GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11109
4280 Foothill Boulevard
Oakland, California

Project No. 10-014-08-001

#102

Prepared for:

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

1) gradient westerly now
2) maybe should remove GW from MW 5.

Prepared by:

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

October 28, 1997

Ken Simas
Project Manager

Al Sevilla, P.E.
Principal

REGISTERED PROFESSIONAL ENGINEER
ALBERTO SANCHEZ SEVILLA
25292
Exp. Date 3/31/99
CIVIL
STATE OF CALIFORNIA

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11109
4280 Foothill Boulevard
Oakland, California

Project No. 10-014-08-001

October 28, 1997

INTRODUCTION

This report presents the results and findings of the August 12, 1997 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11109, 4280 Foothill Boulevard, 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 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.

Groundwater monitoring was performed in coordination with the neighboring Chevron service station, 4265 Foothill Boulevard, and the Shell service station, 4411 Foothill Boulevard. The results are presented in Tables 2 and 3.

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 tabulared 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. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	TPH-D (ug/l)		B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)		DO (ppm)	LAB
MW-1		01/31/90	38.19		15.41	---	22.78		---	---		---	---	---	---	---	---	---		---	---
MW-1	(c)	02/05/90	38.19		---	---	---		---	---		---	---	---	---	---	---	---		---	---
MW-2		02/05/90	41.22		21.90	---	19.31		1300	---		14	ND<0.1	9	13	---	---	---		---	SUP
MW-2		02/14/91	41.22		21.16	---	20.06		ND<50	ND<10000		ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	51	(d)	---	SUP
MW-2		05/13/91	41.22		21.32	---	19.90		ND<50	ND<50		ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	6000	0.5	(e)	---	SUP
MW-2		07/24/91	41.22		22.92	---	18.30		---	---		---	---	---	---	---	---	---		---	---
MW-2		10/03/91	41.22		24.90	---	16.32		ND<50	ND<50		ND<0.3	0.8	ND<0.3	ND<0.3	---	ND<5000	0.7	(e)	---	SUP
MW-2		10/15/91	41.22		24.10	---	17.12		---	---		---	---	---	---	---	---	---		---	---
MW-2	(f)	12/04/91	41.22		---	---	---		---	---		---	---	---	---	---	---	---		---	---
MW-2		12/16/91	41.22		23.95	---	17.27		---	---		---	---	---	---	---	---	---		---	---
MW-2		01/06/92	41.22		23.30	---	17.92		ND<50	ND<50		ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND		---	ANA
MW-2		01/22/92	41.22		23.14	---	18.08		---	---		---	---	---	---	---	---	---		---	---
MW-2		01/28/92	41.22		22.99	---	18.23		---	---		---	---	---	---	---	---	---		---	---
MW-2		02/05/92	41.22		22.63	---	18.59		---	---		---	---	---	---	---	---	---		---	---
MW-2		02/12/92	41.22		22.04	---	19.18		---	---		---	---	---	---	---	---	---		---	---
MW-2		02/17/92	41.22		20.84	---	20.38		---	---		---	---	---	---	---	---	---		---	---
MW-2		04/03/92	41.22		18.29	---	22.93		---	---		---	---	---	---	---	---	---		---	---
MW-2		04/08/92	41.22		18.86	---	22.36		ND<50	63		ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND		---	ANA
MW-2		04/14/92	41.22		19.45	---	21.77		---	---		---	---	---	---	---	---	---		---	---
MW-2		04/29/92	41.22		20.35	---	20.87		---	---		---	---	---	---	---	---	---		---	---
MW-2		05/07/92	41.22		20.84	---	20.38		---	---		---	---	---	---	---	---	---		---	---
MW-2		07/03/92	41.22		22.34	---	18.88		ND<50	---		ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---		---	ANA
MW-2		10/08/92	41.22		23.73	---	17.49		ND<50	---		ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---		---	ANA
MW-2		12/31/92	41.22		21.12	---	20.10		ND<50	---		ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---		---	ANA
MW-2		04/21/93	41.22		17.68	---	23.54		ND<50	ND<50	(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND		---	PACE
MW-2		07/07/93	41.22		20.30	---	20.92		ND<50	---		ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	1.0	(e)	---	PACE
MW-2		09/21/93	41.22		21.93	---	19.29		ND<50	---		0.9	0.7	0.7	2.6	---	---	---		---	PACE
MW-2		12/17/93	41.22		21.48	---	19.74		---	---		---	---	---	---	---	---	---		---	---
MW-2		12/23/93	41.22		---	---	---		ND<50	---		ND<0.5	ND<0.5	ND<0.5	0.7	---	---	---		---	PACE
MW-2		04/07/94	41.22		20.25	---	20.97		ND<50	---		ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---		5.9	PACE
MW-2		07/06/94	41.22		20.59	---	20.63		ND<50	---		ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---		3.1	PACE
MW-2		10/07/94	41.22		22.04	---	19.18		ND<50	---		ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---		2.8	PACE
MW-2		01/27/95	41.22		26.12	---	15.10		ND<50	440		ND<0.5	ND<0.5	ND<0.5	ND<1	---	ND<5000	---		4.8	ATI
MW-2		03/30/95	41.22		12.34	---	28.88		ND<50	---		ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---		7.2	ATI
MW-2		06/20/95	41.22		16.42	---	24.80		ND<50	---		ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---		6.0	ATI
MW-2		10/03/95	41.22		20.06	---	21.16		ND<50	---		ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---		5.7	ATI
MW-2		12/06/95	41.22		21.31	---	19.91		ND<50	---		ND<0.50	ND<0.50	ND<0.50	ND<1.0	46	---	---		5.4	ATI
MW-2		03/21/96	41.22		12.28	---	28.94		ND<50	---		ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---		7.4	SPL
MW-2		06/21/96	41.22		13.28	---	27.94		ND<50	---		ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---		7.3	SPL
MW-2		09/06/96	41.22		13.94	---	27.28		---	---		---	---	---	---	---	---	---		---	---
MW-2		09/09/96	41.22		---	---	---		ND<50	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---		7.4	SPL
MW-2		12/19/96	41.22		12.19	---	29.03		ND<50	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---		7.9	SPL
MW-2		03/17/97	41.22		11.59	---	29.63		---	---		---	---	---	---	---	---	---		---	---
MW-2		08/12/97	41.22		13.21	---	28.01		---	---		---	---	---	---	---	---	---		---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)		DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)		HVOC (ug/l)	DO (ppm)	LAB
MW-3		02/05/90	40.74		17.45	---	23.29	1400	---	15	ND<2.5	11	8	---	---		---	---	SUP
MW-3		02/14/91	40.74		18.52	---	22.22	320	---	8	ND<0.3	8	1	---	---		---	---	SUP
MW-3		05/13/91	40.74		19.32	---	21.42	640	---	13	ND<0.3	18	1	---	---		---	---	SUP
MW-3		07/24/91	40.74		20.69	---	20.05	---	---	---	---	---	---	---	---		---	---	---
MW-3		10/03/91	40.74		19.47	---	21.27	940	---	21	ND<0.3	23	2.1	---	---		---	---	SUP
MW-3		10/15/91	40.74		20.46	---	20.28	---	---	---	---	---	---	---	---		---	---	---
MW-3		12/04/91	40.74		18.29	---	22.45	---	---	---	---	---	---	---	---		---	---	---
MW-3		12/16/91	40.74		18.34	---	22.40	---	---	---	---	---	---	---	---		---	---	---
MW-3		01/06/92	40.74		18.50	---	22.24	580	---	6.1	1	6.1	7.1	---	---		---	---	ANA
MW-3		01/22/92	40.74		17.86	---	22.88	---	---	---	---	---	---	---	---		---	---	---
MW-3		01/28/92	40.74		15.84	---	24.90	---	---	---	---	---	---	---	---		---	---	---
MW-3		02/05/92	40.74		17.53	---	23.21	---	---	---	---	---	---	---	---		---	---	---
MW-3		02/12/92	40.74		17.15	---	23.59	---	---	---	---	---	---	---	---		---	---	---
MW-3		02/17/92	40.74		16.18	---	24.56	---	---	---	---	---	---	---	---		---	---	---
MW-3		04/03/92	40.74		14.80	---	25.94	---	---	---	---	---	---	---	---		---	---	---
MW-3		04/08/92	40.74		17.06	---	23.68	1100	---	30	4.6	32	11	---	---		---	---	ANA
MW-3		04/14/92	40.74		15.22	---	25.52	---	---	---	---	---	---	---	---		---	---	---
MW-3		04/29/92	40.74		15.90	---	24.84	---	---	---	---	---	---	---	---		---	---	---
MW-3		05/07/92	40.74		16.35	---	24.39	---	---	---	---	---	---	---	---		---	---	---
MW-3		07/03/92	40.74		17.74	---	23.00	1200	---	38	ND<2.5	24	ND<2.5	---	---		---	---	ANA
MW-3		10/08/92	40.74		19.06	---	21.68	1400	---	31	ND<0.5	25	13	---	---		---	---	ANA
MW-3		12/31/92	40.74		16.61	---	24.13	820	---	12	4.1	13	5.9	---	---		---	---	ANA
QC-1	(h)	12/31/92	40.74		---	---	---	960	---	11	3.6	10	3.8	---	---		---	---	ANA
MW-3		04/21/93	40.74		14.24	---	26.50	420	---	5.6	ND<0.5	3.9	1.4	---	---		---	---	PACE
QC-1	(h)	04/21/93	40.74		---	---	---	390	---	5.0	ND<0.5	3.7	1.5	---	---		---	---	PACE
MW-3		07/07/93	40.13	(i)	15.19	---	24.94	54	---	0.6	0.6	ND<0.5	ND<0.5	---	---		---	---	PACE
MW-3		09/21/93	40.13		16.58	---	23.55	540	---	7.9	0.9	4.7	2.4	---	---		---	---	PACE
MW-3		12/17/93	40.13		15.82	---	24.31	---	---	---	---	---	---	---	---		---	---	---
MW-3		12/23/93	40.13		---	---	---	500	---	9.8	1.5	3.3	2.1	---	---		---	---	PACE
