



BP OIL

X102

ENVIRONMENTAL
PROTECTION
BP Oil Company
Environmental Remediation Management
98 NOV -4 PM
295 SW 41st Street
Renton, Washington 98055-4931
(425) 251-0667
Fax No: (425) 251-0736

October 30, 1998

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 19 October 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 an accumulation of liquid petroleum hydrocarbon measuring 0.02 feet in thickness was measured in well MW-5 on 23 June 1998. The well was sampled after the hydrocarbon accumulation was removed, and aromatic hydrocarbons were detected by the laboratory. After the sample was obtained, a product recovery canister was placed in the well.

BP plans to continue groundwater monitoring and product collection efforts 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)

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-014-08-004

Prepared for:

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

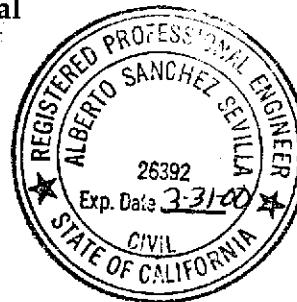
Prepared by:

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

October 19, 1998

Brady Nagle
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Principal



GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-014-08-004

October 19, 1998

INTRODUCTION

This report presents the results and findings of the June 23, 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.



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)	HVOCS (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<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	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<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<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<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	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	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	ND<0.5	—	—	—	—	ANA
MW-2	04/21/93	41.22		17.68	—	23.54	ND<50	—	ND<0.5	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	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	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	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	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	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	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<0.5	ND<1	—	ND<5000	1	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<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<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<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<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<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	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	12/10/97	41.22		12.34	—	28.88	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	03/12/98	41.22		11.04	—	30.16	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	06/23/98	41.22		11.77	—	29.45	—	—	—	—	—	—	—	—	—	—	—	—

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)	HVOOC (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	—	8.1	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	—		—	—	—	960	—	11	3.6	10	3.8	—	—	—	—	—	
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	—		—	—	—	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	—		—	—	—	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	06/12/97	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<1.0	ND<1.0	ND<1.0	ND<10	—	—	—	—	3.4 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 (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		18.65	—	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	ND<0.5	—	—	—	ANA
MW-4	10/08/92	40.11		22.43	—	17.88	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	3.6	—	—	—	—	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	—	—	—	—	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<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<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<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<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	—	—	—	—	—	—	—	—	—	—	—

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)	HVOCS (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		18.56	—	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	01/26/92	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	12/21/92	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	—	580	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	—		—	—	—	6800	—	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	100999	—	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	

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 (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	—	—	—	—
MW-6	12/21/92	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	—	—	—	PACE
MW-6	09/21/93	41.59	19.64	—	21.95	ND<50	—	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	29	(i)	—
MW-6	12/17/93	41.59	21.08	—	20.51	—	—	—	—	—	1.6	—	—	—	—	PACE
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)	07/08/94	—	—	—	—	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	—	—	—	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<0.5	—	—	—	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<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	—	—	—	—	—	—	—	—	—	—	—

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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 (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	—	—	—	—	—	—	—	—	—	—	—	

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 (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)	HVOI (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	--	17.63	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	ND<0.5	--	--	--	--	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<0.5	--	--	--	--	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	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	--	--	--	

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	--	26.13	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<0.5	--	--	--	--	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	14.88	--	26.57	ND<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<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<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<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	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<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	12/01/97	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	--	--	--	--	--	--	--	--	--	--	--	

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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 (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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	PACE	
QC-2 (l)	07/07/93	--	--	--	--	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	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	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/B260 used.
- (l) Travel blank.

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

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

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 (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (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-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-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

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 (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-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-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	—	—	—	—	—	—

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

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

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: Weiss Associates and Blaine Tech.

F1010-014CHEVRON.WG2

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 (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-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	49/6.8 (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	

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

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.

