BP OIL

ENVIRONMENTAL PROTECTION

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

#102

January 16, 1999

Alameda County Health Care Services Agency
Attention Mr. Barney Chan
1131 Harbor Bay Parkway, Room 250
Alameda, CA 94502-6577

RE: Former BP Oil Site No. 11109
4280 Foothill Boulevard (at High Street)
Oakland, CA

Dear Mr. Chan:

Enclosed please find 30 December 1998 Groundwater Monitoring and Sampling Report. The report summarizes groundwater monitoring and sampling data obtained since 1990.

Upon review of the results reported this quarter, you will note that aromatic petroleum hydrocarbons were detected in a sample obtained from well MW-5 on 11 September 1998.

BP plans to continue groundwater monitoring at this time.

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

Sincerely,

Scott Hooton
Environmental Remediation Management

attachment

cc: CRWQCB-SFBR, Attention Mr. E. So, 2101 Webster Street, Ste. 500, Oakland, CA 94612 (w/attachment)
site file
Phil Briggs - Chevron Products Company, P.O. Box 5004, San Ramon, CA 94583-0804 (w/attachment)
David Camille - Tosco (w/attachment)
Fran Thie - Blaine (w/attachment)

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-014-09-001

Prepared for:

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

Prepared by:

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

December 30, 1998

Brady Nagle
Project Manager

Al Sevilla, P.E.
Principal

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-014-09-001

December 30, 1998

INTRODUCTION

This report presents the results and findings of the September 1 and September 11, 1998 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.

Groundwater monitoring was performed concurrently with the neighboring Chevron service station, 4265 Foothill Boulevard, and the Shell service station, 4411 Foothill Boulevard. The results are presented in Tables 3 and 4.

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

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples for this and previous quarters are summarized in Table 1. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown on Figure 2. The results of

groundwater analysis are shown on Figure 3. The laboratory report and chain of custody record are presented in Appendix B.

FREE PRODUCT MONITORING AND RECOVERY

A product removal program has been initiated to recover liquid-phase product from Monitoring Well MW-5. Product thicknesses measured during this and previous monitoring events are presented in Table 1. The volume of free product recovered from the well is presented in Table 2.

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-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	06/12/97	41.22	13.21	---	28.01	---	---	---	---	---	---	---	---	---	---	---
MW-2	12/10/97	41.22	12.34	---	28.88	---	---	---	---	---	---	---	---	---	---	---
MW-2	03/12/98	41.22	11.04	---	30.18	---	---	---	---	---	---	---	---	---	---	---
MW-2	06/23/98	41.22	11.77	---	29.45	---	---	---	---	---	---	---	---	---	---	---
MW-2	09/01/98	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 (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-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		17.66	---	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	---		---	---	---		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	---		---	---	---		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	---		---	---	---		460	---	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	---		---	---	---		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	---		---	---	---		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
MW-3	12/10/97	40.13		10.90	---	29.23		ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---		---	3.2	SPL
MW-3	03/12/98	40.13		10.2	---	29.93		ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---		---	6.3	SPL
QC-1	(h) 03/12/98	---		---	---	---		ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---		---	---	SPL
MW-3	06/23/98	40.13		10.17	---	29.96		50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---		---	3.4	SPL
MW-3	09/01/98	40.13		11.55	---	28.58		---	---	---	---	---	---	---	---		---	---	---
MW-3	09/11/98	---		---	---	---		ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---		---	5.5	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	480	---	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	---	---	---	3.6	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	---	---	---	---	---	---	---	---	---	---	---
MW-4	12/10/97	40.11	11.22	---	28.89	---	---	---	---	---	---	---	---	---	---	---
MW-4	03/12/98	40.11	10.81	---	29.30	---	---	---	---	---	---	---	---	---	---	---
MW-4	06/23/98	40.11	10.61	---	29.50	---	---	---	---	---	---	---	---	---	---	---
MW-4	09/01/98	40.11	13.38	---	26.73	---	---	---	---	---	---	---	---	---	---	---

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		16.15	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	26.84		---	---	---	---	---	---	---	---	---	---	---
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	---		---	---	---		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	---		---	---	---		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	---		---	---	---		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	---		---	---	---		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	---		---	---	---		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	---		---	---	---		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
MW-5	12/10/97	39.14		10.78	0.06	28.41		31000	---	3000	2500	560	5100	500	---	---	1.8	SPL
QC-1	(h) 12/10/97	---		---	---	---		37000	---	2900	2500	440	4800	---	---	---	---	SPL
MW-5	03/12/98	39.14		10.11	0.22	29.20		100000	---	1600	870	250	2600	ND<250	---	---	6.1	SPL
MW-5	06/23/98	39.14		10.20	0.02	28.96		27000	---	2500	840	370	2900	ND<250	---	---	2.1	SPL
QC-1	(h) 06/23/98	---		---	---	---		27000	---	2600	840	400	2950	ND<500	---	---	---	SPL
MW-5	09/01/98	39.14		11.61	0.04	27.56		---	---	---	---	---	---	---	---	---	---	---
MW-5	09/11/98	---		---	---	---		74000	---	4100	ND<500	890	6400	~~ND<5000~~	---	---	5.0	SPL
QC-1	(h) 09/11/98	---		---	---	---		46000	---	3900	1000	740	5000	ND<1000	---	---	---	SPL