QC-1	(h)	12/23/93	40.13		---	---	---	480	---	9.2	ND<0.5	5.4	5.3	---	---		---	---	PACE
MW-3		04/07/94	40.13		28.50	---	11.63	460	---	20	7.4	8.9	11	---	---		---	---	PACE
QC-1	(h)	04/07/94	40.13		---	---	---	460	---	20	7.7	9.0	11	---	---		---	---	PACE
MW-3		07/06/94	40.13		---	---	---	300	---	10	0.6	1.7	6.4	---	---		---	4.8	PACE
MW-3		10/07/94	40.13		27.65	---	12.48	620	---	28	ND<0.5	2.2	12	---	31	(j)	---	4.4	PACE
MW-3		01/27/95	40.13		27.65	---	12.48	---	---	---	---	---	---	---	---		---	---	---
MW-3		03/30/95	40.13		26.05	---	14.08	300	---	10	6.0	3.4	18	---	---		---	7.6	ATI
MW-3		06/20/95	40.13		19.49	---	20.64	170	---	7.2	3.4	0.85	15	---	---		---	---	ATI
MW-3		10/03/95	40.13		24.93	---	15.20	170	---	2.1	ND<0.50	0.81	8.0	6.7	---		---	---	ATI
MW-3		12/06/95	40.13		25.14	---	14.99	1700	---	6.7	3.1	2.8	210	64	---		---	---	ATI
QC-1	(h)	12/06/95	40.13		---	---	---	1400	---	6.1	3.0	1.7	190	53	---		---	---	ATI
MW-3		03/21/96	40.13		9.48	---	30.65	ND<50	---	0.5	ND<1	ND<1	1	ND<10	---		---	7.3	SPL
MW-3		06/21/96	40.13		11.60	---	28.53	ND<50	---	13	ND<1	ND<1	ND<1	12	---		---	7.6	SPL
MW-3		09/06/96	40.13		12.23	---	27.90	---	---	---	---	---	---	---	---		---	---	---
MW-3		09/09/96	40.13		---	---	---	ND<250	---	6.5	ND<5.0	ND<5.0	ND<5.0	ND<50	---		---	7.6	SPL
MW-3		12/19/96	40.13		10.46	---	29.67	ND<50	---	4.1	ND<1.0	ND<1.0	ND<1.0	ND<10	---		---	8.4	SPL
MW-3		03/17/97	40.13		9.86	---	30.27	50	---	ND<5	ND<1.0	ND<1.0	ND<1.0	ND<10	---		---	7.4	SPL
MW-3		08/12/97	40.13		12.11	---	28.02	ND<50	---	0.79	ND<1.0	ND<1.0	ND<1.0	10	---		---	6.1	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
MW-4	02/05/90	40.11	20.75	---	19.36	620	---	ND<0.5	9	ND<0.5	10	---	---	---	---	SUP
MW-4	02/14/91	40.11	21.73	---	18.38	180	---	ND<0.3	ND<0.3	0.4	2	---	---	---	---	SUP
MW-4	05/13/91	40.11	18.55	---	21.56	72	---	0.7	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	SUP
MW-4	07/24/91	40.11	21.31	---	18.80	---	---	---	---	---	---	---	---	---	---	---
MW-4	10/03/91	40.11	22.57	---	17.54	57	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	SUP
MW-4	10/15/91	40.11	22.88	---	17.23	---	---	---	---	---	---	---	---	---	---	---
MW-4	12/04/91	40.11	22.54	---	17.57	---	---	---	---	---	---	---	---	---	---	---
MW-4	12/16/91	40.11	22.59	---	17.52	---	---	---	---	---	---	---	---	---	---	---
MW-4	01/06/92	40.11	22.00	---	18.11	460	---	0.8	3.2	1.9	7.7	---	---	---	---	ANA
MW-4	01/22/92	40.11	21.58	---	18.53	---	---	---	---	---	---	---	---	---	---	---
MW-4	01/28/92	40.11	21.42	---	18.69	---	---	---	---	---	---	---	---	---	---	---
MW-4	02/05/92	40.11	21.10	---	19.01	---	---	---	---	---	---	---	---	---	---	---
MW-4	02/12/92	40.11	20.74	---	19.37	---	---	---	---	---	---	---	---	---	---	---
MW-4	02/17/92	40.11	19.78	---	20.33	---	---	---	---	---	---	---	---	---	---	---
MW-4	04/03/92	40.11	16.80	---	23.31	---	---	---	---	---	---	---	---	---	---	---
MW-4	04/08/92	40.11	17.13	---	22.98	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-4	04/14/92	40.11	17.74	---	22.37	---	---	---	---	---	---	---	---	---	---	---
MW-4	04/29/92	40.11	18.56	---	21.55	---	---	---	---	---	---	---	---	---	---	---
MW-4	05/07/92	40.11	19.10	---	21.01	---	---	---	---	---	---	---	---	---	---	---
MW-4	07/03/92	40.11	20.71	---	19.40	ND<50	---	0.6	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-4	10/08/92	40.11	22.43	---	17.68	270	---	ND<0.5	2.1	2.5	3.2	---	---	---	---	ANA
MW-4	12/31/92	40.11	19.58	---	20.53	150	---	ND<0.5	ND<0.5	ND<0.5	1.3	---	---	---	---	ANA
MW-4	04/21/93	40.11	17.79	---	22.32	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-4	07/07/93	40.11	18.44	---	21.67	160	---	1.2	5.4	3.8	19	---	---	---	---	PACE
MW-4	09/21/93	40.11	20.14	---	19.97	71	---	ND<0.5	1.9	ND<0.5	2.1	---	---	---	---	PACE
MW-4	12/17/93	40.11	19.80	---	20.31	---	---	---	---	---	---	---	---	---	---	---
MW-4	12/23/93	40.11	---	---	---	ND<50	---	3.1	1.6	0.8	3.8	---	---	---	---	PACE
MW-4	04/07/94	40.11	19.12	---	20.99	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	6.6	PACE
MW-4	07/06/94	40.11	19.90	---	20.21	62	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	4.1	PACE
MW-4	10/07/94	40.11	20.07	---	20.04	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	3.8	PACE
MW-4	01/27/95	40.11	13.72	---	26.39	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	---	2.7	ATI
MW-4	03/30/95	40.11	11.46	---	28.65	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	8.3	ATI
MW-4	06/20/95	40.11	14.78	---	25.33	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
MW-4	10/03/95	40.11	19.62	---	20.49	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	5.0	---	---	5.8	ATI
MW-4	12/06/95	40.11	19.91	---	20.20	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	47	---	---	5.7	ATI
MW-4	03/21/96	40.11	11.12	---	28.99	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	7.8	SPL
MW-4	06/21/96	40.11	12.21	---	27.90	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	7.9	SPL
MW-4	09/06/96	40.11	12.89	---	27.22	---	---	---	---	---	---	---	---	---	---	---
MW-4	09/09/96	40.11	---	---	---	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	7.2	SPL
MW-4	12/19/96	40.11	11.01	---	29.10	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	8.4	SPL
MW-4	03/17/97	40.11	10.42	---	29.69	---	---	---	---	---	---	---	---	---	---	---
MW-4	08/12/97	40.11	12.77	---	27.34	---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
MW-5		10/03/91	39.55		18.08	---	21.47		79000	---	13000	7400	1400	6200	---	---	---	---	SUP
MW-5		10/15/91	39.55		18.55	---	21.00		---	---	---	---	---	---	---	---	---	---	---
MW-5		12/04/91	39.55		18.44	0.13	21.21		---	---	---	---	---	---	---	---	---	---	---
MW-5		12/16/91	39.55		18.66	0.01	20.90		---	---	---	---	---	---	---	---	---	---	---
MW-5		01/06/92	39.55		19.12	0.11	20.51		---	---	---	---	---	---	---	---	---	---	---
MW-5		01/22/92	39.55		14.59	---	24.96		---	---	---	---	---	---	---	---	---	---	---
MW-5		01/28/92	39.55		15.25	---	24.30		---	---	---	---	---	---	---	---	---	---	---
MW-5		02/05/92	39.55		15.58	SHEEN	23.97		---	---	---	---	---	---	---	---	---	---	---
MW-5		02/12/92	39.55		15.54	0.01	24.02		---	---	---	---	---	---	---	---	---	---	---
MW-5		02/17/92	39.55		13.98	SHEEN	25.57		---	---	---	---	---	---	---	---	---	---	---
MW-5		04/03/92	39.55		13.63	0.04	25.95		---	---	---	---	---	---	---	---	---	---	---
MW-5		04/08/92	39.55		13.17	0.01	26.39		---	---	---	---	---	---	---	---	---	---	---
MW-5		04/14/92	39.55		13.45	0.01	26.11		---	---	---	---	---	---	---	---	---	---	---
MW-5		04/29/92	39.55		13.75	0.07	25.85		---	---	---	---	---	---	---	---	---	---	---
MW-5		05/07/92	39.55		16.16	0.04	23.43		---	---	---	---	---	---	---	---	---	---	---
MW-5		07/03/92	39.55		17.67	0.08	21.94		---	---	---	---	---	---	---	---	---	---	---
MW-5		09/01/92	39.55		17.83	0.50	22.10		---	---	---	---	---	---	---	---	---	---	---
MW-5		10/08/92	39.55		17.86	0.92	22.38		---	---	---	---	---	---	---	---	---	---	---
MW-5		12/31/92	39.55		15.20	SHEEN	24.35		---	---	---	---	---	---	---	---	---	---	---
MW-5		04/21/93	39.55		12.64	0.02	26.93		---	---	---	---	---	---	---	---	---	---	---
MW-5		07/07/93	39.14	(i)	12.68	0.82	27.08		---	---	---	---	---	---	---	---	---	---	---
MW-5		09/21/93	39.14		14.35	SHEEN	24.79		---	---	---	---	---	---	---	---	---	---	---
MW-5		12/17/93	39.14		12.61	0.41	26.64		---	---	---	---	---	---	---	---	---	---	---
MW-5		04/07/94	39.14		30.00	---	9.14		66000	---	3000	1700	250	6800	---	---	---	---	PACE
MW-5		07/06/94	39.14		---	---	---		29000	---	1900	330	63	2700	---	---	---	---	PACE
MW-5		10/07/94	39.14		28.70	---	10.44		250000	---	2600	660	830	5200	---	---	---	4.2	PACE
QC-1	(h)	10/07/94	39.14		---	---	---		45000	---	2900	540	260	2600	---	---	---	---	PACE
MW-5		01/27/95	39.14		28.70	---	10.44		---	---	---	---	---	---	---	---	---	---	---
MW-5		03/30/95	39.14		28.95	---	10.19		50000	---	7900	2600	520	6400	---	---	---	5.5	ATI
QC-1	(h)	03/30/95	39.14		---	---	---		43000	---	7900	2500	440	6200	---	---	---	---	ATI
MW-5		06/20/95	39.14		22.54	---	16.60		34000	---	5100	1900	300	3700	---	---	---	---	ATI
QC-1	(h)	06/20/95	39.14		---	---	---		26000	---	3500	290	ND<25	3300	---	---	---	---	ATI
MW-5		10/03/95	39.14		18.84	---	20.30		12000	---	68	42	11	1600	330	---	---	---	ATI
QC-1	(h)	10/03/95	39.14		---	---	---		12000	---	46	39	10	1600	320	---	---	---	ATI
MW-5		12/06/95	39.14		19.07	---	20.07		16000	---	1200	93	51	700	600	---	---	---	ATI
MW-5		03/21/96	39.14		7.43	---	31.71		1500	---	89	28	6	250	ND<10	---	---	7.2	SPL