F1010-014SHELL.WQ2

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 (Feet) (a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet) (b)	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-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-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



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



0 1000' 2000'

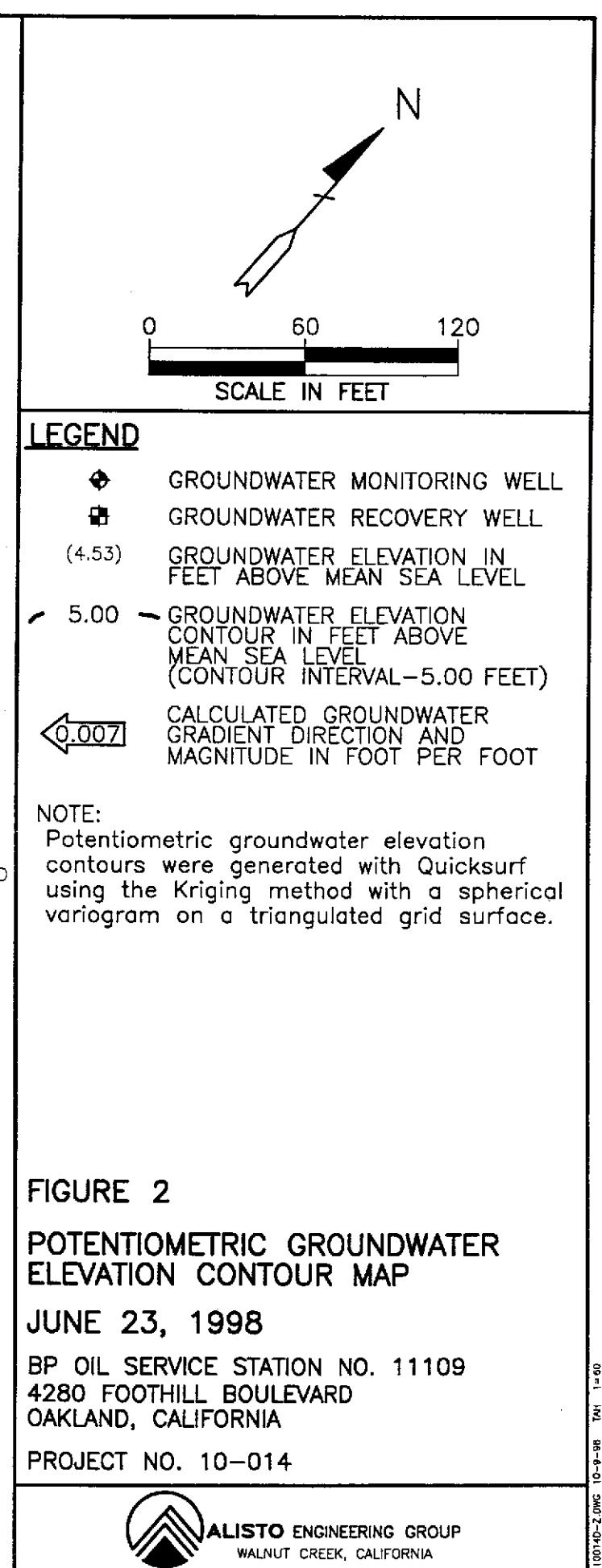
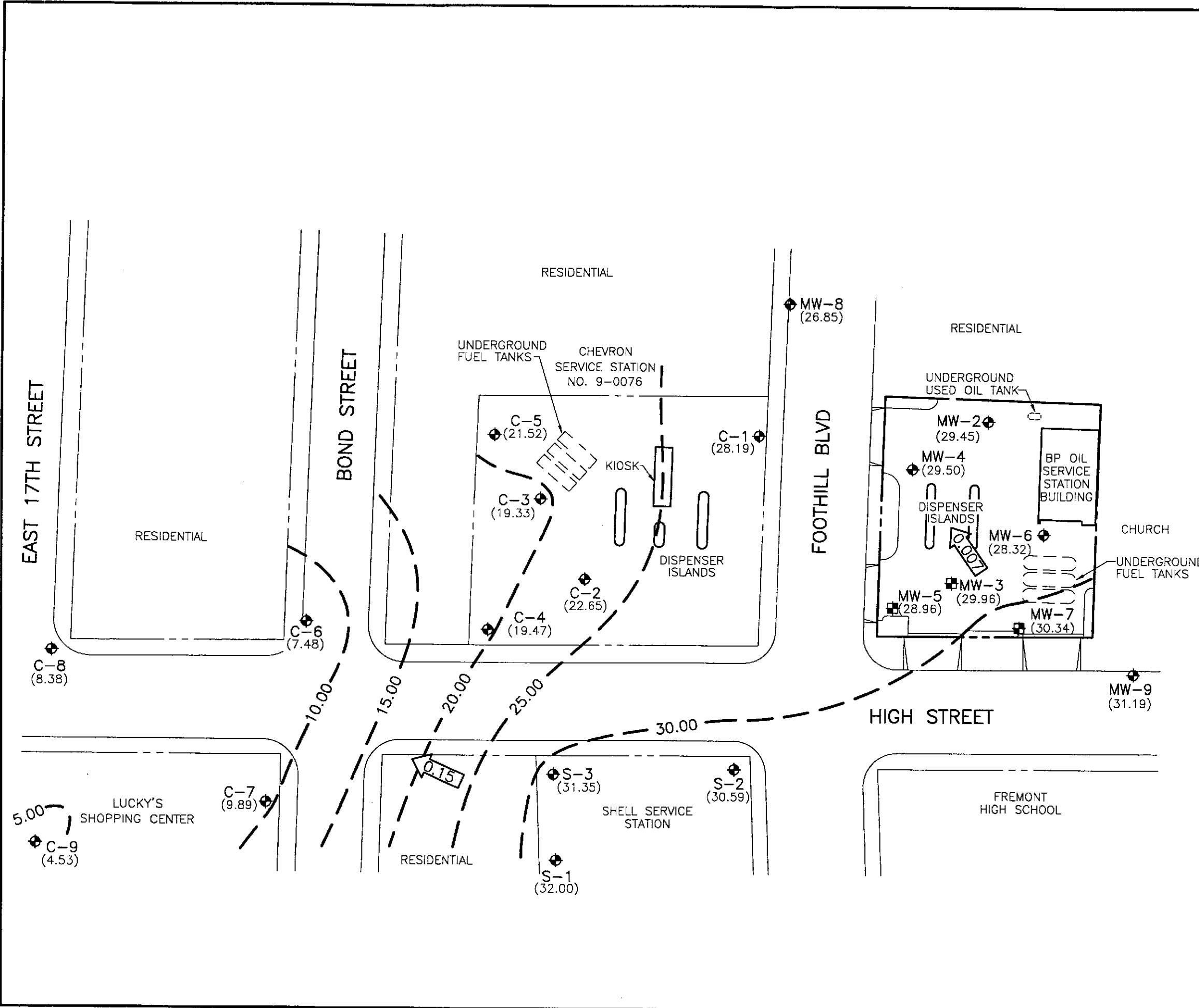
FIGURE 1
SITE VICINITY MAP