↑ need to quantitate

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-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	---	---	---	---	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	---	---	---	---	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	08/12/97	41.59	13.11	---	28.48	---	---	---	---	---	---	---	---	---	---	---
MW-6	12/10/97	41.59	13.84	---	27.75	---	---	---	---	---	---	---	---	---	---	---
MW-6	03/12/98	41.59	11.17	---	30.42	---	---	---	---	---	---	---	---	---	---	---
MW-6	06/23/98	41.59	13.27	---	28.32	---	---	---	---	---	---	---	---	---	---	---
MW-6	09/01/98	41.59	14.70	---	26.89	---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11109
4260 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	---		---	---	---		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	---		---	---	---		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	08/12/97	40.32		11.44	---	28.88		---	---	---	---	---	---	---	---	---	---	---
MW-7	12/10/97	40.32		10.42	---	29.90		---	---	---	---	---	---	---	---	---	---	---
MW-7	03/12/98	40.32		9.51	---	30.81		---	---	---	---	---	---	---	---	---	---	---
MW-7	06/23/98	40.32		9.98	---	30.34		---	---	---	---	---	---	---	---	---	---	---
MW-7	09/01/98	40.32		11.38	---	28.94		---	---	---	---	---	---	---	---	---	---	---

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-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	20.88	---	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	16.42	---	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	---	---	---	---	---	---	---	---	---	---	---
MW-8	12/10/97	38.18	11.88	---	26.30	---	---	---	---	---	---	---	---	---	---	---
MW-8	03/12/98	38.18	11.89	---	26.29	---	---	---	---	---	---	---	---	---	---	---
MW-8	06/23/98	38.18	11.33	---	26.85	---	---	---	---	---	---	---	---	---	---	---
MW-8	09/01/98	38.18	12.71	---	25.47	---	---	---	---	---	---	---	---	---	---	---

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-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	---	---	---	---	---
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	---	---	---	---	ANA
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	---	---	---	---	---	---	---	---	---	---	PACE
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	---	---	---	---	---	---	---	---	---	---	---
MW-9	12/10/97	41.25	10.44	---	30.81	---	---	---	---	---	---	---	---	---	---	---
MW-9	03/12/98	41.25	9.50	---	31.75	---	---	---	---	---	---	---	---	---	---	---
MW-9	06/23/98	41.25	10.06	---	31.19	---	---	---	---	---	---	---	---	---	---	---
MW-9	09/01/98	41.25	11.52	---	29.73	---	---	---	---	---	---	---	---	---	---	---

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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
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 (f)	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	0.5	ND<0.5	ND<1	---	---	---	---	ATI
QC-2 (l)	03/30/95	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	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	ND<5.0	---	---	---	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<0.5	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:\0\10-014\10-014GW.WQ2

TABLE 2 - PRODUCT REMOVAL STATUS
BP OIL COMPANY SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF SAMPLING	PRODUCT THICKNESS (Feet)	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)
MW-5	03/12/98	0.22	0.20	0.20
MW-5	06/23/98	0.02	<0.05	0.20
MW-5	09/11/98	0.04	0.10	0.30

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TABLE 3 - 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)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)
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-1	12/10/97	38.41	13.18	---	25.23	---	---	---	---	---	---
C-1	03/12/98	38.41	9.49	---	28.92	---	---	---	---	---	---
C-1	06/23/98	38.41	10.22	---	28.19	1300	650	6.9	22	6.5	290
C-1	09/01/98	38.41	16.98	---	21.43	270	6.0	ND<2.5	ND<2.5	ND<2.5	950
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-2	12/10/97	37.47	17.21	---	20.26	---	---	---	---	---	---
C-2	03/12/98	37.47	14.17	---	23.30	---	---	---	---	---	---
C-2	06/23/98	37.47	14.82	---	22.65	1100000	6800	5100	13000	38000	ND<1000
C-2	09/01/98	37.47	21.78	---	15.69	9700	300	8.2	6.2	250	3700
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	---	---	---	---	---	---
C-3	12/10/97	38.37	22.26	---	16.11	---	---	---	---	---	---
C-3	03/12/98	38.37	18.35	---	20.02	---	---	---	---	---	---
C-3	06/23/98	38.37	19.04	---	19.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5
C-3	09/01/98	38.37	19.97	---	18.40	200	6.8	0.31	0.52	2.0	ND<2.5