QC-1	(h)	03/21/96	39.14		---	---	---		1900	---	92	30	7	270	ND<10	---	---	---	SPL
MW-5		06/21/96	39.14		9.87	---	29.27		3500	---	740	150	19	400	ND<100	---	---	7.1	SPL
QC-1	(h)	06/21/96	39.14		---	---	---		2700	---	680	140	20	400	ND<50	---	---	---	SPL
MW-5		09/06/96	39.14		10.52	---	28.62		---	---	---	---	---	---	---	---	---	---	---
MW-5		09/09/96	39.14		---	---	---		82000	---	3100	1700	850	9100	ND<2500	---	---	7.5	SPL
QC-1	(h)	09/09/96	---			---	---		90000	---	2900	1600	670	6900	ND<2500	---	---	---	SPL
MW-5		12/19/96	39.14		8.62	---	30.52		41000	---	790	820	120	2040	ND<500	---	---	7.7	SPL
QC-1	(h)	12/19/96	---		---	---	---		26000	---	490	430	63	1140	ND<500	---	---	---	SPL
MW-5		03/17/97	39.14		8.22	---	30.92		5500	---	1.9	2.4	ND<1.0	ND<1.0	29	---	---	6.4	SPL
QC-1	(h)	03/17/97	---		---	---	---		6600	---	2.5	2.7	ND<1.0	ND<1.0	28	---	---	---	SPL
MW-5		08/12/97	39.14		12.18	0.22	27.13		33000	---	6400	2400	680	4400	ND<1000	---	---	6.8	SPL
QC-1	(h)	08/12/97	---		---	---	---		36000	---	6100	2500	720	4500	ND<500	---	---	---	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)		TOG (ug/l)		HVOC (ug/l)	DO (ppm)	LAB
MW-6		10/03/91	41.59		20.73	---	20.86		ND<50	---	0.7	0.8	ND<0.3	1.3	---		---		---	---	SUP
MW-6		10/15/91	41.59		21.20	---	20.39		---	---	---	---	---	---	---		---		---	---	---
MW-6		12/04/91	41.59		21.26	---	20.33		---	---	---	---	---	---	---		---		---	---	---
MW-6		12/16/91	41.59		21.12	---	20.47		---	---	---	---	---	---	---		---		---	---	---
MW-6		01/06/92	41.59		20.29	---	21.30		ND<50	---	ND<0.5	ND<0.5	ND<0.5	1.6	---		---		---	---	ANA
MW-6		01/22/92	41.59		20.12	---	21.47		---	---	---	---	---	---	---		---		---	---	---
MW-6		01/28/92	41.59		20.20	---	21.39		---	---	---	---	---	---	---		---		---	---	---
MW-6		02/05/92	41.59		20.09	---	21.50		---	---	---	---	---	---	---		---		---	---	---
MW-6		02/12/92	41.59		19.15	---	22.44		---	---	---	---	---	---	---		---		---	---	---
MW-6		02/17/92	41.59		18.02	---	23.57		---	---	---	---	---	---	---		---		---	---	---
MW-6		04/03/92	41.59		16.62	---	24.97		---	---	---	---	---	---	---		---		---	---	---
MW-6		04/08/92	41.59		17.06	---	24.53		ND<50	---	0.6	ND<0.5	0.8	ND<0.5	---		---		---	---	ANA
MW-6		04/14/92	41.59		17.23	---	24.36		---	---	---	---	---	---	---		---		---	---	---
MW-6		04/29/92	41.59		18.12	---	23.47		---	---	---	---	---	---	---		---		---	---	---
MW-6		05/07/92	41.59		18.52	---	23.07		---	---	---	---	---	---	---		---		---	---	---
MW-6		07/03/92	41.59		19.71	---	21.88		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---		---	---	ANA
MW-6		10/08/92	41.59		21.22	---	20.37		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---		---	---	ANA
QC-1	(h)	10/08/92	41.59		21.22	---	20.37		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---		---	---	ANA
MW-6		12/31/92	41.59		21.33	---	20.26		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---		---	---	ANA
MW-6		04/21/93	41.59		16.45	---	25.14		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---		---	---	PACE
MW-6		07/07/93	41.59		18.68	---	22.91		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		29	(j)	---	---	PACE
MW-6		09/21/93	41.59		19.64	---	21.95		ND<50	---	ND<0.5	ND<0.5	ND<0.5	1.6	---		---		---	---	PACE
MW-6		12/17/93	41.59		21.08	---	20.51		---	---	---	---	---	---	---		---		---	---	---
MW-6		12/23/93	41.59		---	---	---		ND<50	---	ND<0.5	0.5	ND<0.5	0.6	---		---		---	---	PACE
MW-6		04/07/94	41.59		21.27	---	20.32		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---		---	6.1	PACE
MW-6		07/06/94	41.59		19.81	---	21.78		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---		---	4.0	PACE
QC-1	(h)	07/06/94	41.59		---	---	---		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---		---	---	PACE
MW-6		10/07/94	41.59		21.25	---	20.34		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		24	(j)	---	3.5	PACE
MW-6		01/27/95	41.59		12.39	---	29.20		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---		---		---	4.2	ATI
MW-6		03/30/95	41.59		11.34	---	30.25		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		---		---	6.1	ATI
MW-6		06/20/95	41.59		15.12	---	26.47		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		---		---	---	ATI
MW-6		10/03/95	41.59		20.68	---	20.91		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	66		---		---	6.4	ATI
MW-6		12/06/95	41.59		23.77	---	17.82		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	45		---		---	5.7	ATI
MW-6		03/21/96	41.59		11.55	---	30.04		ND<50	---	ND<0.5	ND<1	ND<1	ND<1	41		---		---	9.1	SPL
MW-6		06/21/96	41.59		12.60	---	28.99		ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10		---		---	8.6	SPL
MW-6		09/06/96	41.59		13.25	---	28.34		---	---	---	---	---	---	---		---		---	---	---
MW-6		09/09/96	41.59		---	---	---		ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	22/22	(k)	---		---	7.9	SPL
MW-6		12/19/96	41.59		11.45	---	30.14		ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		---		---	7.7	SPL
MW-6		03/17/97	41.59		10.80	---	30.79		---	---	---	---	---	---	---		---		---	---	---
MW-6		06/12/97	41.59		13.11	---	28.48		---	---	---	---	---	---	---		---		---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
MW-7		10/03/91	40.64		14.93	---	25.71		360	---	62	13	3.4	20	---	---	---	---	SUP
MW-7		10/15/91	40.64		15.16	---	25.48		---	---	---	---	---	---	---	---	---	---	---
MW-7		12/04/91	40.64		15.41	---	25.23		---	---	---	---	---	---	---	---	---	---	---
MW-7		12/16/91	40.64		15.21	---	25.43		---	---	---	---	---	---	---	---	---	---	---
MW-7		01/06/92	40.64		14.56	---	26.08		1100	---	170	ND<0.5	24	23	---	---	---	---	ANA
MW-7		01/22/92	40.64		14.63	---	26.01		---	---	---	---	---	---	---	---	---	---	---
MW-7		01/28/92	40.64		14.73	---	25.91		---	---	---	---	---	---	---	---	---	---	---
MW-7		02/05/92	40.64		14.58	---	26.06		---	---	---	---	---	---	---	---	---	---	---
MW-7		02/12/92	40.64		13.94	---	26.70		---	---	---	---	---	---	---	---	---	---	---
MW-7		02/17/92	40.64		13.10	---	27.54		---	---	---	---	---	---	---	---	---	---	---
MW-7		04/03/92	40.64		12.66	---	27.98		---	---	---	---	---	---	---	---	---	---	---
MW-7		04/08/92	40.64		12.77	---	27.87		750	---	150	ND<0.5	23	9.9	---	---	---	---	ANA
MW-7		04/14/92	40.64		13.02	---	27.62		---	---	---	---	---	---	---	---	---	---	---
MW-7		04/29/92	40.64		13.59	---	27.05		---	---	---	---	---	---	---	---	---	---	---
MW-7		05/07/92	40.64		13.95	---	26.69		---	---	---	---	---	---	---	---	---	---	---
MW-7		07/03/92	40.64		14.73	---	25.91		660	---	210	ND<2.5	33	8	---	---	---	---	ANA
MW-7		10/08/92	40.64		15.75	---	24.89		320	---	49	1.4	13	6.2	---	---	---	---	ANA
MW-7		12/31/92	40.64		13.57	---	27.07		900	---	100	ND<2.5	28	4.3	---	---	---	---	ANA
MW-7		04/21/93	40.64		14.56	---	26.08		510	---	83	1.2	10	5.8	---	---	---	---	PACE
MW-7		07/07/93	40.32	(i)	13.40	---	26.92		1100	---	160	2.0	27	4.0	---	---	---	---	PACE
QC-1	(h)	07/07/93	40.32		---	---	---		1100	---	170	1.9	29	2.8	---	---	---	---	PACE
MW-7		09/21/93	40.32		14.40	---	25.92		690	---	150	3.1	26	5.7	---	---	---	---	PACE
QC-1	(h)	09/21/93	40.32		---	---	---		640	---	140	1.7	23	2.4	---	---	---	---	PACE
MW-7		12/17/93	40.32		13.65	---	26.67		---	---	---	---	---	---	---	---	---	---	---
MW-7		12/23/93	40.32		---	---	---		250	---	64	1.2	9.0	1.8	---	---	---	---	PACE
MW-7		04/07/94	40.32		30.62	---	9.70		140	---	32	1.4	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-7		07/06/94	40.32		16.88	---	23.44		410	---	94	1.3	10	3.5	---	---	---	4.4	PACE
MW-7		10/07/94	40.32		25.59	---	14.73		ND<50	---	9.2	ND<0.5	ND<0.5	ND<0.5	---	---	---	4.9	PACE
MW-7		01/27/95	40.32		9.82	---	30.50		810	---	570	3	60	17	---	---	---	0	ATI
QC-1	(h)	01/27/95	---		---	---	---		930	---	620	4	77	21	---	---	---	---	ATI
MW-7		03/30/95	40.32		9.15	---	31.17		180	---	65	0.53	2.0	ND<1.0	---	---	---	7.8	ATI
MW-7		06/20/95	40.32		11.38	---	28.94		2800	---	980	ND<5.0	ND<5.0	43	---	---	---	---	ATI
MW-7		10/03/95	40.32		29.95	---	10.37		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	ATI
MW-7		12/06/95	40.32		29.85	---	10.47		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	ATI
MW-7		03/21/96	40.32		9.76	---	30.56		1000	---	390	2	40	13	ND<10	---	---	7.4	SPL
MW-7		06/21/96	40.32		11.01	---	29.31		ND<250	---	40	ND<5	ND<5	ND<5	ND<50	---	---	7.4	SPL
MW-7		09/06/96	40.32		11.68	---	28.64		---	---	---	---	---	---	---	---	---	---	---
MW-7		09/09/96	40.32		---	---	---		ND<250	---	13	ND<5.0	ND<5.0	ND<5.0	ND<50	---	---	7.2	SPL
