

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-014-05-004

MAY 23

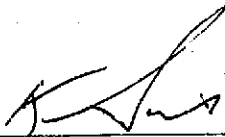
Prepared for:

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

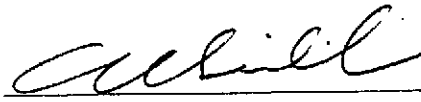
Prepared by:

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

May 20, 1996



**Ken Simas
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. 10-014-05-004

May 20, 1996

INTRODUCTION

This report presents the results and findings of the March 21, 1996 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 relative to mean sea level. The survey data and groundwater elevation measurements collected to date are presented in Table 1.

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

Groundwater monitoring was performed concurrently at the neighboring Shell service station, 4411 Foothill Boulevard, and the Chevron U.S.A. service station, 4265 Foothill Boulevard. The results are presented in Tables 2 and 3.

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples for this and previous quarters are summarized in Table 1. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown on Figure 2. The results of groundwater analysis are shown on Figure 3. The laboratory report and chain of custody record are presented in Appendix B.



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

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
MW-1	01/31/90	38.19	15.41	---	22.78	---	---	---	---	---	---	---	---	---	---	---
MW-1 (c)	02/05/90	38.19	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/05/90	41.22	21.90	---	19.31	1300	---	14	ND<0.1	9	13	---	---	---	---	SUP
MW-2	02/14/91	41.22	21.16	---	20.06	ND<50	ND<10000	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	51	(d)	SUP
MW-2	05/13/91	41.22	21.32	---	19.90	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	6000	0.5	(e)	SUP
MW-2	07/24/91	41.22	22.92	---	18.30	---	---	---	---	---	---	---	---	---	---	---
MW-2	10/03/91	41.22	24.90	---	16.32	ND<50	ND<50	ND<0.3	0.8	ND<0.3	ND<0.3	---	ND<5000	0.7	(e)	SUP
MW-2	10/15/91	41.22	24.10	---	17.12	---	---	---	---	---	---	---	---	---	---	---
MW-2 (f)	12/04/91	41.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	12/16/91	41.22	23.95	---	17.27	---	---	---	---	---	---	---	---	---	---	---
MW-2	01/06/92	41.22	23.30	---	17.92	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	ANA
MW-2	01/22/92	41.22	23.14	---	18.08	---	---	---	---	---	---	---	---	---	---	---
MW-2	01/28/92	41.22	22.99	---	18.23	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/05/92	41.22	22.63	---	18.59	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/12/92	41.22	22.04	---	19.18	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/17/92	41.22	20.84	---	20.38	---	---	---	---	---	---	---	---	---	---	---
MW-2	04/03/92	41.22	18.29	---	22.93	---	---	---	---	---	---	---	---	---	---	---
MW-2	04/08/92	41.22	18.86	---	22.36	ND<50	63	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-2	04/14/92	41.22	19.45	---	21.77	---	---	---	---	---	---	---	---	---	---	---
MW-2	04/29/92	41.22	20.35	---	20.87	---	---	---	---	---	---	---	---	---	---	---
MW-2	05/07/92	41.22	20.84	---	20.38	---	---	---	---	---	---	---	---	---	---	---
MW-2	07/03/92	41.22	22.34	---	18.88	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-2	10/08/92	41.22	23.73	---	17.49	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-2	12/31/92	41.22	21.12	---	20.10	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-2	04/21/93	41.22	17.68	---	23.54	ND<50	ND<50 (g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	PAGE
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)	PAGE
MW-2	09/21/93	41.22	21.93	---	19.29	ND<50	---	0.9	0.7	0.7	2.6	---	---	---	---	PAGE
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	---	---	---	---	PAGE
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	PAGE
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	PAGE
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	PAGE
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