TABLE 3 - 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)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)
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-4	12/10/97	36.49	16.65	---	19.84	---	---	---	---	---	---
C-4	03/12/98	36.49	16.59	---	19.90	---	---	---	---	---	---
C-4	06/23/98	36.49	17.02	---	19.47	27000	1600	160	180	690	100
C-4	09/01/98	36.49	21.45	---	15.04	520	14	2.3	ND<0.50	4.8	61
C-5	07/14/92	38.50	28.00	---	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-5	12/10/97	38.50	21.00	---	17.50	---	---	---	---	---	---
C-5	03/12/98	38.50	16.42	---	22.08	---	---	---	---	---	---
C-5	06/23/98	38.50	16.98	---	21.52	---	---	---	---	---	---
C-5	09/01/98	38.50	20.42	---	18.08	---	---	---	---	---	---
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	---	---	---	---	---	---
C-6	12/10/97	35.40	24.65	---	10.75	---	---	---	---	---	---
C-6	03/12/98	35.40	27.12	---	8.28	---	---	---	---	---	---
C-6	06/23/98	35.40	27.92	---	7.48	220	35	ND<0.5	2.5	1.1	ND<2.5
C-6	09/01/98	35.40	31.60	---	3.80	1800	370	2.8	19	4.8	44

TABLE 3 - 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)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)
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-7	12/10/97	35.19	29.26	---	5.93	---	---	---	---	---	---
C-7	03/12/98	35.19	24.92	---	10.27	---	---	---	---	---	---
C-7	06/23/98	35.19	25.30	---	9.89	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5
C-7	09/01/98	35.19	26.27	---	8.92	570	24	1.4	8.4	22	24
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-8	12/10/97	34.68	29.80	---	4.88	---	---	---	---	---	---
C-8	03/12/98	34.68	25.73	---	8.95	---	---	---	---	---	---
C-8	06/23/98	34.68	26.30	---	8.38	---	---	---	---	---	---
C-8	09/01/98	34.68	26.51	---	8.17	---	---	---	---	---	---
C-9	03/17/97	30.68	27.56	---	3.12	---	---	---	---	---	---
C-9	06/11/97	30.68	28.27	---	2.41	---	---	---	---	---	---
C-9	09/17/97	30.68	28.63	---	2.05	---	---	---	---	---	---
C-9	12/10/97	30.68	29.43	---	1.25	---	---	---	---	---	---
C-9	03/12/98	30.68	25.62	---	5.06	---	---	---	---	---	---
C-9	06/23/98	30.68	26.15	---	4.53	---	---	---	---	---	---
C-9	09/01/98	30.68	26.38	---	4.30	---	---	---	---	---	---

TABLE 3 - 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)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)
Trip Blank	06/23/98	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5
Trip Blank	09/01/98	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
ug/l	Micrograms per liter
---	Not analyzed/measured/applicable
ND	Not detected above reported detection limit
SEQ	Sequoia Analytical

SOURCE: Weiss Associates and Blaine Tech.

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.

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TABLE 4 - 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)	TPH-G (ug/l)	TPH-D (ug/l)	TPH-MO (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	LAB
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-1	12/11/97	38.31	6.96	31.35	---	---	---	---	---	---	---	---	---
S-1	03/12/98	38.31	6.00	32.31	25000	2500	510	250	820	670	5000	ND<125	SEQ
DUP (c)	03/12/98	---	---	---	26000	---	---	250	840	720	5100	ND<125	SEQ
S-1	06/23/98	38.31	6.31	32.00	ND<1000	230	ND<500	280	14	23	15	6100/7800 (d)	SEQ
S-1	09/01/98	38.31	9.17	29.14	26000	2300	ND<500	370	620	1300	33	1400/120 (d)	SEQ
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-2	12/11/97	38.79	8.27	30.52	---	---	---	---	---	---	---	---	---
S-2	03/12/98	38.79	7.97	30.82	1100	---	---	830	48	ND<10	ND<10	4700/4800 (d)	SEQ
S-2	06/23/98	38.79	8.20	30.59	720	---	---	46	6.8	50	68	50/8.8 (d)	SEQ
DUP (c)	06/23/98	---	---	---	810	---	---	48	7.1	50	70	49/8.8 (d)	SEQ
S-2	09/01/98	38.79	9.85	28.94	ND<2000	---	---	170	ND<20	ND<20	ND<20	9300/12000 (d)	SEQ
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	---	---	---	---	---	---	---	---	---
S-3	12/11/97	37.33	7.34	29.99	---	---	---	---	---	---	---	---	---
S-3	03/12/98	37.33	5.75	31.58	29000	---	---	840	810	1700	6000	ND<250	SEQ
S-3	06/23/98	37.33	5.98	31.35	3800	---	---	90	220	240	1400	ND<50	SEQ
S-3	09/01/98	37.33	8.98	28.35	9600	---	---	480	120	870	1800	490/ND<50 (d)	SEQ
DUP (c)	09/01/98	---	---	---	9200	---	---	420	110	800	1700	110/ND<50 (d)	SEQ

TABLE 4 - 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)	TPH-G (ug/l)	TPH-D (ug/l)	TPH-MO (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	LAB
EB (e)	03/12/98	---	---	---	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	SEQ
EB (e)	06/23/98	---	---	---	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	SEQ
EB (e)	09/01/98	---	---	---	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	SEQ

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
TPH-MO	Total petroleum hydrocarbons as motor oil
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
ug/l	Micrograms per liter
---	Not analyzed/measured/applicable
ND	Not detected above reported detection limit
SEQ	Sequoia Analytical

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.