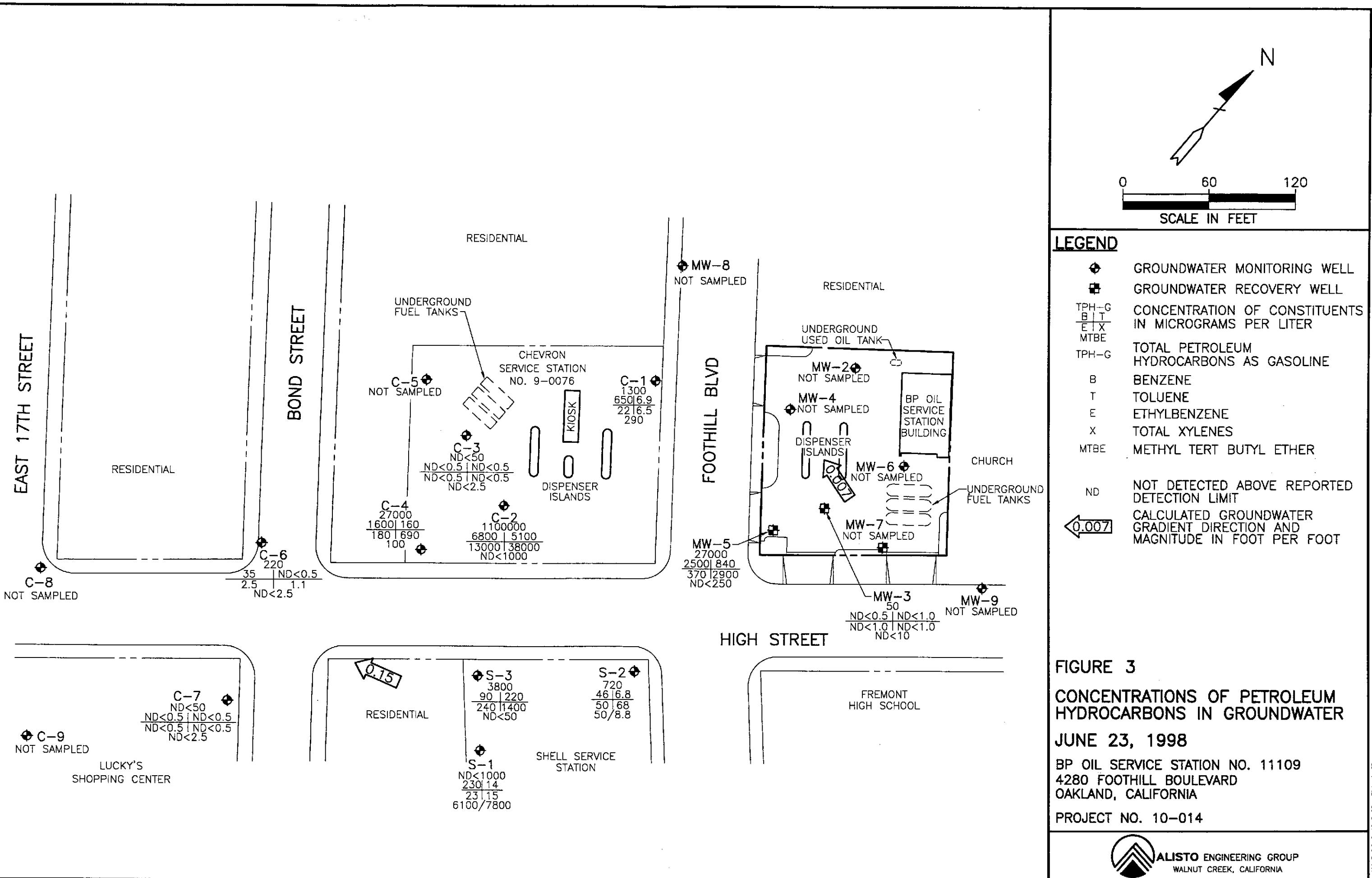
BP OIL SERVICE STATION NO. 11109
4280 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. 10-014



