82.0	20 - 110
Benzene	ND	50	39	78.0	62 - 121
Toluene	ND	50	46	92.0	66 - 136
Ethyl_Benzene	ND	50	49	98.0	70 - 136
O-Xylene	ND	50	50	100	74 - 134
M and P Xylene	ND	100	97	97.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	21	105	22	110	4.65	20	39 - 150
BENZENE	ND	20	17	85.0	18	90.0	5.71	25	39 - 150
TOLUENE	ND	20	16	80.0	16	80.0	0	26	56 - 134
ETHYL_BENZENE	ND	20	16	80.0	17	85.0	6.06	38	61 - 128
O-XYLENE	ND	20	18	90.0	18	90.0	0	29	40 - 130
M AND P XYLENE	ND	40	32	80.0	33	82.5	3.08	20	43 - 152

Analyst: DN
Sequence Date: 07/23/97
SPL ID of sample spiked: 9707675-03A
Sample File ID: S_G7861.TX0
Method Blank File ID:
Blank Spike File ID: S_G7881.TX0
Matrix Spike File ID: S_G7856.TX0
Matrix Spike Duplicate File ID: S_G7857.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 (4th Q '95)
(***) = Source: SPL-Houston Historical Data (3rd Q '96)

SAMPLES IN BATCH(SPL ID):

9707746-07A 9707746-06A 9707746-05A 9707746-01A
9707746-03A 9707733-22A 9707690-08A 9707746-04A
9707746-05A 9707886-03A 9707675-04A 9707675-05A
9707522-10A 9707569-01B 9707569-02B 9707569-04A
9707675-03A 9707746-02A

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

** SPL BATCH QUALITY CONTROL REPORT **
CA LUFT

Matrix: Aqueous
Units: mg/L

Batch Id: HP_S970721122100

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	1.12	112	50 - 150

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
PETROLEUM HYDROCARBONS-GAS	ND	0.9	0.93	103	0.91	101	1.96	50	50 - 150

Analyst: YN
Sequence Date: 07/20/97
SPL ID of sample spiked: 9707690-02A
Sample File ID: SSG7788.TX0
Method Blank File ID:
Blank Spike File ID: SSG7780.TX0
Matrix Spike File ID: SSG7784.TX0
Matrix Spike Duplicate File ID: SSG7785.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): 9707690-04A 9707690-05A 9707690-06A 9707690-07A
9707456-03A 9707690-01A 9707690-02A 9707690-03A

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

** SPL BATCH QUALITY CONTROL REPORT **

CA LUFT

Matrix: Aqueous
Units: mg/L

Batch Id: HP_S970722091100

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	1.18	118	50 - 150

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
PETROLEUM HYDROCARBONS-GAS	ND	0.9	0.72	80.0	0.71	78.9	1.38	50	50 - 150

Analyst: DN
Sequence Date: 07/22/97
SPL ID of sample spiked: 9707746-03A
Sample File ID: SSG7868.TX0
Method Blank File ID:
Blank Spike File ID: SSG7853.TX0
Matrix Spike File ID: SSG7921.TX0
Matrix Spike Duplicate File ID: SSG7922.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):

9707746-05A 9707746-04A 9707746-01A 9707746-03A
9707690-08A 9707675-04A 9707675-05A 9707522-10A
9707675-08A 9707746-02A 9707746-07A 9707746-06A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9707690

CHAIN OF CUSTODY

No. 085829

Page 1 of 1

CONSULTANT'S NAME: Alisto Engineering	CONSULTANT'S ADDRESS: 1575 Treat Blvd W.C. 94598		
BP SITE NUMBER: 11266	BP SITE / FACILITY ADDRESS: Alameda, Ca		CONSULTANT PROJECT NUMBER: 10-050
CONSULTANT PROJECT MANGER: Brady Nagle	PHONE NUMBER: (510) 295-1850	FAX NUMBER: 295-1823	CONSULTANT CONTRACT NUMBER: 6797621
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: 7/15/97	SHIPMENT METHOD: Fed Ex

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

AIRBILL NUMBER: 38484 70673

ANALYSIS REQUIRED

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

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
[signature]	7/14/97		Patricia Lytton	7/15/97	0800
Patricia Lytton	7/15/97	1500	[signature] / SPL	7/16/97	0945

3 cool

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:
7/16/97	0945

SPL Sample ID:
9707690

			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 #)	3848470673	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	7/16/97

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

BP Site Number:	11266
ERM Contact:	G797621
Sampling Date:	07/09/97
Matrix Description:	Water
Date Final Report Received:	07/31/97
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%?		✓ (1)	
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: (1) Exceeded for BTEX (see Table attached)

Data Validation Completed by: William Howell

(signature): Bill Howell

Date: 8/26/97

Calculation of RPD
for BP Oil QA/QC Program
BP Oil Station No. 11266 07/09/97 Event

Analytical Data	TPH-G	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
Primary Sample	10000	93	27	720	476	4500
QC-1 Duplicate	7600	42	13	340	175	4300
Sample Mean	8800	67.5	20	530	325.5	4400
RPD	27.27%	75.56%	70.00%	71.70%	92.47%	4.55%
Significant Result?	NO	YES	YES	YES	YES	NO

Notes:

(1) Significance is defined as an RPD greater than 30% (or less than -30).