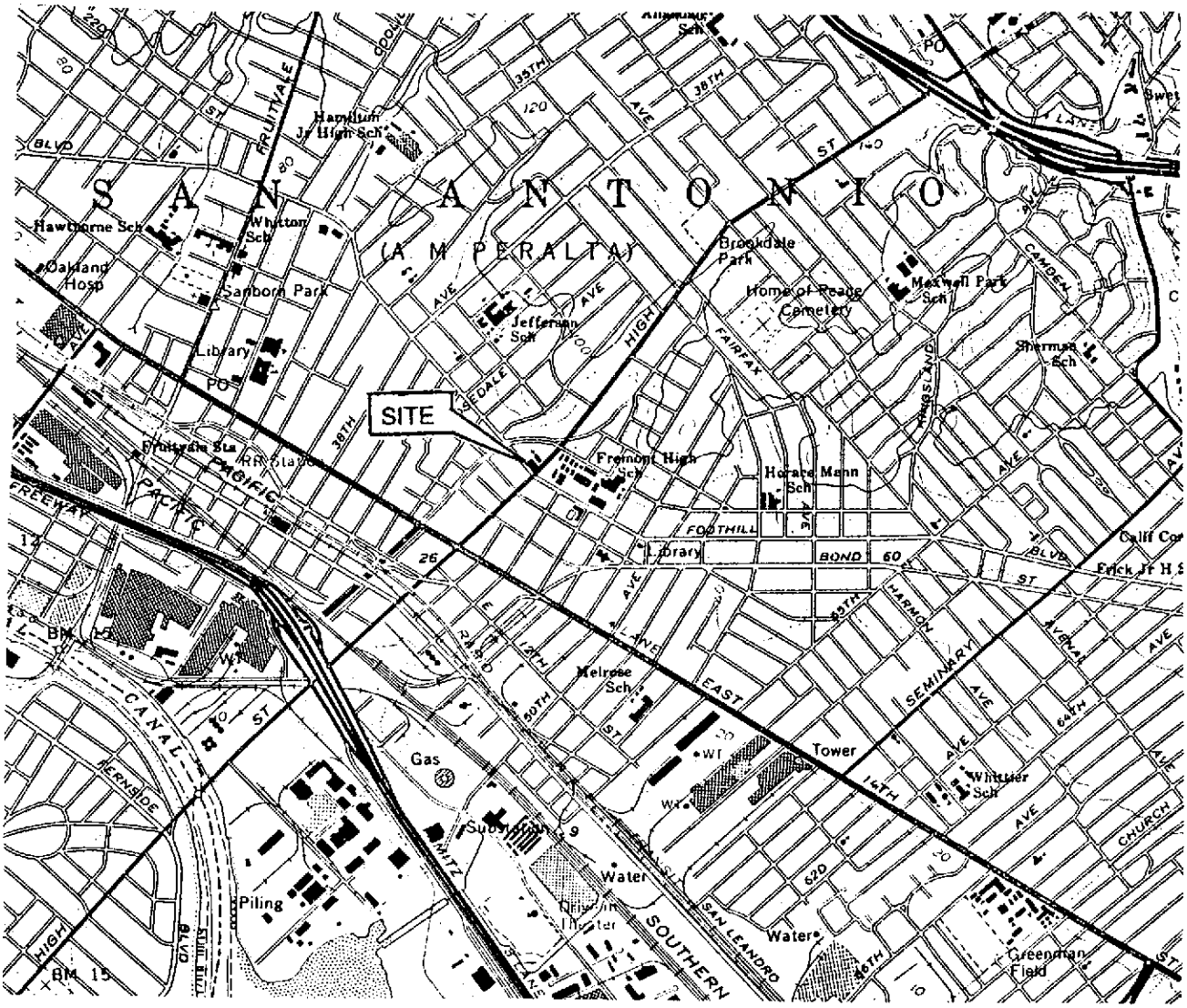
(c) Blind duplicate.

(d) EPA Methods 8020/8260 used for MTBE analysis.

(e) Trip blank.

SOURCE: Weiss Associates and Blaine Tech.