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA





APPENDIX A
WATER SAMPLING FIELD SURVEY FORMS

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK, CA 94598 (510)295-1650 FAX295-1823

Project No.	10-014-08-004	Date:	6/23/98
Address	4280 Foothill Blvd	Day:	M T W TH F
Contract No.	H176522	City:	Oakland
Station No.	BP 11109	Sampler:	L-CB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS: JOINT MONITORING 6/16/98
MW-2	NIS	2"	30.10	11.77	Ø	0820	Not Sampled
MW-3	S-1	4"	31.80	10.17		0841	
MW-4	NIS	4"	34.28	10.61	Ø	0856	Not Sampled
MW-5	S-2	4"	-35	10.20	0.2	0844	QC-1(S-3) from this well
MW-6	NIS	4"	34.28	13.27	Ø	0823	Not Sampled
MW-7	1	6"	33.42	9.98		0830	Not Sampled
MW-8	1	2"	29.71	11.33		0834	Not Sampled
MW-9	1	2"	29.31	10.06	✓	0838	Not Sampled

FIELD INSTRUMENT CALIBRATION DATA

pH METER Icm 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED Y N TIME 0900

D.O. METER Icm ZERO d.O. SOLUTION BAROMETRIC PRESSURE 760 TEMP WEATHER Clear

CONDUCTIVITY METER Icm 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.	<input type="radio"/> EPA 601
MW-3	10.17	4"	0C	Ø	Y	(N)	15	0918	66.9	7.36	1.17ms	2.9	<input checked="" type="radio"/> TPH-G/BTEX
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.					30	65.2	7.26	1.21ms		<input type="radio"/> TPH Diesel
$31.80 - 10.17 = 21.63 \times .65 = 14.06 \times 3 = 42.18$								43	0940	64.6	7.22	1.21ms	<input type="radio"/> TOG 5520
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> Disp.Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Baller(s) <input type="checkbox"/> Sys Port												TIME/SAMPLE ID	
Comments:												0945	