MW-7		12/19/96	40.32		10.78	---	29.54		70	---	1.2	ND<1.0	1.4	ND<1.0	ND<10	---	---	8.3	SPL
MW-7		03/17/97	40.32		9.96	---	30.36		---	---	---	---	---	---	---	---	---	---	---
MW-7		06/12/97	40.32		11.44	---	28.88		---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
MW-8		10/03/91	38.18		22.37	---	15.81		ND<50	---	ND<0.3	0.6	ND<0.3	0.9	---	---	---	---	SUP
MW-8		10/15/91	38.18		22.70	---	15.48		---	---	---	---	---	---	---	---	---	---	---
MW-8		12/04/91	38.18		22.44	---	15.74		---	---	---	---	---	---	---	---	---	---	---
MW-8		12/16/91	38.18		22.47	---	15.71		---	---	---	---	---	---	---	---	---	---	---
MW-8		01/06/92	38.18		21.94	---	16.24		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-8		01/22/92	38.18		21.44	---	16.74		---	---	---	---	---	---	---	---	---	---	---
MW-8		01/28/92	38.18		21.20	---	16.98		---	---	---	---	---	---	---	---	---	---	---
MW-8		02/05/92	38.18		20.86	---	17.30		---	---	---	---	---	---	---	---	---	---	---
MW-8		02/12/92	38.18		20.54	---	17.64		---	---	---	---	---	---	---	---	---	---	---
MW-8		02/17/92	38.18		19.99	---	18.19		---	---	---	---	---	---	---	---	---	---	---
MW-8		04/03/92	38.18		16.75	---	21.43		---	---	---	---	---	---	---	---	---	---	---
MW-8		04/08/92	38.18		16.57	---	21.61		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-8	(f)	04/14/92	38.18		---	---	---		---	---	---	---	---	---	---	---	---	---	---
MW-8		04/29/92	38.18		18.61	---	19.57		---	---	---	---	---	---	---	---	---	---	---
MW-8		05/07/92	38.18		18.41	---	19.77		---	---	---	---	---	---	---	---	---	---	---
MW-8		07/03/92	38.18		20.35	---	17.83		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-8	(f)	10/08/92	38.18		21.74	---	16.44		---	---	---	---	---	---	---	---	---	---	---
MW-8		12/31/92	38.18		19.09	---	19.09		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-8		04/21/93	38.18		18.92	---	19.26		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-8		07/07/93	38.18		17.76	---	20.42		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-8		09/21/93	38.18		19.71	---	18.47		ND<50	---	2.9	2.2	2.2	7.1	---	---	---	---	PACE
MW-8		12/17/93	38.18		21.33	---	16.85		---	---	---	---	---	---	---	---	---	---	---
MW-8		12/23/93	38.18		---	---	---		ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.6	---	---	---	---	PACE
MW-8		04/07/94	38.18		21.51	---	16.67		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	6.6	PACE
MW-8		07/06/94	38.18		17.41	---	20.77		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	4.4	PACE
MW-8		10/07/94	38.18		19.20	---	18.98		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	3.7	PACE
MW-8		01/27/95	38.18		12.25	---	25.93		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	---	2.9	ATI
MW-8		03/30/95	38.18		10.35	---	27.83		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	8.3	ATI
MW-8		06/20/95	38.18		13.37	---	24.81		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	6.9	ATI
MW-8	(f)	10/03/95	38.18		---	---	---		---	---	---	---	---	---	---	---	---	---	---
MW-8		12/06/95	38.18		18.42	---	19.76		ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	47	---	---	5.3	ATI
MW-8	(f)	03/21/96	38.18		---	---	---		---	---	---	---	---	---	---	---	---	---	---
MW-8		06/21/96	38.18		13.03	---	25.15		ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	7.0	SPL
MW-8		09/06/96	38.18		13.70	---	24.48		---	---	---	---	---	---	---	---	---	---	---
MW-8		09/09/96	38.18		---	---	---		ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	7.0	SPL
MW-8		12/19/96	38.18		11.93	---	26.25		ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	7.6	SPL
MW-8		03/17/97	38.18		11.29	---	26.89		---	---	---	---	---	---	---	---	---	---	---
MW-8		08/12/97	38.18		13.73	---	24.45		---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
MW-9	10/03/91	41.25	14.12	—	27.13	ND<50	---	ND<0.3	0.4	ND<0.3	ND<0.3	---	---	---	—	SUP
MW-9	10/15/91	41.25	14.27	—	26.98	---	---	---	---	---	---	---	—	—	—	—
MW-9	12/04/91	41.25	13.84	—	27.41	---	—	---	---	---	---	---	---	---	—	—
MW-9	12/16/91	41.25	14.18	---	27.07	---	---	—	—	---	---	---	---	---	---	---
MW-9	01/06/92	41.25	13.42	---	27.83	ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.9	---	---	---	---	ANA
MW-9	01/22/92	41.25	13.75	---	27.50	---	---	---	---	---	---	---	---	---	---	---
MW-9	01/28/92	41.25	14.76	---	26.49	---	---	---	---	---	---	---	---	---	---	---
MW-9	02/05/92	41.25	13.38	---	27.87	---	---	---	---	---	---	---	---	---	---	---
MW-9	02/12/92	41.25	11.86	---	29.39	---	---	---	---	---	---	---	---	---	—	—
MW-9	02/17/92	41.25	10.78	---	30.47	---	---	---	---	---	---	---	---	---	—	—
MW-9	04/03/92	41.25	11.63	---	29.62	---	---	---	---	---	---	---	---	---	—	—
MW-9	04/08/92	41.25	12.25	---	29.00	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-9	04/14/92	41.25	12.32	---	28.93	---	---	---	---	---	---	---	---	---	---	---
MW-9	04/29/92	41.25	13.07	---	28.18	---	---	---	---	---	---	---	---	---	---	---
MW-9	05/07/92	41.25	14.43	---	26.82	---	---	---	---	---	---	---	---	---	—	—
MW-9	07/03/92	41.25	13.85	—	27.40	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	—	---	---	ANA
MW-9	10/08/92	41.25	14.89	---	26.36	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-9	12/31/92	41.25	11.90	---	29.35	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-9	04/21/93	41.25	13.68	---	27.57	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-9	07/07/93	41.25	13.12	---	28.13	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-9	09/21/93	41.25	14.00	---	27.25	ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.9	---	---	---	—	PACE
MW-9	12/17/93	41.25	12.98	---	28.27	---	---	---	---	---	---	---	---	---	—	—
MW-9	12/23/93	41.25	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.9	---	---	---	—	PACE
MW-9	04/07/94	41.25	13.24	—	28.01	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	4.7	PACE
MW-9	07/06/94	41.25	13.77	—	27.48	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	3.9	PACE
MW-9	10/07/94	41.25	14.60	---	26.65	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	3.0	PACE
MW-9	01/27/95	41.25	8.47	---	32.78	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	---	2.5	ATI
MW-9	03/30/95	41.25	8.19	---	33.06	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	8.4	ATI
MW-9	06/20/95	41.25	11.25	---	30.00	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	8.1	ATI
MW-9	10/03/95	41.25	14.68	---	26.57	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	6.0	ATI
MW-9	12/06/95	41.25	16.07	---	25.18	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	46	---	---	5.4	ATI
MW-9	03/21/96	41.25	9.60	---	31.65	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	8.0	SPL
MW-9	06/21/96	41.25	10.86	---	30.39	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	7.8	SPL
MW-9	09/06/96	41.25	11.52	---	29.73	---	---	---	---	---	---	---	---	---	---	---
MW-9	09/09/96	41.25	---	---	---	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	20/21 (k)	---	---	7.3	SPL
MW-9	12/19/96	41.25	10.43	---	30.82	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	7.3	SPL
MW-9	03/17/97	41.25	9.87	---	31.38	---	---	---	---	---	---	---	---	---	---	---
MW-9	08/12/97	41.25	11.44	---	29.81	---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
QC-2	(l)	10/08/92	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
QC-2	(l)	12/31/92	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
QC-2	(l)	04/21/93	---	---	---	---	---	---	---	---	---	---	---	---	ND	---	PACE
QC-2	(l)	07/07/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.6	---	---	---	---	PACE
QC-2	(l)	09/21/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(l)	12/23/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(l)	04/07/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(l)	07/06/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(l)	10/07/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(l)	01/27/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(l)	03/30/95	---	---	---	---	ND<50	---	ND<0.5	0.5	ND<0.5	ND<1	---	---	---	---	ATI
QC-2	(l)	06/20/95	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2	(l)	10/03/95	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2	(l)	12/06/95	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	ATI
QC-2	(l)	03/21/96	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	ATI
QC-2	(l)	06/21/96	---	---	---	---	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	---	SPL
QC-2	(l)	06/21/96	---	---	---	---	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	---	SPL