F:\0\10-014\SHELL.WQ2



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

N

QUADRANGLE LOCATION

0 1000' 2000'

FIGURE 1

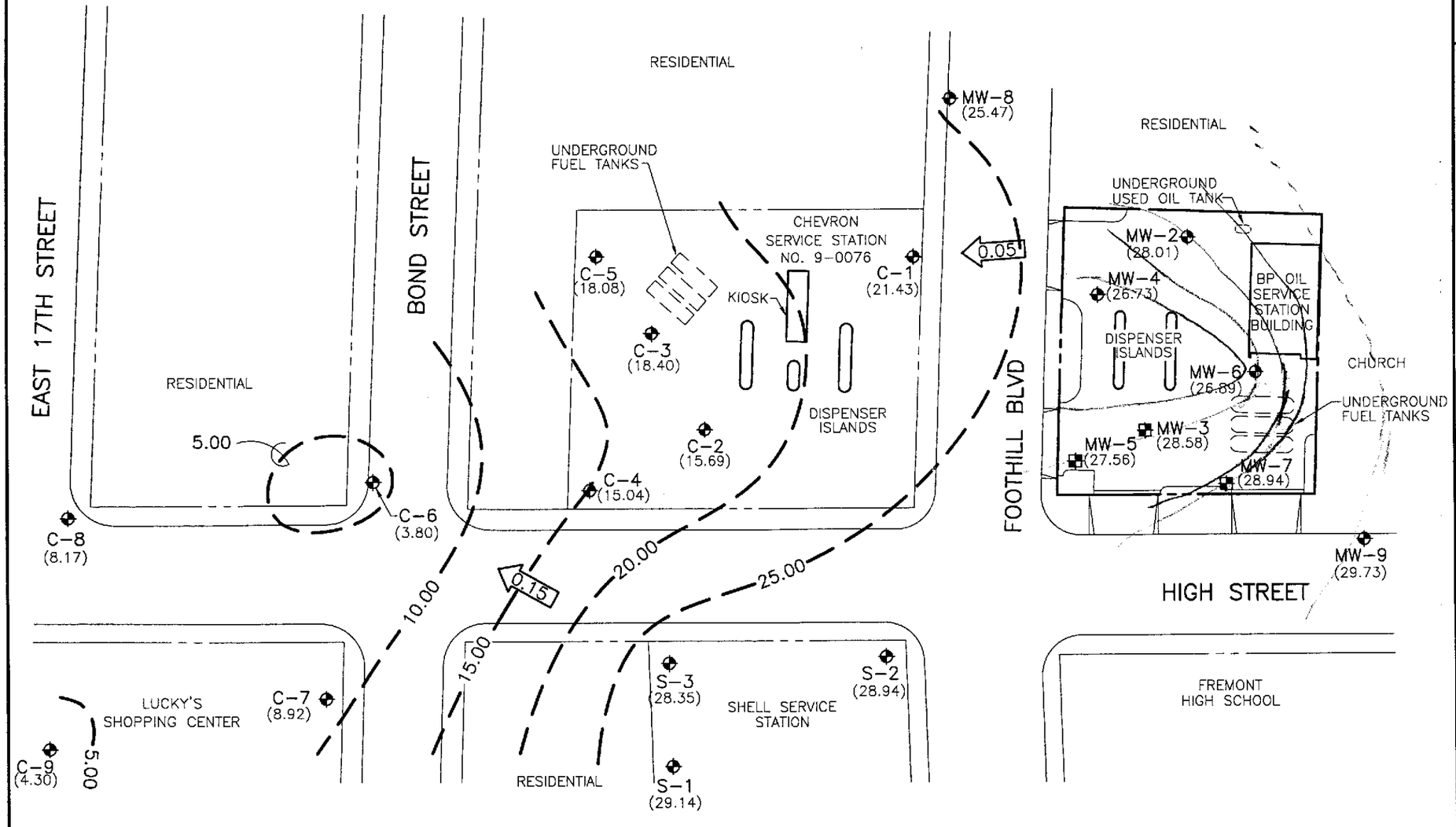
SITE VICINITY MAP

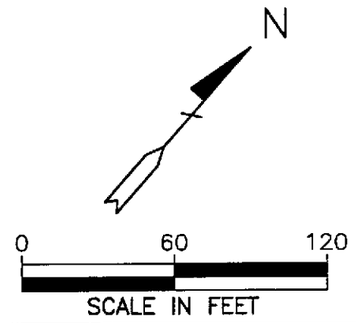
BP OIL SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. 10-014

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10D148---.DWG 5-26-93 RKW 1-1





LEGEND

- ◆ GROUNDWATER MONITORING WELL
- ◆ GROUNDWATER RECOVERY WELL
- (4.30) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 5.00 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:
Potentiometric groundwater elevation contours were generated with Quicksurf using the Kriging method with a spherical variogram on a triangulated grid surface.