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)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
MW-3	02/05/90	40.74	17.45	---	23.29	1400	---	15	ND<2.5	11	8	---	---	---	---	SUP
MW-3	02/14/91	40.74	18.52	---	22.22	320	---	8	ND<0.3	8	1	---	---	---	---	SUP
MW-3	05/13/91	40.74	19.32	---	21.42	640	---	13	ND<0.3	18	1	---	---	---	---	SUP
MW-3	07/24/91	40.74	20.69	---	20.05	---	---	---	---	---	---	---	---	---	---	---
MW-3	10/03/91	40.74	19.47	---	21.27	940	---	21	ND<0.3	23	2.1	---	---	---	---	SUP
MW-3	10/15/91	40.74	20.46	---	20.26	---	---	---	---	---	---	---	---	---	---	---
MW-3	12/04/91	40.74	18.29	---	22.45	---	---	---	---	---	---	---	---	---	---	---
MW-3	12/16/91	40.74	18.34	---	22.40	---	---	---	---	---	---	---	---	---	---	---
MW-3	01/06/92	40.74	18.50	---	22.24	580	---	6.1	1	6.1	7.1	---	---	---	---	ANA
MW-3	01/22/92	40.74	17.86	---	22.88	---	---	---	---	---	---	---	---	---	---	---
MW-3	01/28/92	40.74	15.84	---	24.90	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/05/92	40.74	17.53	---	23.21	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/12/92	40.74	17.15	---	23.59	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/17/92	40.74	16.18	---	24.56	---	---	---	---	---	---	---	---	---	---	---
MW-3	04/03/92	40.74	14.80	---	25.94	---	---	---	---	---	---	---	---	---	---	---
MW-3	04/08/92	40.74	17.06	---	23.68	1100	---	30	4.6	32	11	---	---	---	---	ANA
MW-3	04/14/92	40.74	15.22	---	25.52	---	---	---	---	---	---	---	---	---	---	---
MW-3	04/29/92	40.74	15.90	---	24.84	---	---	---	---	---	---	---	---	---	---	---
MW-3	05/07/92	40.74	16.35	---	24.39	---	---	---	---	---	---	---	---	---	---	---
MW-3	07/03/92	40.74	17.74	---	23.00	1200	---	38	ND<2.5	24	ND<2.5	---	---	---	---	ANA
MW-3	10/08/92	40.74	19.06	---	21.68	1400	---	31	ND<0.5	25	13	---	---	---	---	ANA
MW-3	12/31/92	40.74	16.61	---	24.13	820	---	12	4.1	13	5.9	---	---	---	---	ANA
QC-1	(h) 12/31/92	40.74	---	---	---	960	---	11	3.6	10	3.8	---	---	---	---	ANA
MW-3	04/21/93	40.74	14.24	---	26.50	420	---	5.6	ND<0.5	3.9	1.4	---	---	---	---	PACE
QC-1	(h) 04/21/93	40.74	---	---	---	390	---	5.0	ND<0.5	3.7	1.5	---	---	---	---	PACE
MW-3	07/07/93	40.13	(i) 15.19	---	24.94	54	---	0.6	0.6	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-3	09/21/93	40.13	16.58	---	23.55	540	---	7.9	0.9	4.7	2.4	---	---	---	---	PACE
MW-3	12/17/93	40.13	15.82	---	24.31	---	---	---	---	---	---	---	---	---	---	---
MW-3	12/23/93	40.13	---	---	---	500	---	9.8	1.5	3.3	2.1	---	---	---	---	PACE
QC-1	(h) 12/23/93	40.13	---	---	---	480	---	9.2	ND<0.5	5.4	5.3	---	---	---	---	PACE
MW-3	04/07/94	40.13	28.50	---	11.63	460	---	20	7.4	8.9	11	---	---	---	---	PACE
QC-1	(h) 04/07/94	40.13	---	---	---	460	---	20	7.7	9.0	11	---	---	---	---	PACE
MW-3	07/06/94	40.13	---	---	---	300	---	10	0.6	1.7	6.4	---	---	---	---	4.8 PACE
MW-3	10/07/94	40.13	27.65	---	12.48	620	---	28	ND<0.5	2.2	12	---	---	---	---	4.4 PACE
MW-3	01/27/95	40.13	27.65	---	12.48	---	---	---	---	---	---	---	---	---	---	---
MW-3	03/30/95	40.13	26.05	---	14.08	300	---	10	6.0	3.4	18	---	---	---	7.6	ATI
MW-3	06/20/95	40.13	19.49	---	20.64	170	---	7.2	3.4	0.85	15	---	---	---	---	ATI
MW-3	10/03/95	40.13	24.93	---	15.20	170	---	2.1	ND<0.50	0.81	8.0	6.7	---	---	---	ATI
MW-3	12/06/95	40.13	25.14	---	14.99	1700	---	6.7	3.1	2.8	210	64	---	---	---	ATI
QC-1	(h) 12/06/95	40.13	---	---	---	1400	---	6.1	3.0	1.7	190	53	---	---	---	ATI
MW-3	03/21/96	40.13	9.48	---	30.65	ND<50	---	0.5	ND<1	ND<1	1	ND<10	---	---	7.3	SPL

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

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)	DEPTH TO WATER (Feet) (a)	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	39.14	---	---	---	45000	---	2900	540	260	2600	---	---	---	---	PACE
MW-5	01/27/95	39.14	28.70	---	10.44	---	---	---	---	---	---	---	---	---	---	---
MW-5	03/30/95	39.14	28.95	---	10.19	50000	---	7900	2600	520	6400	---	---	---	5.5	ATI
QC-1	(h) 03/30/95	39.14	---	---	---	43000	---	7900	2500	440	6200	---	---	---	---	ATI
MW-5	06/20/95	39.14	22.54	---	16.60	34000	---	5100	1900	300	3700	---	---	---	---	ATI
QC-1	(h) 06/20/95	39.14	---	---	---	26000	---	3500	290	ND<25	3300	---	---	---	---	ATI
MW-5	10/03/95	39.14	18.84	---	20.30	12000	---	68	42	11	1600	330	---	---	---	ATI
QC-1	(h) 10/03/95	39.14	---	---	---	12000	---	46	39	10	1600	320	---	---	---	ATI
MW-5	12/06/95	39.14	19.07	---	20.07	16000	---	1200	93	51	700	600	---	---	---	ATI
MW-5	03/21/96	39.14	7.43	---	31.71	1500	---	89	28	6	250	ND<10	---	---	7.2	SPL
QC-1	(h) 03/21/96	39.14	---	---	---	1900	---	92	30	7	270	ND<10	---	---	---	SPL

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	41.59	21.22	---	20.37	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-6	12/31/92	41.59	21.33	---	20.26	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-6	04/21/93	41.59	16.45	---	25.14	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-6	07/07/93	41.59	18.68	---	22.91	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-6	09/21/93	41.59	19.64	---	21.95	ND<50	---	ND<0.5	ND<0.5	ND<0.5	1.6	---	---	---	---	PACE
MW-6	12/17/93	41.59	21.08	---	20.51	---	---	---	---	---	---	---	---	---	---	---
MW-6	12/23/93	41.59	---	---	---	ND<50	---	ND<0.5	0.5	ND<0.5	0.6	---	---	---	---	PACE
MW-6	04/07/94	41.59	21.27	---	20.32	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	6.1 PACE
MW-6	07/06/94	41.59	19.81	---	21.78	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	4.0 PACE
QC-1 (h)	07/06/94	41.59	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---
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<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