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING

GROUP

1575 TREAT BOULEVARD, SUITE 201

WALNUT CREEK CA 94598 (510) 295-1650 FAX 295-1823

Project No.	10-014-08-004	Date:	6/23/98
Address	4280 Foothill Blvd	Day:	M T W TH F
Contract No.	H176522	City:	Oakland
Station No.	BP 11109	Sampler:	LUB

Well ID	Depth to Water	Diam	Cap/Lock	Product	Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-5	10.20	4"	OIL	X	(Y)	N	17	1010	67.6	7.96	1.16 ms	1.6
Total Depth - Water Level =	x Well Vol. Factor =	x#vol. to Purge	PurgeVol.				34		67.1	7.83	1.26 ms	
$\sim 35.00 - 10.20 = 24.80 \times .65 = 16.12 \times 3 = 48.36$							49	1050	66.6	7.77	1.24 ms	2.1
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> Disp.Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Baller(s) <input type="checkbox"/> Sys Port												
Comments: $D = 10.18' \quad P = .02$												1052
TIME/SAMPLE ID												

MW-5 Removed ~.05 gal EP

EPA 601

TPH-G/BTEX

TPH Diesel

TOC 5520

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



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

July 8, 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 June 25, 1998. The sample(s) was assigned to Certificate of Analysis No.(s) 9806C05 and analyzed for all parameters as listed on the chain of custody.

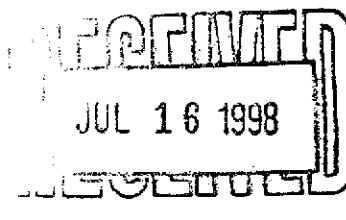
Any data flag or quality control exception associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s).

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

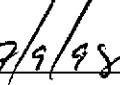
Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 98-06-C05

Approved for Release by:



Joel Grice, Senior Organic Project Manager



Date: 7/9/98

Greg Grandits
Laboratory Director

Cynthia Schreiner
Quality Assurance Officer

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



Certificate of Analysis No. H9-9806C05-01

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

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

P.O. #
H176522, COC#098636
DATE: 07/07/98

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

PROJECT NO: 10-14-08-004
MATRIX: WATER
DATE SAMPLED: 06/23/98
DATE RECEIVED: 06/25/98

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 103
4-Bromofluorobenzene 97

Method 8020A***

Analyzed by: AA

Date: 07/06/98

Gasoline Range Organics 0.050 0.05 P mg/L

Surrogate % Recovery
1,4-Difluorobenzene 93
4-Bromofluorobenzene 100

California LUFT Manual for Gasoline

Analyzed by: AA

Date: 07/06/98 04:07:00

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



Certificate of Analysis No. H9-9806C05-02

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

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

P.O. #
H176522, COC#098636
DATE: 07/07/98

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

PROJECT NO: 10-14-08-004
MATRIX: WATER
DATE SAMPLED: 06/23/98
DATE RECEIVED: 06/25/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	250	ug/L
Benzene	2500	12	ug/L
Toluene	840	25	ug/L
Ethylbenzene	370	25	ug/L
Total Xylene	2900	25	ug/L

Surrogate

1,4-Difluorobenzene % Recovery 117
4-Bromofluorobenzene 100

Method 8020A***

Analyzed by: AA

Date: 07/06/98

Gasoline Range Organics

27 1.2 P mg/L

Surrogate

1,4-Difluorobenzene % Recovery 119
4-Bromofluorobenzene 109

California LUFT Manual for Gasoline

Analyzed by: AA

Date: 07/06/98 04:59:00

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



Certificate of Analysis No. H9-9806C05-03

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

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

P.O. #

H176522, COC#098636
DATE: 07/07/98

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

PROJECT NO: 10-14-08-004
MATRIX: WATER
DATE SAMPLED: 06/23/98
DATE RECEIVED: 06/25/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	500 P	ug/L
Benzene	2600	25 P	ug/L
Toluene	840	50 P	ug/L
Ethylbenzene	400	50 P	ug/L
Total Xylene	2950	50 P	ug/L