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

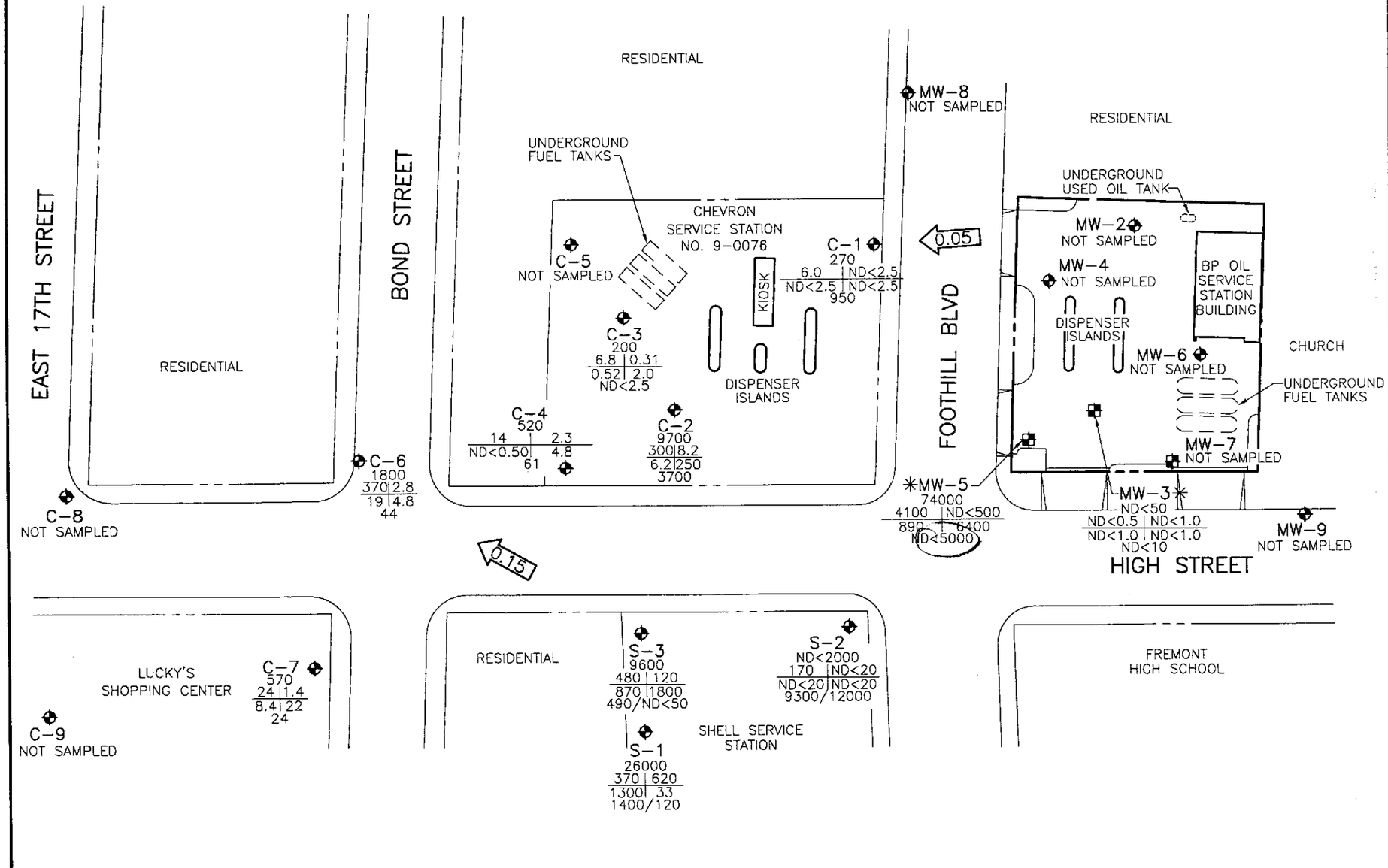
SEPTEMBER 1, 1998

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

PROJECT NO. 10–014

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

100140-1.DWG 12-27-98 YAH 1=80



N

0 60 120

SCALE IN FEET

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 (EPA METHOD 8020/8260)
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
0.05	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT
*	WELLS WERE SAMPLED ON SEPTEMBER 11, 1998. ALL OTHER WELLS WERE SAMPLED ON SEPTEMBER 1, 1998.

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

SEPTEMBER 1 & 11, 1998

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

PROJECT NO. 10-014

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10014E-1.DWG 12-27-98 TAH 1=60

ALISTO

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK, CA 94598 (925)295-1650 FAX295-1823

Field Report / Sampling Data Sheet

*Monitored 9/1/98

Project No. 10-014-9-1 Date: 9/11/98
Address 4280 Foothill Blvd Day: M T W TH (F)
Contract No. Pending City: Oakland
Station No. BP 11109 Sampler: LB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS: JOINT MONITORING 9/1/98 DBA: 76 UnoCal
MW-2	NIS	2"	30.10	13.21	Ø	1110	Not Sampled
MW-3	S-1	4"	31.80	11.55	"	1130	
MW-4	NIS	4"	34.28	13.38	↓	1113	Not Sampled
MW-5	S-2	4"	"	11.61	.04	1132	QC-1 (S-3) From this well BM
MW-6	NIS	4"	34.28	14.70	Ø	1117	Not Sampled
MW-7	"	6"	33.42	11.38	"	1119	Not Sampled
MW-8	"	2"	29.71	12.71	"	1122	Not Sampled
MW-9	↓	2"	29.31	11.52	↓	1127	Not Sampled

FIELD INSTRUMENT CALIBRATION DATA

pH METER Tem 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1140

D.O. METER Tem ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE 760 TEMP 72 WEATHER 7A