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)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (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-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	(f) 13.40	---	26.92	1100	---	160	2.0	27	4.0	---	---	---	---	PACE
QC-1	(h) 07/07/93	40.32	---	---	---	1100	---	170	1.9	29	2.8	---	---	---	---	PACE
MW-7	09/21/93	40.32	14.40	---	25.92	690	---	150	3.1	26	5.7	---	---	---	---	PACE
QC-1	(h) 09/21/93	40.32	---	---	---	640	---	140	1.7	23	2.4	---	---	---	---	PACE
MW-7	12/17/93	40.32	13.65	---	26.67	---	---	---	---	---	---	---	---	---	---	---
MW-7	12/23/93	40.32	---	---	---	250	---	64	1.2	9.0	1.8	---	---	---	---	PACE
MW-7	04/07/94	40.32	30.62	---	9.70	140	---	32	1.4	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-7	07/06/94	40.32	16.88	---	23.44	410	---	94	1.3	10	3.5	---	---	---	4.4	PACE
MW-7	10/07/94	40.32	25.59	---	14.73	ND<50	---	9.2	ND<0.5	ND<0.5	ND<0.5	---	---	---	4.9	PACE
MW-7	01/27/95	40.32	9.82	---	30.50	810	---	570	3	60	17	---	---	---	0	ATI
QC-1	(h) 01/27/95	---	---	---	---	930	---	620	4	77	21	---	---	---	---	ATI
MW-7	03/30/95	40.32	9.15	---	31.17	180	---	65	0.53	2.0	ND<1.0	---	---	---	7.8	ATI
MW-7	06/20/95	40.32	11.38	---	28.94	2800	---	980	ND<5.0	ND<5.0	43	---	---	---	---	ATI
MW-7	10/03/95	40.32	29.95	---	10.37	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	ATI
MW-7	12/06/95	40.32	29.85	---	10.47	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	ATI
MW-7	03/21/96	40.32	9.76	---	30.56	1000	---	390	2	40	13	ND<10	---	---	7.4	SPL

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)	DEPTH TO WATER (Feet) (a)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (ug/l)	HVOC (ug/l)	DO (ppm)	LAB
MW-8	10/03/91	38.18	22.37	---	15.81	ND<50	---	ND<0.3	0.6	ND<0.3	0.9	---	---	---	---	SUP
MW-8	10/15/91	38.18	22.70	---	15.48	---	---	---	---	---	---	---	---	---	---	---
MW-8	12/04/91	38.18	22.44	---	15.74	---	---	---	---	---	---	---	---	---	---	---
MW-8	12/16/91	38.18	22.47	---	15.71	---	---	---	---	---	---	---	---	---	---	---
MW-8	01/06/92	38.18	21.94	---	16.24	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-8	01/22/92	38.18	21.44	---	16.74	---	---	---	---	---	---	---	---	---	---	---
MW-8	01/28/92	38.18	21.20	---	16.98	---	---	---	---	---	---	---	---	---	---	---
MW-8	02/05/92	38.18	20.88	---	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	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	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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	---	---	---	---	ANA
MW-9	10/08/92	41.25	14.89	---	26.36	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-9	12/31/92	41.25	11.90	---	29.35	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-9	04/21/93	41.25	13.68	---	27.57	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-9	07/07/93	41.25	13.12	---	28.13	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-9	09/21/93	41.25	14.00	---	27.25	ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.9	---	---	---	---	PACE
MW-9	12/17/93	41.25	12.98	---	28.27	---	---	---	---	---	---	---	---	---	---	---
MW-9	12/23/93	41.25	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.9	---	---	---	---	PACE
MW-9	04/07/94	41.25	13.24	---	28.01	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	4.7	PACE
MW-9	07/06/94	41.25	13.77	---	27.48	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	3.9	PACE
MW-9	10/07/94	41.25	14.60	---	26.65	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	3.0	PACE
MW-9	01/27/95	41.25	8.47	---	32.78	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	---	2.5	ATI
MW-9	03/30/95	41.25	8.19	---	33.06	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	8.4	ATI
MW-9	06/20/95	41.25	11.25	---	30.00	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	8.1	ATI
MW-9	10/03/95	41.25	14.68	---	26.57	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	6.0	ATI
MW-9	12/06/95	41.25	16.07	---	25.18	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	46	---	---	5.4	ATI
MW-9	03/21/96	41.25	9.60	---	31.65	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	8.0	SPL

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
QC-2	(i)	10/08/92	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
QC-2	(i)	12/31/92	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
QC-2	(i)	04/21/93	---	---	---	---	---	---	---	---	---	---	---	ND	---	PACE
QC-2	(i)	07/07/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.6	---	---	---	---	PACE
QC-2	(i)	09/21/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(i)	12/23/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(i)	04/07/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(i)	07/06/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(i)	10/07/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(i)	01/27/95	---	---	---	ND<50	---	ND<0.5	0.5	ND<0.5	ND<1	---	---	---	---	ATI
QC-2	(i)	03/30/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2	(i)	06/20/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2	(i)	10/03/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	ATI
QC-2	(i)	12/06/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	ATI
QC-2	(i)	03/21/96	---	---	---	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 Anamatrix, Inc.
 PACE Pace, Inc.
 ATI Analytical Technologies, Inc.
 SPL SPL, Inc.