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
TOG	Total oil and grease
HVOC	Halogenated volatile organic compounds
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
---	Not analyzed/measured/applicable
ND	Not detected above reported detection limit
SUP	Superior Analytical Laboratory
ANA	Anametrix, Inc.
PACE	Pace, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

NOTES:

(a) Top of casing elevations surveyed in feet above mean sea level, relative to the NGVD (1929).

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

(c) Well destroyed during tank removal in November 1990.

(d) Methylene chloride.

(e) 1,2-Dichloroethane.

(f) Well inaccessible.

(g) Sample collected from MW-2 for TPH-D analysis received in laboratory 7 days after collection; sample exceeded EPA recommended holding time for TPH-D on a water matrix.

(h) Blind duplicate.

(i) Top of casing lowered.

(j) A copy of the documentation for this data is included in Appendix C of Alisto report 10-014-07-001.

(k) EPA Methods 8020/8260 used.

(l) Travel blank.

F:\010-014\014-8-1.WQ2

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
CHEVRON U.S.A. SERVICE STATION NO. 9-0076
4265 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)
C-1	07/14/92	38.41	27.61	---	10.80
C-1	10/08/92	38.41	24.44	---	13.97
C-1	09/21/93	38.41	21.42	---	16.99
C-1	03/30/95	38.41	12.02	---	26.39
C-1	06/20/95	38.41	14.40	---	24.01
C-1	03/21/96	38.41	11.65	---	26.76
C-1	09/06/96	38.41	16.75	---	21.66
C-1	12/19/96	38.41	13.98	---	24.43
C-1	03/17/97	38.41	12.78	---	25.63
C-1	06/11/97	38.41	15.16	---	23.25
C-1	09/17/97	38.41	16.94	---	21.47
C-2	07/14/92	37.47	---	---	---
C-2	10/08/92	37.47	---	---	---
C-2	09/21/93	37.47	26.29	---	11.18
C-2	03/30/95	37.47	17.18	---	20.29
C-2	06/20/95	37.47	18.95	---	18.52
C-2	03/21/96	37.47	16.17	---	21.30
C-2	09/06/96	37.47	21.14	0.04	16.36
C-2	12/19/96	37.47	17.55	0.03	19.94
C-2	03/17/97	37.47	18.59	---	18.88
C-2	06/11/97	37.47	21.30	---	16.17
C-2	09/17/97	37.47	23.14	---	14.33
C-3	07/14/92	38.37	27.87	---	10.50
C-3	10/08/92	38.37	28.55	---	9.82
C-3	09/21/93	38.37	26.22	---	12.15
C-3	03/30/95	38.37	18.42	---	19.95
C-3	06/20/95	38.37	19.79	---	18.58
C-3	03/21/96	38.37	17.85	---	20.52
C-3	09/06/96	38.37	21.63	---	16.74
C-3	12/19/96	38.37	22.30	---	16.07
C-3	03/17/97	38.37	18.95	---	19.42
C-3	06/11/97	38.37	21.15	---	17.23
C-3	09/17/97	38.37	22.41	---	15.96

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
CHEVRON U.S.A. SERVICE STATION NO. 9-0076
4265 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)
C-4	07/14/92	36.49	26.89	---	9.60
C-4	10/08/92	36.49	27.79	---	8.70
C-4	09/21/93	36.49	25.51	---	10.98
C-4	03/30/95	36.49	14.86	---	21.63
C-4	06/20/95	36.49	16.90	---	19.59
C-4	03/21/96	36.49	14.10	---	22.39
C-4	09/06/96	36.49	20.13	---	16.36
C-4	12/19/96	36.49	16.92	---	19.57
C-4	03/17/97	36.49	17.40	---	19.09
C-4	06/11/97	36.49	18.34	---	18.15
C-4	09/17/97	36.49	21.46	---	15.03
C-5	07/14/92	38.50	28	---	10.50
C-5	10/08/92	38.50	28.65	---	9.85
C-5	09/21/93	38.50	26.36	---	12.14
C-5	03/30/95	38.50	18.54	---	19.96
C-5	06/20/95	38.50	20.13	---	18.37
C-5	03/21/96	38.50	18.40	---	20.10
C-5	09/06/96	38.50	21.90	---	16.60
C-5	12/19/96	38.50	21.15	---	17.35
C-5	03/17/97	38.50	19.84	---	18.66
C-5	06/11/97	38.50	21.60	---	16.90
C-5	09/17/97	38.50	27.83	---	10.67
C-6	07/14/92	35.40	38.89	---	-3.49
C-6	10/08/92	35.40	38.67	---	-3.27
C-6	09/21/93	35.40	33.98	---	1.42
C-6	03/30/95	35.40	26.38	---	9.02
C-6	06/20/95	35.40	25.01	---	10.39
C-6	03/21/96	35.40	23.12	---	12.28
C-6	09/06/96	35.40	24.83	---	10.57
C-6	12/19/96	35.40	24.50	---	10.90
C-6	03/17/97	35.40	22.59	---	12.81
C-6	06/11/97	35.40	23.76	---	11.64
C-6	09/17/97	35.40	24.74	---	10.66

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
CHEVRON U.S.A. SERVICE STATION NO. 9-0076
4265 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)
C-7	07/14/92	35.19	39.77	---	-4.58
C-7	10/08/92	35.19	39.14	---	-3.95
C-7	09/21/93	35.19	35.46	---	-0.27
C-7	03/30/95	35.19	27.60	---	7.59
C-7	06/20/95	35.19	27.87	---	7.32
C-7	03/21/96	35.19	27.85	---	7.34
C-7	09/06/96	35.19	28.35	---	6.84
C-7	12/19/96	35.19	29.11	---	6.08
C-7	03/17/97	35.19	27.14	---	8.05
C-7	06/11/97	35.19	28.05	---	7.14
C-7	09/17/97	35.19	29.00	---	6.19
C-8	07/14/92	34.68	39.02	---	-4.34
C-8	10/08/92	34.68	38.68	---	-4.00
C-8	09/21/93	34.68	35.30	---	-0.62
C-8	03/30/95	34.68	29.24	---	5.44
C-8	06/20/95	34.68	28.34	---	6.34
C-8	03/21/96	34.68	28.65	---	6.03
C-8	09/06/96	34.68	28.70	---	5.98
C-8	12/19/96	34.68	29.70	---	4.98
C-8	03/17/97	34.68	27.76	---	6.92
C-8	06/11/97	34.68	28.81	---	5.87
C-8	09/17/97	34.68	29.36	---	5.32
C-9	03/17/97	30.68	27.56	---	3.11
C-9	06/11/97	30.68	28.27	---	3.11
C-9	09/17/97	30.68	28.63	---	3.11

NOTES:

(a) Top of casing elevations surveyed relative to 1929 NGVD. Measured in feet above mean sea level.

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

--- Not measured/available.

Source: Groundwater data collected by Blaine Tech Services Inc.