CONDUCTIVITY METER Tem 10,000 _____ TURBIDITY METER _____ 5.0 NTU _____ OTHER X

LEAK DETECTOR: _____ ALARM MODE X NON ALARM MODE

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-3	11.55	4"	OK	Ø	Y (N)	14	1202	70.2	7.41	1.09 ms	5.2
Total Depth - Water Level=	x Well Vol. Factor=	x#Vol. to Purge	PurgeVol.			28		69.3	7.29	1.21 ms	
31.80-11.55=20.25X.65=13.16X3=39.48						40	1237	68.8	7.22	1.17 ms	5.5

Purge Method: X Surface Pump O Disp.Tube O Winch O Disp. Bailer(s)___ O Sys Port

Comments:

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

TIME/SAMPLE ID
1240

PAGE_____ OF_____

ALISTO

Field Report / Sampling Data Sheet

* Monitored 9/1/98

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK, CA 94598 (925)295-1650 FAX295-1823

Project No. 10-014 Date: 9/11/98
Address 4280 Foothill Blvd Day: M T W TH F
Contract No. Pending City: Oakland
Station No. BP 11109 Sampler: LB

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-5	11.61	4"	OK	Ø	Y (N)	14	1257	69.4	7.82	1.11ms	4.7
						28		68.3	7.71	1.22ms	
						40	1330	67.7	7.71	1.27ms	5.0

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge Purge Vol.

~ 32 - 11.61 = 20.39 X .65 = 13.25 X 3 = 39.75

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

Comments: QC-1 (S-3) From this well

* MW-5 Removed .10 gal FP

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

TIME/SAMPLE ID: 1330

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

September 21, 1998

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

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on September 15, 1998. The sample(s) was assigned to Certificate of Analysis No.(s) 9809507 and analyzed for all parameters as listed on the chain of custody.

Sample "S-1" (SPL ID:H9-9809507-02) was randomly selected to be used as a matrix spiked sample for SW-846 Method 8020. The recoveries of m,p-Xylene and o-Xylene in the matrix spike and matrix spike duplicate were outside the advisory QC limits. A Laboratory Control Sample was analyzed with the QC batch (HP_S980916103900). The recovery of all analytes in the LCS was within the mandatory QC limits, validating the batch.

Any data flags or quality control exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s).

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

Joel Grice
Senior Organic Project Manager

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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 98-09-507

Approved for Release by:

Joel Grice, Senior Organic Project Manager

Date: 9/23/98

Greg Grandits
Laboratory Director

Cynthia Schreiner
Quality Assurance Officer

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

Certificate of Analysis No. H9-9809507-02

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

P.O.# N/A, COC#095816
DATE: 09/21/98

PROJECT: #11109, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-014-9-1
MATRIX: WATER
DATE SAMPLED: 09/11/98
DATE RECEIVED: 09/15/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	ug/L
Benzene	ND	0.5 P	ug/L
Toluene	ND	1.0 P	ug/L
Ethylbenzene	ND	1.0 P	ug/L
Total Xylene	ND	1.0 P	ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: YN			
Date: 09/17/98			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	80		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: YN			
Date: 09/17/98 01:21:00			

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

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

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

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

Certificate of Analysis No. H9-9809507-01

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

P.O.# N/A, COC#095816
DATE: 09/21/98

PROJECT: #11109, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-014-9-1
MATRIX: WATER
DATE SAMPLED: 09/11/98
DATE RECEIVED: 09/15/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	5000 P	ug/L
Benzene	4100	250 P	ug/L
Toluene	ND	500 P	ug/L
Ethylbenzene	890	500 P	ug/L
Total Xylene	6400	500 P	ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	113		
4-Bromofluorobenzene	100		
Method 8020A***			
Analyzed by: YN			
Date: 09/17/98			
Gasoline Range Organics	74	25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	107		
California LUFT Manual for Gasoline			
Analyzed by: YN			
Date: 09/17/98 03:14:00			

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

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

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

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

Certificate of Analysis No. H9-9809507-03

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

P.O.#
N/A, COC#095816
DATE: 09/21/98

PROJECT: #11109, N/A
SITE: Oakland, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-014-9-1
MATRIX: WATER
DATE SAMPLED: 09/11/98
DATE RECEIVED: 09/15/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	1000 P	ug/L
Benzene	3900	50 P	ug/L
Toluene	1000	100 P	ug/L
Ethylbenzene	740	100 P	ug/L
Total Xylene	5000	100 P	ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	117		
4-Bromofluorobenzene	93		
Method 8020A***			
Analyzed by: YN			
Date: 09/17/98			
Gasoline Range Organics	46	5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	87		
4-Bromofluorobenzene	110		
California LUFT Manual for Gasoline			
Analyzed by: YN			
Date: 09/17/98 03:52:00			