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) Travel blank.

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
 SHELL SERVICE STATION
 4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-014

WELL ID	DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)
S-1	03/30/95	38.31	6.09	32.22
S-1	06/20/95	38.31	7.30	31.01
S-1	12/06/95	38.31	11.64	26.67
S-1	03/21/96	38.31	6.87	31.44
S-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-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

NOTES:

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

SOURCE:

Groundwater data collected by Weiss Associates

F:\010-014\014-5-4B.WQ2

TABLE 3 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
 CHEVRON U.S.A. SERVICE STATION NO. 9-0076
 4265 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

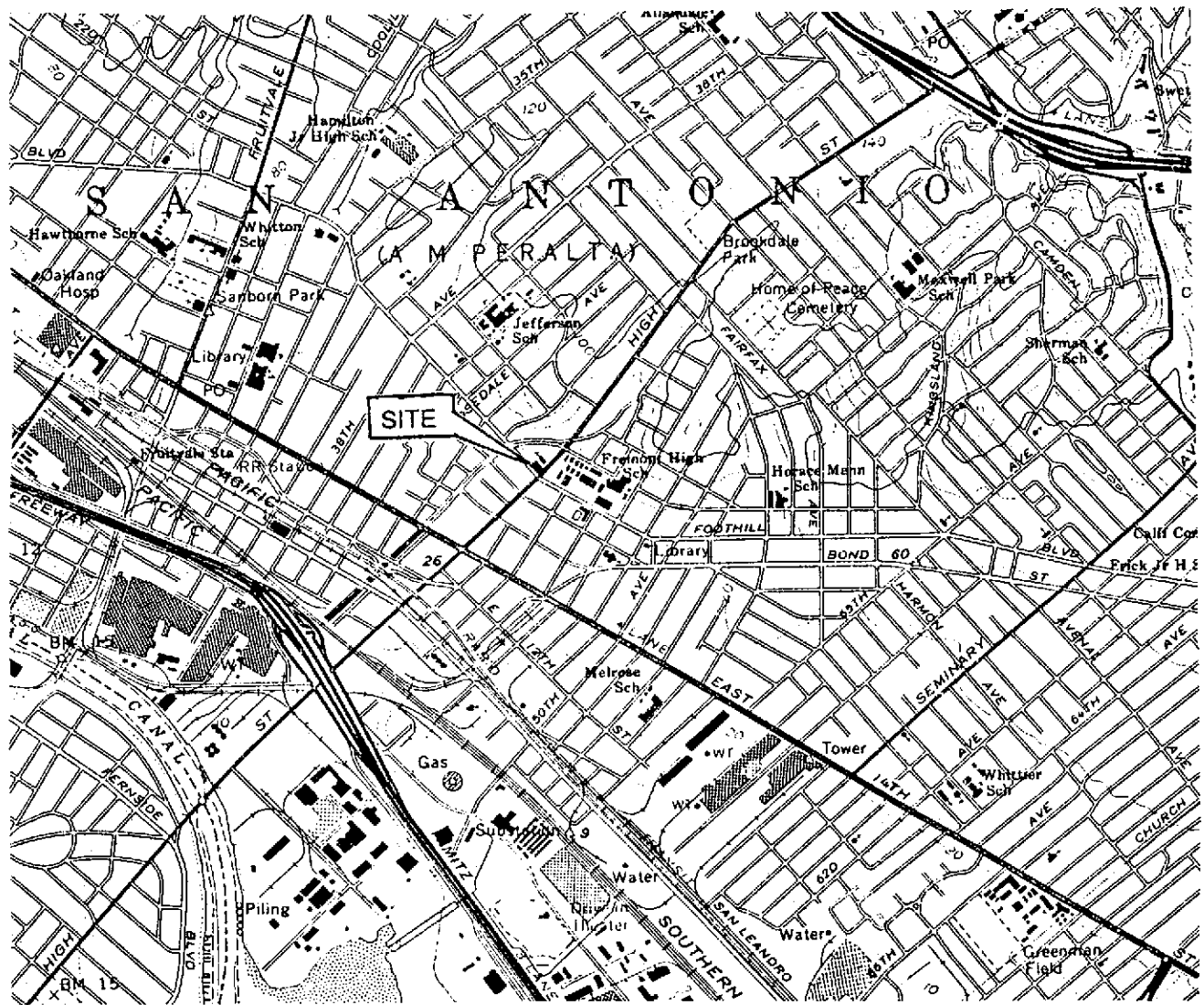
ALISTO PROJECT NO. 10-014

WELL ID	DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)
C-1	07/14/92	38.41	27.61	0.00	10.80
C-1	10/08/92	38.41	24.44	0.00	13.97
C-1	09/21/93	38.41	21.42	0.00	16.99
C-1	03/30/95	38.41	12.02	0.00	26.39
C-1	06/20/95	38.41	14.40	0.00	24.01
C-1	03/21/96	38.41	11.65	0.00	26.76
C-2	07/14/92	37.47	---	---	---
C-2	10/08/92	37.47	---	---	---
C-2	09/21/93	37.47	26.29	0.00	11.18
C-2	03/30/95	37.47	17.18	0.00	20.29
C-2	06/20/95	37.47	18.95	0.00	18.52
C-2	03/21/96	37.47	16.17	0.00	21.30
C-3	07/14/92	38.37	27.87	0.00	10.50
C-3	10/08/92	38.37	28.55	0.00	9.82
C-3	09/21/93	38.37	26.22	0.00	12.15
C-3	03/30/95	38.37	18.42	0.00	19.95
C-3	06/20/95	38.37	19.79	0.00	18.58