F:\0\10-014\014-8-1A.WQ2

TABLE 3 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)
S-1	03/30/95	38.31	6.09	32.22
S-1	06/20/95	38.31	7.30	31.01
S-1	12/06/95	38.31	11.64	26.67
S-1	03/21/96	38.31	6.87	31.44
S-1	06/21/96	38.31	8.65	29.66
S-1	09/06/96	38.31	10.50	27.81
S-1	12/19/96	38.31	8.24	30.07
S-1	03/17/97	38.31	7.26	31.05
S-1	06/11/97	38.31	10.69	27.62
S-1	09/17/97	38.31	10.26	28.05
S-2	03/30/95	38.79	7.86	30.93
S-2	06/20/95	38.79	9.51	29.28
S-2	12/06/95	38.79	10.52	28.27
S-2	03/21/96	38.79	8.60	30.19
S-2	06/21/96	38.79	9.95	28.84
S-2	09/06/96	38.79	10.50	28.29
S-2	12/19/96	38.79	9.40	29.39
S-2	03/17/97	38.79	9.82	28.97
S-2	06/11/97	38.79	10.18	28.61
S-2	09/17/97	38.79	9.90	28.89
S-3	03/30/95	37.33	7.06	30.27
S-3	06/20/95	37.33	8.15	29.18
S-3	12/06/95	37.33	10.53	26.80
S-3	03/21/96	37.33	7.32	30.01
S-3	06/21/96	37.33	8.85	28.48
S-3	09/06/96	37.33	10.10	27.23
S-3	12/19/96	37.33	8.36	28.97
S-3	03/17/97	37.33	8.57	28.76
S-3	06/11/97	37.33	9.26	28.07
S-3	09/17/97	37.33	9.62	27.71

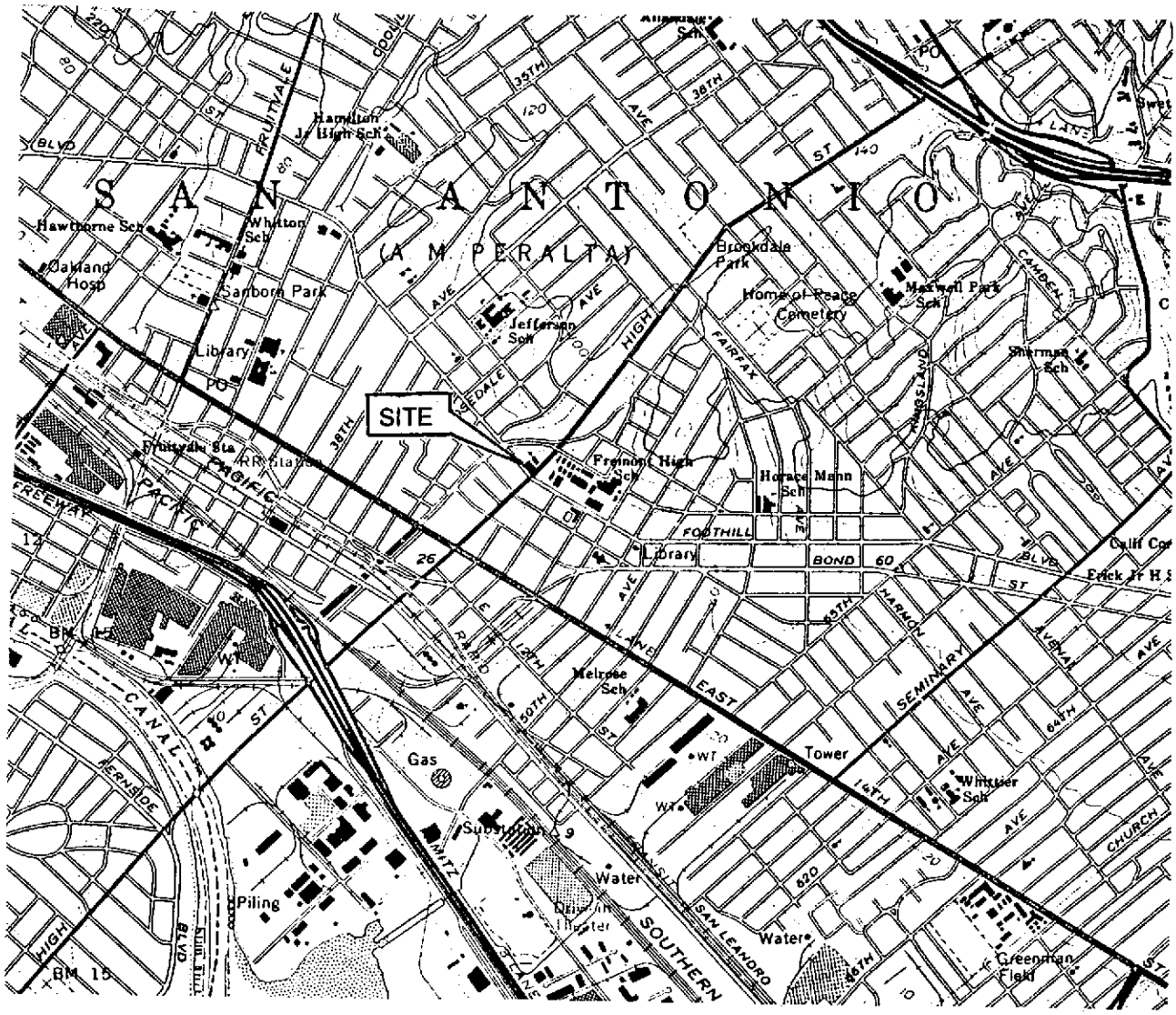
NOTES:

(a) Top of casing elevations surveyed relative to 1929 NGVD. Measured in feet above mean sea level.

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

SOURCE: Groundwater data has been collected by Weiss Associates and Blaine Tech.

F:\0\10-014\014-8-1B.WQ



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

N

0 1000' 2000'

FIGURE 1

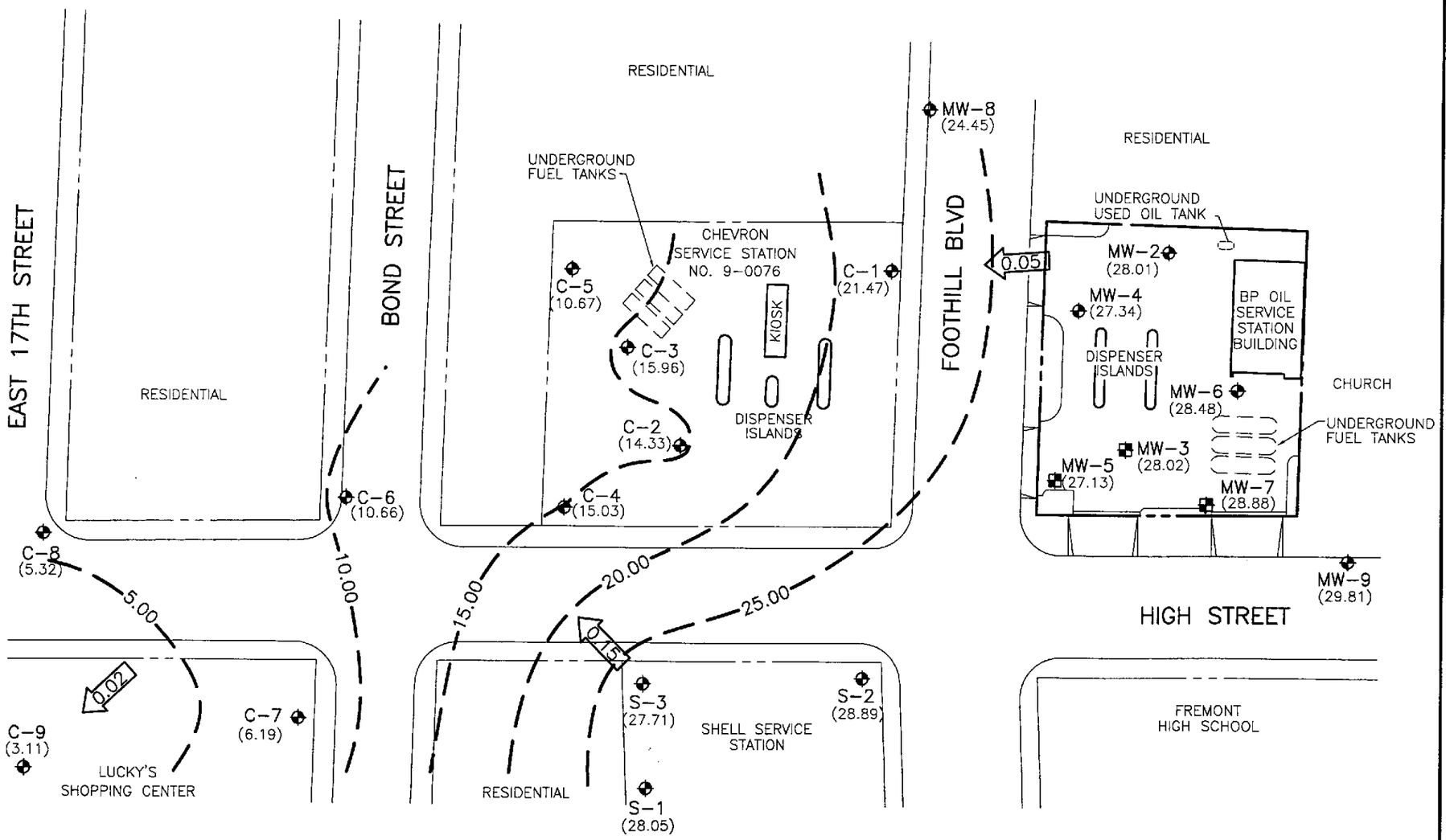
SITE VICINITY MAP

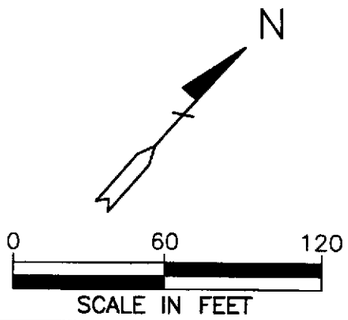
BP OIL SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. 10-014

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10014B---.DWG 5-26-93 RKW 1=1





LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- (6.19) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 10.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–5.00 FEET)
- 0.05 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

NOTE:
Wells associated with Shell and Chevron Stations were monitored on September 17, 1997.