Surrogate

% Recovery

1,4-Difluorobenzene
4-Bromofluorobenzene

107

100

Method 8020A***

Analyzed by: AA

Date: 07/06/98

Gasoline Range Organics

27 2.5 P

mg/L

Surrogate

% Recovery

1,4-Difluorobenzene
4-Bromofluorobenzene

107

100

California LUFT Manual for Gasoline

Analyzed by: AA

Date: 07/06/98 05:25:00

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



** SPL BATCH QUALITY CONTROL REPORT **

METHOD 8020

HOUSTON LABORATORY

8880 INTERCHANGE DRIVE

HOUSTON, TEXAS 77054

PHONE (713) 660-0901

Units: ug/L

Batch Id: VARE980706213700

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
MTBE	ND	50	43	86.0	72 - 128
Benzene	ND	50	51	102	61 - 119
Toluene	ND	50	51	102	65 - 125
EthylBenzene	ND	50	50	100	70 - 118
O Xylene	ND	50	51	102	72 - 117
M & P Xylene	ND	100	100	100	72 - 116

MATRIX SPIKES

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
MTBE	ND	100	93	93.0	78	78.0	17.5	20	39 - 150
BENZENE	ND	100	95	95.0	80	80.0	17.1	21	32 - 164
TOLUENE	ND	100	95	95.0	81	81.0	15.9	20	38 - 159
ETHYLBENZENE	ND	100	91	91.0	77	77.0	16.7	19	52 - 142
O XYLENE	ND	100	97	97.0	82	82.0	16.8	18	53 - 143
M & P XYLENE	ND	200	190	95.0	160	80.0	17.1 *	17	53 - 144

* = 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)

Analyst: AA

Sequence Date: 07/06/98

SPL ID of sample spiked: 9806A93-01A

Sample File ID: E_G1025.TX0

Method Blank File ID:

Blank Spike File ID: E_G1014R.TX0

Matrix Spike File ID: E_G1016.TX0

Matrix Spike Duplicate File ID: E_G1017.TX0

SAMPLES IN BATCH(SPL ID):

9806A84-02A 9806A84-01A 9806A93-01A 9806A93-02A
 9806C07-02A 9806C06-04A 9806C06-02A 9806C06-03A
 9806C07-01A 9806C07-03A 9806C07-05A 9806C07-06A
 9806C05-01A 9806C05-02A 9806C05-03A



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

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

Units: mg/L

Batch Id: VARE980706211100

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) * Recovery Range
			Result <1>	Recovery %	
Gasoline Range Organics	ND	1.0	1.1	110	64 - 131

MATRIX SPIKES

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
GASOLINE RANGE ORGANICS	ND	0.9	0.70	77.8	0.74	82.2	5.50	36	36 - 160

* = 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):

9806A93-01A 9806A93-02A 9806A71-14C 9806A71-02C
9806C07-02A 9806A71-01C 9806A71-13C 9806C06-04A
9806C06-02A 9806C06-03A 9806C07-01A 9806C07-03A
9806C07-05A 9806C07-06A 9806C05-01A 9806C05-02A
9806C05-03A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

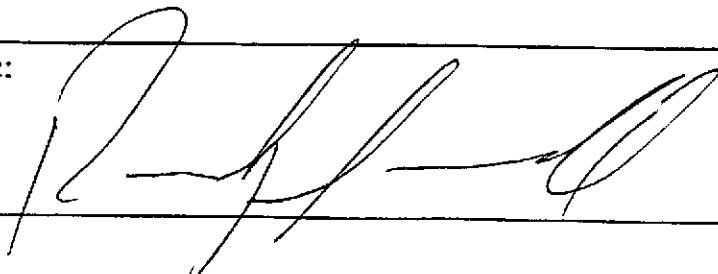
SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
6-25-98	10 ⁰⁰

SPL Sample ID:
9806005

	<u>Yes</u>	<u>No</u>
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:	2	C
10 Method of sample delivery to SPL:	SPL Delivery Client Delivery FedEx Delivery (airbill #) Other:	80518847548
11 Method of sample disposal:	SPL Disposal HOLD Return to Client	—

Name:	Date:
	6-25-98



CHAIN OF CUSTODY

980605
No. 0986

No. 098636

Page _____ of _____

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

BP Site Number: 11109
ERM Contract: H176522
Sampling Date: 6/25/98
Matrix Description: Water
Date Final Report Received: 7/16/98
Laboratory & Location: SPL, Houston, Texas

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

MS/MSD relative % difference value for M & P 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): Brady Nagle

Date: 10/15/98