C-3	03/21/96	38.37	17.85	0.00	20.52
C-4	07/14/92	36.49	26.89	0.00	9.60
C-4	10/08/92	36.49	27.79	0.00	8.70
C-4	09/21/93	36.49	25.51	0.00	10.98
C-4	03/30/95	36.49	14.86	0.00	21.63
C-4	06/20/95	36.49	16.90	0.00	19.59
C-4	03/21/96	36.49	14.10	0.00	22.39
C-5	07/14/92	38.50	28	0.00	10.50
C-5	10/08/92	38.50	28.65	0.00	9.65
C-5	09/21/93	38.50	26.36	0.00	12.14
C-5	03/30/95	38.50	18.54	0.00	19.96
C-5	06/20/95	38.50	20.13	0.00	18.37
C-5	03/21/96	38.50	18.40	0.00	20.10
C-6	07/14/92	35.40	38.89	0.00	-3.49
C-6	10/08/92	35.40	38.67	0.00	-3.27
C-6	09/21/93	35.40	33.98	0.00	1.42
C-6	03/30/95	35.40	26.38	0.00	9.02
C-6	06/20/95	35.40	25.01	0.00	10.39
C-6	03/21/96	35.40	23.12	0.00	12.28
C-7	07/14/92	35.19	39.77	0.00	-4.58
C-7	10/08/92	35.19	39.14	0.00	-3.95
C-7	09/21/93	35.19	35.46	0.00	-0.27
C-7	03/30/95	35.19	27.60	0.00	7.59
C-7	06/20/95	35.19	27.87	0.00	7.32
C-7	03/21/96	35.19	27.85	0.00	7.34
C-8	07/14/92	34.68	39.02	0.00	-4.34
C-8	10/08/92	34.68	38.68	0.00	-4.00
C-8	09/21/93	34.68	35.30	0.00	-0.62
C-8	03/30/95	34.68	29.24	0.00	5.44
C-8	06/20/95	34.68	28.34	0.00	6.34
C-8	03/21/96	34.68	28.65	0.00	6.03

NOTES:

- (a) Top of casing elevations surveyed relative to 1929 NGVD.
Measured in feet above mean sea level.
- (b) Groundwater elevations in feet above mean sea level.
- Not measured.

Source: Groundwater data collected by Blaine Tech Services Inc.



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

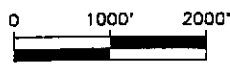
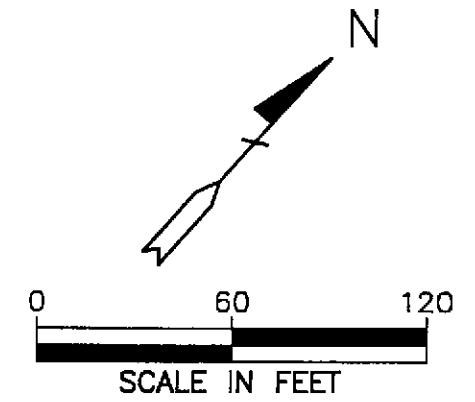
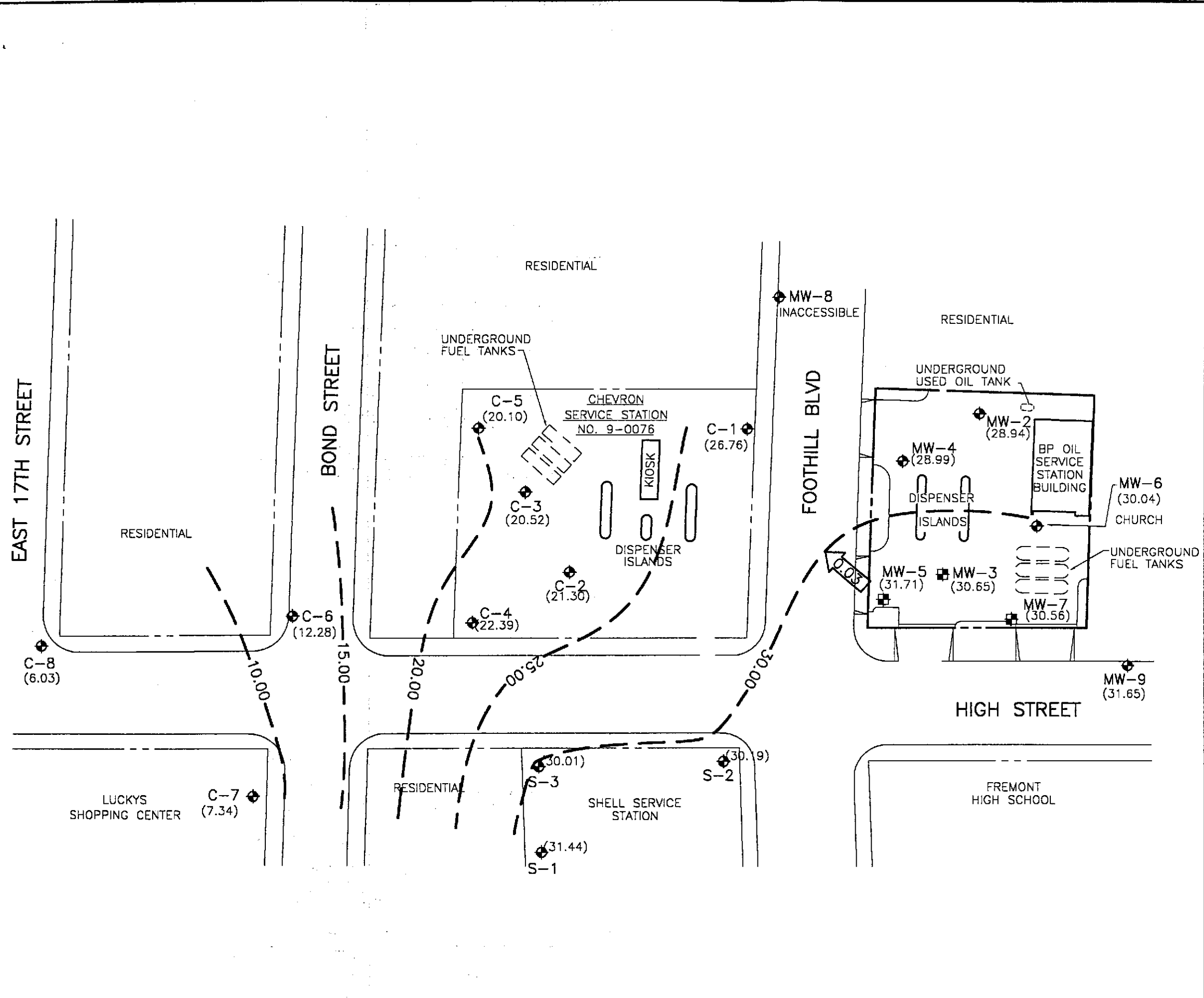