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

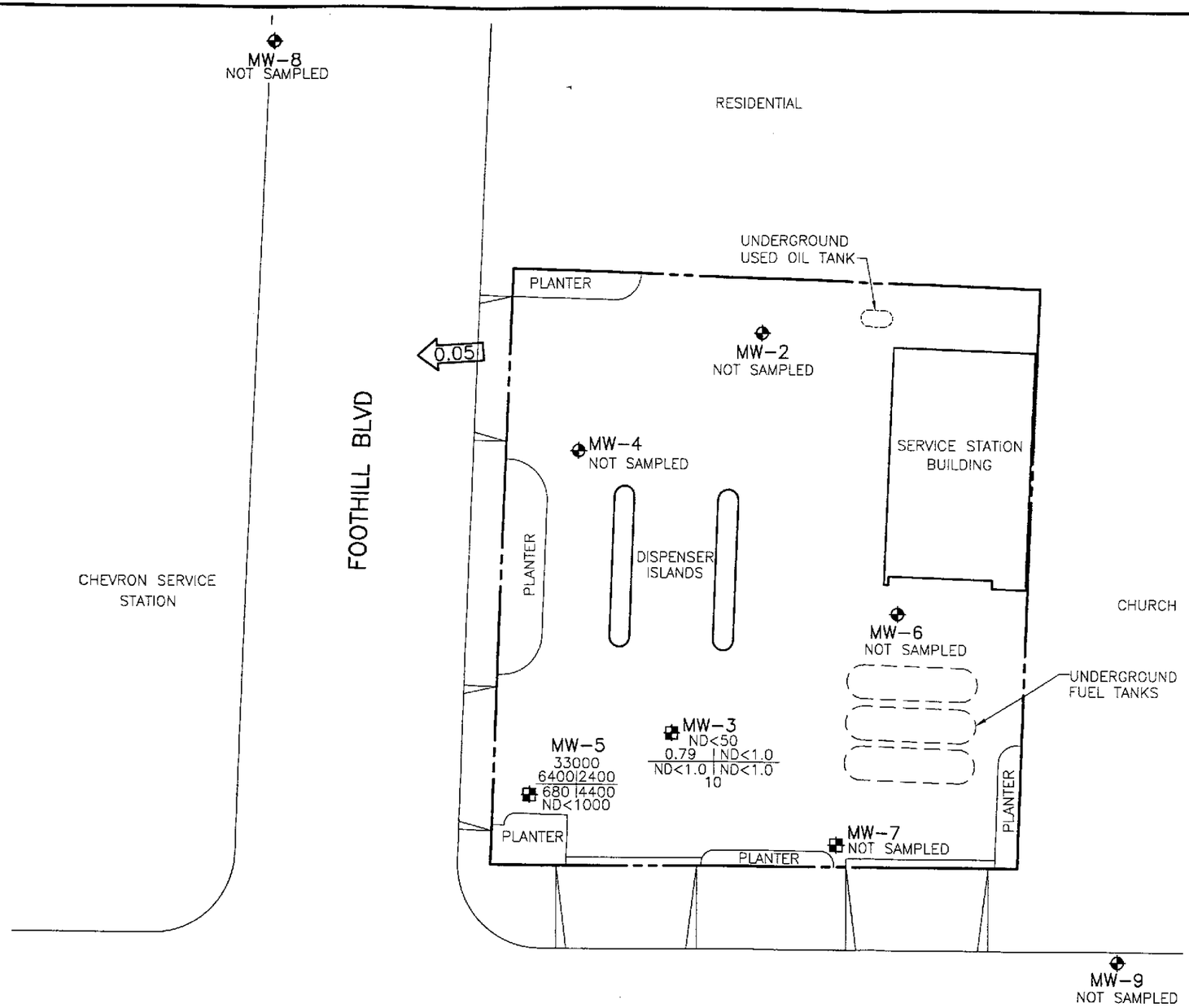
AUGUST 12, 1997

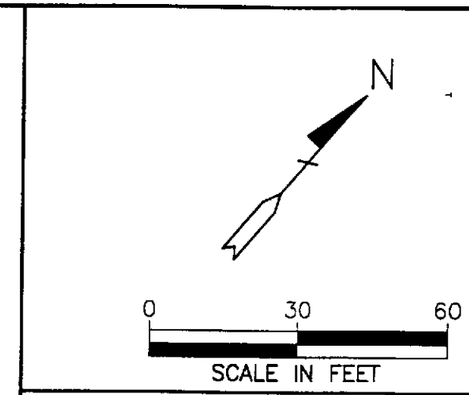
BP OIL SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. 10–014

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10014D-M.DWG 10-21-97 RKW 1=80





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
0.05	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

AUGUST 12, 1997

BP OIL SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. 10-014

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10014E.DWG 10-19-97 RKW 1=30

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201

Project No. 10-014-08-001 Date: 8/12/97
Address 4280 Foothill Blvd Day: M T W TH F
Contract No. H176522 City: Oakland
Station No. BP 11109 Sampler:

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-2	NA	2"	30.10	[illegible]	[illegible]		Not Sampled Depth to water 13.21
MW-3	S-1	4"	31.80	12.11	0		
MW-4	NA	4"	34.28	12.77	0		Not Sampled
MW-5	S-2, 3	4"		12.18	0.22		Dark brn, Purge product & sample
MW-6	NA	4"	34.28	13.11	0		Not Sampled
MW-7	NA	6"	33.42	11.44	0		Not Sampled
MW-8	NA	2"	29.71	13.13			Not Sampled
MW-9	NA	2"	29.31	11.44	V		Not Sampled MW-5-4 Trip Blank

FIELD INSTRUMENT CALIBRATION DATA

pH METER U-10 4.00 4.02 7.00 7.00 10.00 10.00 TEMPERATURE COMPENSATED (Y) N TIME 1600

D.O. METER U-10 ZERO d.O. SOLUTION 0.0 BAROMETRIC PRESSURE / TEMP 68° WEATHER clear, hot

CONDUCTIVITY METER U-10 ~~10.000~~ 0.0 mS 10.00 TURBIDITY METER _____ 5.0 NTU _____ OTHER _____

LEAK DETECTOR: _____ ALARM MODE _____ NON ALARM MODE

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C mS	D.O.
MW-3	12.11	4"	OK	0	Y (N)	17	16:20	76.3	7.14	1.28	6.0
						18	16:25	76.3	7.18	1.27	
						18	16:29	76.3	7.13	1.28	6.1

Total Depth - Water Level= 31.8 - 12.11 = | x Well Vol. Factor= | x#vol. to Purge | PurgeVol.

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

Comments: End purge, Parameters stable

EPA 601 _____
(X) TPH-G/BTEX METHOD
TPH Diesel ____
TOG 5520 ___
TIME/SAMPLE ID
S-1 1630

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-5	12.18	4"	OK	0.22'	(Y) N	17	16:58	76.4	7.22	0.90	6.4
						18	17:00	72.4	7.04	0.91	
						20	17:02	72.4	7.21	0.84	6.8

Total Depth - Water Level= 35 - 12.18 = | x Well Vol. Factor= | x#vol. to Purge | PurgeVol.

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

Comments: Vault full of water, Duplicate End purge well stable, / S-3

EPA 601 _____
(X) TPH-G/BTEX METHOD
TPH Diesel ____
TOG 5520 ___
TIME/SAMPLE ID
S-2, S-3 1708/1712

PAGE _____ OF _____

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

August 22, 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 14, 1997 . The samples were assigned to Certificate of Analysis No.(s)9708585 and analyzed for all parameters as listed on the chain of custody.

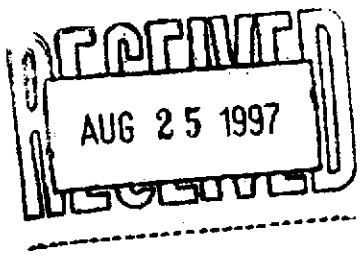
There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

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 97-08-585

Approved for Release by:

Brett VanDelinder, Project Manager

Date: 7.32.97

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. H9-9708585-01

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

P.O.# H1756522,COC#084719
DATE: 08/22/97

PROJECT: BP Oil # 11109
SITE: 4280 FootHill, Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-014-3-1
MATRIX: WATER
DATE SAMPLED: 08/12/97 16:30:00
DATE RECEIVED: 08/14/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	10	10 P	µg/L
Benzene	0.79	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	87		
Method 8020A***			
Analyzed by: VHZ			
Date: 08/21/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	77		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/21/97 04:00:00			

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

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

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

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

Certificate of Analysis No. H9-9708585-02

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

P.O.# H1756522,COC#084719
DATE: 08/22/97

PROJECT: BP Oil # 11109
SITE: 4280 FootHill, Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-014-8-1
MATRIX: WATER
DATE SAMPLED: 08/12/97 17:08:00
DATE RECEIVED: 08/14/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	1000 P	µg/L
Benzene	6400	50 P	µg/L
Toluene	2400	100 P	µg/L
Ethylbenzene	680	100 P	µg/L
Total Xylene	4400	100 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	110		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: VHZ			
Date: 08/21/97			
Total Petroleum Hydrocarbons-Gasoline	33	5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	110		
4-Bromofluorobenzene	90		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/21/97 05:22:00			

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. H9-9708585-03

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

P.O.# H1756522,COC#084719
DATE: 08/22/97

PROJECT: BP Oil # 11109
SITE: 4280 FootHill, Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-014-3-1
MATRIX: WATER
DATE SAMPLED: 08/12/97 17:12:00
DATE RECEIVED: 08/14/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	500 P	µg/L
Benzene	6100	25 P	µg/L
Toluene	2500	50 P	µg/L
Ethylbenzene	720	50 P	µg/L
Total Xylene	4500	50 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	113		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: VHZ			
Date: 08/21/97			
Total Petroleum Hydrocarbons-Gasoline	36	2.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	133		
4-Bromofluorobenzene	100		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/21/97 04:54:00			