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

** SPL BATCH QUALITY CONTROL REPORT **
Method 8020A***

Matrix: Aqueous
Units: ug/L

Batch Id: HP_S980916103900

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	42	84.0	72 - 128
Benzene	ND	50	43	86.0	61 - 119
Toluene	ND	50	45	90.0	65 - 125
EthylBenzene	ND	50	40	80.0	70 - 118
O Xylene	ND	50	43	86.0	72 - 117
M & P Xylene	ND	100	89	89.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	19	95.0	19	95.0	0	20	39 - 150
BENZENE	ND	20	20	100	19	95.0	5.13	21	32 - 164
TOLUENE	ND	20	17	85.0	16	80.0	6.06	20	38 - 159
ETHYLBENZENE	ND	20	15	75.0	14	70.0	6.90	19	52 - 142
O XYLENE	ND	20	10	50.0 *	9.3	46.5 *	7.25	18	53 - 143
M & P XYLENE	ND	40	9.1	22.8 *	8.2	20.5 *	10.6	17	53 - 144

Analyst: YN
Sequence Date: 09/16/98
SPL ID of sample spiked: 9809507-02A
Sample File ID: S_I2065.TX0
Method Blank File ID:
Blank Spike File ID: S_I2048.TX0
Matrix Spike File ID: S_I2071.TX0
Matrix Spike Duplicate File ID: S_I2072.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1ST Q '97)
(***) = Source: SPL-Houston Historical Data (1ST Q '97)

SAMPLES IN BATCH(SPL ID):

9809512-01A 9809507-02A 9809506-01A 9809506-02A
9809507-01A 9809507-03A 9809326-09A 9809326-10A
9809326-12A 9809506-03A 9809506-04A

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

** SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Matrix: Aqueous

Batch Id: HP_S980916092100

Units: mg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	0.81	81.0	64 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
GASOLINE RANGE ORGANICS	ND	0.90	0.74	82.2	0.85	94.4	13.8	36	36 - 160

Analyst: YN

Sequence Date: 09/16/98

SPL ID of sample spiked: 9809506-01A

Sample File ID: SSI2066.TX0

Method Blank File ID:

Blank Spike File ID: SSI2049.TX0

Matrix Spike File ID: SSI2073.TX0

Matrix Spike Duplicate File ID: SSI2074.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)

« = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical data (1st Q '97)

(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9809507-02A 9809506-01A 9809506-02A 9809507-01A
9809507-03A 9809506-03A 9809506-04A 9809512-01A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
9-15-98	10°0

SPL Sample ID:
9809507

			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 #)	805188475416	
		Other:		
11	Method of sample disposal:	SPL Disposal	—	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	9-15-98

9809507

CHAIN OF CUSTODY

No. 095816

Page 1 of 1

CONSULTANT'S NAME: Alisto Engineering	CONSULTANT'S ADDRESS: 1575 Treat Blvd #201, W.C. Ca 94598		
BP SITE NUMBER: 11109	BP SITE / FACILITY ADDRESS: Oakland		CONSULTANT PROJECT NUMBER: 10-014-9-1
CONSULTANT PROJECT MANGER: Brady Nagle	PHONE NUMBER: (925) 295-1650	FAX NUMBER: 295-1823	CONSULTANT CONTRACT NUMBER: Pending #1176522
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: 9/14/98 — SHIPMENT METHOD: Fed Ex

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

ANALYSIS REQUIRED

AIRBILL NUMBER: 805188475416

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH Gas	BTEX	COMMENTS
S-2	9/11/98		W	3	HCL		X	X	
S-1	↓		↓	↓	↓		↓	↓	
S-3	↓		↓	↓	↓		↓	↓	
									4°C

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
	9/11/98	8am	Todd Buchholz	9/11/98	1445
Todd Buchholz	9/14/98	1450			
			Randy Tunnell	9-15-98	1000

CLV-16722-A (2/97)
PKG/50

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

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

BP Site Number:	11109
ERM Contract:	H176522
Sampling Date:	9/11/98
Matrix Description:	Water
Date Final Report Received:	9/21/98
Laboratory & Location:	SPL, Houston, Texas

		Yes	No	N/A
1.	Is BP contract release number consistent with analytical report?	_X_	____	____
2.	Was report submitted within the specified timeframe?	_X_	____	____
3.	Does report agree with the COC?	_X_	____	____
4.	Are units consistent with the given matrix?	_X_	____	____
5.	Were any target analytes/compounds detected in blanks (i.e., trip or equipment)?	____	____	_X_
6.	Are duplicate water samples within 30%?	_X_	____	____
7.	Are holding times met?	_X_	____	____
8.	Are surrogates within limits using laboratory criteria?	_X_	____	____
9.	Are MS/MSD acceptable using laboratory criteria?	See Below	____	____
10.	Are LCS results acceptable using laboratory criteria?	_X_	____	____

MS/MSD recovery values for xylenes in the matrix spike was outside QC limits due to matrix interference. MS/MSD limits are advisory only; as stated in SW-846, Section 8.7 to 8.8, if the MS/MSD results fall outside the advisable ranges, a laboratory control samples (LCS) must be analyzed and fall within those ranges. LCS results are within quality control limits.

Data Validation Completed by: Brady Nagle

(signature): _____

Date: 12/9/98