FIGURE 1
SITE VICINITY MAP
 BP OIL SERVICE STATION NO. 11109
 4280 FOOTHILL BOULEVARD
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-014

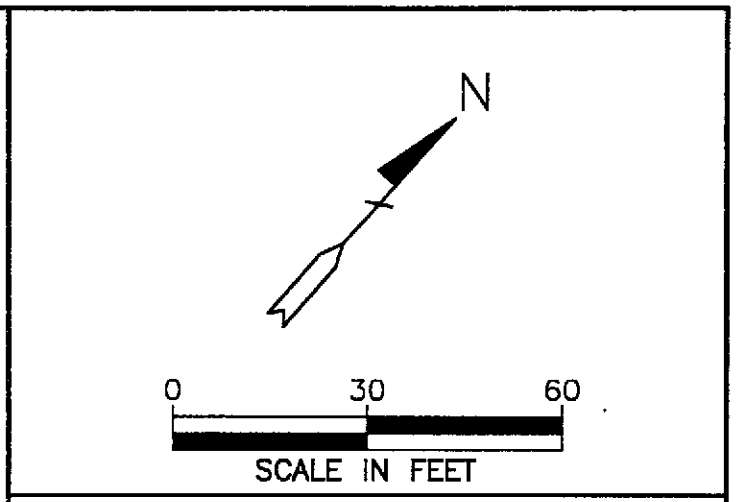
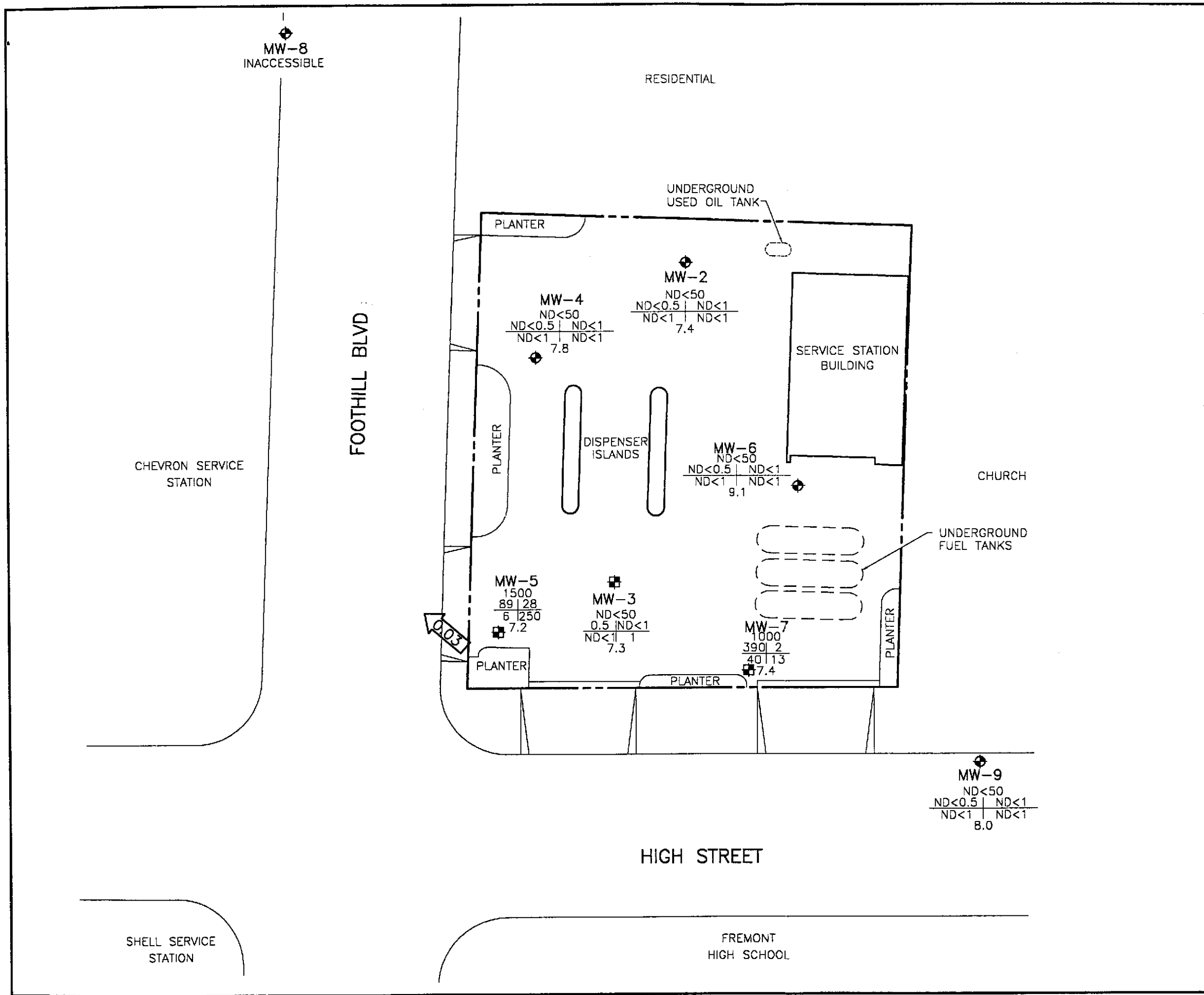
ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA