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

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

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

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

Certificate of Analysis No. H9-9708585-04

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

P.O.# H1756522,COC#084719
DATE: 08/22/97

PROJECT: BP Oil # 11109
SITE: 4280 FootHill, Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-4

PROJECT NO: 10-014-8-1
MATRIX: WATER
DATE SAMPLED: 08/12/97 17:20:00
DATE RECEIVED: 08/14/97

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	87		
Method 8020A***			
Analyzed by: VHZ			
Date: 08/21/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	70		
California LUFT Manual			
Analyzed by: VHZ			
Date: 08/21/97 04:27:00			

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

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

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

QUALITY CONTROL

DOCUMENTATION

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

Method 8020A *** **BATCH#:**HP_J970819180700
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	30	100	74- 131
4-Bromofluorobenzene	30	23	77	43- 135

Method 8020A *** **BATCH#:**HP_J970819180700
WORK ORDER: LCS **CLIENT SAMPLE ID:**

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

Method 8020A *** **BATCH#:**HP_J970819180700
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9708682-03A

1,4-DIFLUOROBENZENE	30	30	100	70- 131
4-BROMOFLUOROBENZENE	30	27	90	43- 135

Method 8020A *** **BATCH#:**HP_J970819180700
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9708682-03A

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

Method 8020A*** **BATCH#:**HP_W970821092300
WORK ORDER: 9708585-01A **CLIENT SAMPLE ID:**S-1

1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	26	87	43- 135

Method 8020A*** **BATCH#:**HP_W970821092300
WORK ORDER: 9708585-02A **CLIENT SAMPLE ID:**S-2

1,4-Difluorobenzene	30	33.0000	110	70- 131
4-Bromofluorobenzene	30	29.0000	97	43- 135

Method 8020A*** **BATCH#:**HP_W970821092300
WORK ORDER: 9708585-03A **CLIENT SAMPLE ID:**S-3

1,4-Difluorobenzene	30	34.0000	113	70- 131
4-Bromofluorobenzene	30	30.0000	100	43- 135

Method 8020A*** **BATCH#:**HP_W970821092300
WORK ORDER: 9708585-04A **CLIENT SAMPLE ID:**S-4

1,4-Difluorobenzene	30	28	93	70- 131

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

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	26	87	43- 135

Method 8020A* BATCH#:HP_W970821092300**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	28	27.7	70- 131
4-Bromofluorobenzene	30	26	26.0	43- 135

Method 8020A* BATCH#:HP_W970821092300**
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	30	100	70- 131
4-Bromofluorobenzene	30	29	96.7	43- 135

Method 8020A* BATCH#:HP_W970821092300**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9708589-01A

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

Method 8020A* BATCH#:HP_W970821092300**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9708589-01A

1,4-Difluorobenzene	30	31	103	70- 131
4-Bromofluorobenzene	30	28	93	43- 135

California LUFT Manual BATCH#:HP_W970821101700
WORK ORDER: 9708585-01A **CLIENT SAMPLE ID:**S-1

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

California LUFT Manual BATCH#:HP_W970821101700
WORK ORDER: 9708585-02A **CLIENT SAMPLE ID:**S-2

1,4-Difluorobenzene	30	33.0000	110	50- 150
4-Bromofluorobenzene	30	27.0000	90	50- 150

California LUFT Manual BATCH#:HP_W970821101700
WORK ORDER: 9708585-03A **CLIENT SAMPLE ID:**S-3

1,4-Difluorobenzene	30	40.0000	133	50- 150
4-Bromofluorobenzene	30	30.0000	100	50- 150

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

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
California LUFT Manual **BATCH#:**HP_W970821101700				
WORK ORDER: 9708585-04A **CLIENT SAMPLE ID:**S-4				
1,4-Difluorobenzene	30	28	93	50- 150
4-Bromofluorobenzene	30	21	70	50- 150
California LUFT Manual **BATCH#:**HP_W970821101700				
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**				
1,4-Difluorobenzene	30	30	29.9	50- 150
4-Bromofluorobenzene	30	21	20.6	50- 150
California LUFT Manual **BATCH#:**HP_W970821101700				
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9708589-02A				
1,4-Difluorobenzene	30	30	100	50- 150
4-Bromofluorobenzene	30	31	103	50- 150
California LUFT Manual **BATCH#:**HP_W970821101700				
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9708589-02A				
1,4-Difluorobenzene	30	31	103	50- 150
4-Bromofluorobenzene	30	32	107	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**

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

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

Matrix: Aqueous
Units: µg/L

Batch Id: HP_W970821092300

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	20 - 110
Benzene	ND	50	46	92.0	62 - 121
Toluene	ND	50	47	94.0	66 - 136
Ethyl_Benzene	ND	50	47	94.0	70 - 136
O-Xylene	ND	50	47	94.0	74 - 134
M and P Xylene	ND	100	95	95.0	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	16	80.0	17	85.0	6.06	20	39 - 150
BENZENE	ND	20	18	90.0	18	90.0	0	25	39 - 150
TOLUENE	ND	20	18	90.0	18	90.0	0	26	56 - 134
ETHYL_BENZENE	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 AND P XYLENE	ND	40	36	90.0	36	90.0	0	20	43 - 152

Analyst: VHZ
Sequence Date: 08/21/97
SPL ID of sample spiked: 9708589-01A
Sample File ID: W_H7725.TX0
Method Blank File ID:
Blank Spike File ID: W_H7716.TX0
Matrix Spike File ID: W_H7720.TX0
Matrix Spike Duplicate File ID: W_H7721.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): 9708585-04A 9708585-03A 9708585-02A 9708790-06A
9708790-03A 9708589-01A 9708589-02A 9708585-01A

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_W970821101700

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	0.90	90.0	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	1.02	113	0.881	50	50 - 150

Analyst: VHZ
Sequence Date: 08/21/97
SPL ID of sample spiked: 9708589-02A
Sample File ID: WWH7726.TX0
Method Blank File ID:
Blank Spike File ID: WWH7718.TX0
Matrix Spike File ID: WWH7722.TX0
Matrix Spike Duplicate File ID: WWH7723.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):

9708585-01A 9708585-04A 9708585-03A 9708585-02A
9708790-06A 9708790-03A 9708589-03A 9708589-04A
9708589-05A 9708589-06A 9708589-07A 9708774-13A
9708774-14A 9708774-15A 9708589-01A 9708589-02A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9708585

CHAIN OF CUSTODY

No. 084719

Page 1 of 1

CONSULTANT'S NAME: ACCSTO ENGINEERING	CONSULTANT'S ADDRESS: 1575 Treat Blvd Ste 201 Walnut Creek CA 94598		
BP SITE NUMBER: 11109	BP SITE / FACILITY ADDRESS: 4280 Foothill, Oakland CA		CONSULTANT PROJECT NUMBER: 10-014-8-1
CONSULTANT PROJECT MANGER: Brady Nagle	PHONE NUMBER: 510 295 1650	FAX NUMBER: 510 295 1823	CONSULTANT CONTRACT NUMBER: H17565722
BP CONTACT: Scott Hooton	BP ADDRESS: Renton WA	PHONE NUMBER: —	FAX NO.: —
LAB CONTACT	LABORATORY ADDRESS: Houston TX	PHONE NUMBER: —	FAX NO.: —
BP CONTACT REQUESTING RUSH TAT (Print BP Contact Name)	RUSH REQUESTED OF (Print Consultant Contact Name) DATE/TIME	SHIPMENT DATE: 8/13/97	SHIPMENT METHOD: Fed Ex

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

ANALYSIS REQUIRED

AIRBILL NUMBER: 384847030 1

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH-G BTEX	TPH-MOTOR OIL	COMMENTS
S-1	8/12/97	16:30	Water	3	40ml		X	X	
S-2	"	17:09	"	3	"		X	X	
S-3	"	17:12	"	3	"		X	X	
S-4	"	17:20	"	2	"		X		

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
P. Nagle	8/12/97	1440	P. Nagle	8/13/97	1402
P. Nagle	8/13/97	1420	Jun Qin ACCS/SPL	8/14/97	1015

40 ml's

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:
8/14/97	1015

SPL Sample ID:
9708585

			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 #)	384847030	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	8/14/97

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

BP Site Number: 11109
ERM Contact: H176522
Sampling Date: 08/12/97
Matrix Description: Water
Date Final Report Received: 08/25/97
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: 10/24/97

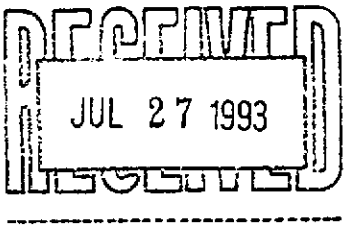
APPENDIX C

HISTORICAL MTBE DOCUMENTATION

10-014-02-001

pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS



July 26, 1993

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

RE: PACE Project No. 430709.527
Client Reference: BP Station # 11109

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received July 09 - 13, 1993.

Please note that a peak eluting earlier than Benzene and suspected to be Methyl tert-butly ether was detected in the following sample at the approximated level:

70 0110750/MW-6 29ug/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

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

October 21, 1994

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

RE: PACE Project No. 441010.509
Client Reference: BP Site #11109/10-014-~~04-001~~ 03-002

Dear Mr. Howell:

Enclosed is the report of laboratory analyses for samples received October 10, 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:

S-3/70 0420962	24 ug/L ✓
S-6/70 0420997	31 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,

Stacy P. Hock

for Ronald M. Chew
Project Manager

Enclosures

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