(2) "A negative" RPD will result if the value of the Primary Sample Result is smaller than QC-1. The determination of Significant Result is not affected by sign of RPD.

APPENDIX C

HISTORICAL MTBE LABORATORY ANALYSIS DOCUMENTATION

Mr. Brady Nagle
Page 10

FOOTNOTES
for pages 1 through 9

April 12, 1993
PACE Project Number: 430326515

Client Reference: BP Station # 11266

MDL Method Detection Limit
ND Not detected at or above the MDL.
(MT) A peak eluting earlier than Benzene and suspected to be methyl tert butyl ether was present in your samples RW-1 and MW-1 at approximately 315 ppb and 1400 ppb respectively.

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

10-050-02/091

pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS

July 02, 1993

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

RE: PACE Project No. 430618.523
Client Reference: BP Station # 11266

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received June 18, 1993.

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:

70 0096235/RW-1	390ug/L
70 0096243/MW-1	220ug/L
70 0096251/MW-2	23ug/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,

Stacy L Stock

for Jim J. Oys
Project Manager

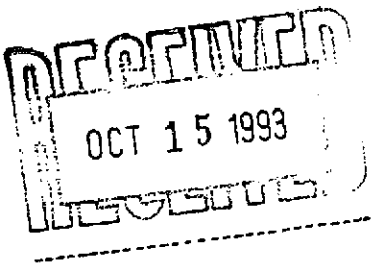
Enclosures

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

10-050-03-002

pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS



October 13, 1993

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

RE: PACE Project No. 431005.508
Client Reference: BP Station # 11266

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received October 05, 1993.

Please note that methyl tertiary butyl ether (MTBE) was detected in the following samples at the approximated level:

70 0165849/RW-1	1800ug/L
70 0165857/MW-1	320ug/L
70 0165865/MW-2	59ug/L
70 0165911/QC-1	1900ug/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,

Jim J. Oys
Project Manager

Enclosures

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

10-050-03-00

pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS

RECEIVED
JAN 10 1994

January 07, 1994

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

RE: PACE Project No. 431229.501
Client Reference: BP Station # 11266/CP# 10-050-~~01~~ 03-003

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received December 29, 1993.

Please note that methyl tertiary butyl ether (MTBE) was detected in the following samples at the approximate level:

70 0222010/MW-1	220ug/L
70 0222028/MW-2	1300ug/L
70 0222079/RW-1	1900ug/L
70 0222087/QC-1 (mw-2)	1100ug/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,

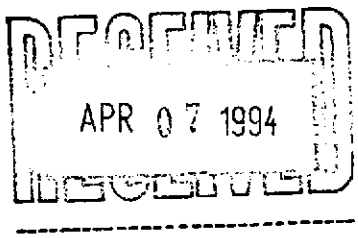
Jim J. Oys
Project Manager

Enclosures

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

pace
INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS



April 06, 1994

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

RE: PACE Project No. 440330.519
Client Reference: BP Station # 11266/CP#10-050-03-004

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received March 30, 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:

700295750/MW-2	1600 ug/L
700295777/QC-1	1600 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

Ronald M. Chew
Project Manager

Enclosures

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

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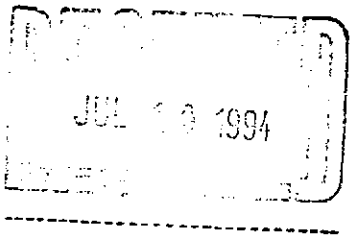
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS



July 18, 1994

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

RE: PACE Project No. 440708.511
Client Reference: BP Site #11266/ 10-050-04-001

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received July 08, 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:

700352878/S-3	38 ug/L
700352886/S-4	410 ug/L
700352894/S-5	2000 ug/L
700352908/S-6	30000 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

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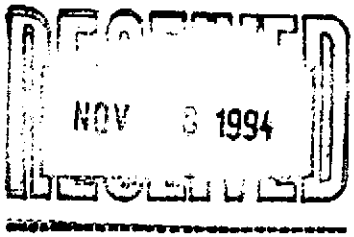
pace INCORPORATED
ENVIRONMENTAL LABORATORIES

REPORT OF LABORATORY ANALYSIS



November 05, 1994

Mr. Peter Beaver
Alisto Engineering Group
1777 Oakland Blvd, Ste. 200
Walnut Creek, CA 94596

RE: PACE Project No. 441025.510
Client Reference: BP Site #11266/10-050-4-2

Dear Mr. Beaver:

Enclosed is the report of laboratory analyses for samples received October 25, 1994.

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

700432588/S-6 2500 ug/L

and 2) the following sample's sample pattern does not match the Gasoline Standard pattern:

700432600/S-8

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

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Novato, CA 94949
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