- LEGEND**
- ◆ GROUNDWATER MONITORING WELL
 - ⊠ GROUNDWATER RECOVERY WELL
 - (7.34) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
 - - - 10.00 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL-5.00 FEET)
 - ← 0.02 ← CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
MARCH 21, 1996
 BP OIL SERVICE STATION NO. 11109
 4280 FOOTHILL BOULEVARD
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-014

100140-01.DWG 05-15-96 JAC 1-80



LEGEND

- ◆ GROUNDWATER MONITORING WELL
- ⊕ GROUNDWATER RECOVERY WELL
- TPH-G
B | T
E | X
DO
CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
- TPH-G
B
T
E
X
DO
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X TOTAL XYLENES
- DO DISSOLVED OXYGEN
- ND NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- ←0.02 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3
CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER
MARCH 21, 1996
 BP OIL SERVICE STATION NO. 11109
 4280 FOOTHILL BOULEVARD
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-014

10014E-0.DWG 05-15-96 JVC 1-30

APPENDIX A
WATER SAMPLING FIELD SURVEY FORMS

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201

Project No. 10-014-05-004 Date: 3/21/96
Address 4280 Foothill Blvd Day: MTWTF
Contract No. 6602076 City: OAKLAND CA
Station No. 1109 Sampler: DC

WELL ID	SAMPLE ID	DEPTH TO WATER	TOTAL DEPTH	PRODUCT THICKNESS	TIME	COMMENTS:
MW-9	S-1	9.60	29.31	Φ	1001	
MW-4	S-2	11.12	34.28		1008	
MW-2	S-3	12.28	30.10		1016	
MW-6	S-4	11.55	34.28		1020	
MW-7	S-5	9.76	33.48		1025	
MW-3	S-6	9.48	31.80		1032	
MW-5	S-7	7.43	Nm	∇	1040	
MW-8	NST	-	-	-	-	car parked on well cannot locate owner

FIELD INSTRUMENT CALIBRATION DATA

* * * pH METER Hylec 4.00 7.00 10.00 ✓ TEMPERATURE COMPENSATED (Y) N TIME 1115
D.O. METER ICM ZERO d.O. SOLUTION 0.2ppm BAROMETRIC PRESSURE 761 TEMP 66°F WEATHER Sunny
* * * CONDUCTIVITY METER Hylec 10,000 ✓ TURBIDITY METER _____ 5.0 NTU _____ OTHER _____

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Irridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.	
MW-9	9.60	2"	OL	Φ	Y (N)	3	1124	74.4	6.19	0.61	8.1	<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level =						6	1129	72.1	6.29	0.59		<input checked="" type="checkbox"/> TPH-G/BTEX <u>H</u>
$29.31 - 9.60 = 19.71 \times .16 = 3.15 \times 3 = 9.48$						9.5	1135	72.7	6.33	0.59	8.0	<input type="checkbox"/> TPH Diesel _____
Purge Method: <input checked="" type="checkbox"/> Surface Pump ODisp. Tube OWinch ODisp. Bailor(s) OSys Port												<input type="checkbox"/> TOG 5520 _____
Comments:												TIME/SAMPLE ID <u>1140 / S-1</u>
MW-4	11.12	4"	replaced	Φ	Y (N)	15	1150	70.6	6.90	0.68	8.2	<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level =						30	1156	68.9	6.82	0.68		<input checked="" type="checkbox"/> TPH-G/BTEX <u>H</u>
$34.28 - 11.12 = 23.16 \times .65 = 15.05 \times 3 = 45.16$						45.25	1202	68.5	6.74	0.68	7.8	<input type="checkbox"/> TPH Diesel _____
Purge Method: <input checked="" type="checkbox"/> Surface Pump ODisp. Tube OWinch ODisp. Bailor(s) OSys Port												<input type="checkbox"/> TOG 5520 _____
Comments:												TIME/SAMPLE ID <u>1207 / S-2</u>

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP

Groundwater Sampling

1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94596 (510) 295-1650 FAX 295-1823

Date: 3/21/96 Project No. 10-014-05-004
Day: Thur Station No. 11109
Weather: Sunny Address 4280 Foothill Blvd, Oakland CA
SAMPLER: DL

Well ID	Depth to Water	Diam	Cap/Lock	Product	Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.	
MW-2	12.28	2 1/2"	OL	Φ	Φ	3	1212	66.3	7.24	0.59	7.7		<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level=							6	1216	67.4	7.14	0.59		<input checked="" type="checkbox"/> TPH-G/BTEX <u>Hu</u>
x Well Vol. Factor=							8.75	1220	67.3	7.00	0.59	7.4	<input type="checkbox"/> TPH Diesel _____
x#vol. to Purge=													<input type="checkbox"/> TOG 5520 _____
Purge Vol.													Time Sampled
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> ODsp. Tube <input type="checkbox"/> OWinch <input type="checkbox"/> ODsp. Bailer(s) <input type="checkbox"/> OSys Port													1222 13-3
Comments:													
MW-6	11.55	4"	OL	Φ	Φ	15	1229	68.1	7.24	0.90	8.8		<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level=							30	1235	68.6	7.18	0.97		<input checked="" type="checkbox"/> TPH-G/BTEX <u>Hu</u>
x Well Vol. Factor=							44.5	1243	68.5	7.21	0.97	9.1	<input type="checkbox"/> TPH Diesel _____
x#vol. to Purge=													<input type="checkbox"/> TOG 5520 _____
Purge Vol.													Time Sampled
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> ODsp. Tube <input type="checkbox"/> OWinch <input type="checkbox"/> ODsp. Bailer(s) <input type="checkbox"/> OSys Port													1247 13-4
Comments:													
MW-7	9.76	6"	OL	Φ	Φ	40	1257	69.1	7.50	0.94	7.6		<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level=							60	1304	69.6	7.24	0.91		<input checked="" type="checkbox"/> TPH-G/BTEX <u>Hu</u>
x Well Vol. Factor=							70	1310	69.6	7.18	0.92	7.4	<input type="checkbox"/> TPH Diesel _____
x#vol. to Purge=													<input type="checkbox"/> TOG 5520 _____
Purge Vol.													Time Sampled
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> ODsp. Tube <input type="checkbox"/> OWinch <input type="checkbox"/> ODsp. Bailer(s) <input type="checkbox"/> OSys Port													1320 13-5
Comments:													
MW-3	9.48	4 1/2"	OL	Φ	Φ	15	1329	69.8	7.12	1.18	7.5		<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level=							30	1334	70.5	6.99	1.23		<input checked="" type="checkbox"/> TPH-G/BTEX <u>Hu</u>
x Well Vol. Factor=							43.75	1339	70.7	6.91	1.22	7.3	<input type="checkbox"/> TPH Diesel _____
x#vol. to Purge=													<input type="checkbox"/> TOG 5520 _____
Purge Vol.													Time Sampled
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> ODsp. Tube <input type="checkbox"/> OWinch <input type="checkbox"/> ODsp. Bailer(s) <input type="checkbox"/> OSys Port													1340 13-6
Comments:													
MW-5	7.43	4"	OL	Φ	Φ	30		68.7	8.02	0.53	7.2		<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level=							40		68.9	7.87	0.52		<input checked="" type="checkbox"/> TPH-G/BTEX <u>Hu</u>
x Well Vol. Factor=							54		69.1	7.81	0.52	7.2	<input type="checkbox"/> TPH Diesel _____
x#vol. to Purge=													<input type="checkbox"/> TOG 5520 _____
Purge Vol.													Time Sampled
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> ODsp. Tube <input type="checkbox"/> OWinch <input type="checkbox"/> ODsp. Bailer(s) <input type="checkbox"/> OSys Port													1410 13-7
Comments: <u>DL-1 from this well (3-8)</u>													

* Conductivity readings are in x1000 µs/cm units

** System is not operating, will have away water in the well

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



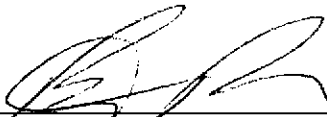
HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL, INC.

REPORT APPROVAL SHEET


WORK ORDER NUMBER: 96 - 03 - B57

Approved for release by:



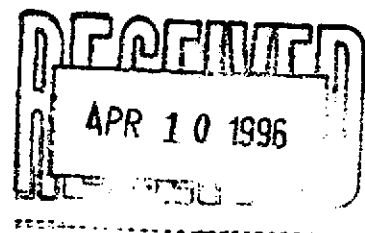
M. Scott Sample, Laboratory Director

Date: 4/8/96



Ed Fry, Project Manager

Date: 4/11/96





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

Certificate of Analysis No. H9-9603B57-01

Alisto Engineering
 1575 Treat Blvd.
 Walnut Creek, CA 94598
 ATTN: Bill Howell

P.O.#
 G602076 , COC# 055961
 DATE: 04/03/96

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

PROJECT NO: 10-014-05-004
 MATRIX: WATER
 DATE SAMPLED: 03/21/96 11:40:00
 DATE RECEIVED: 03/23/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1 P	µg/L
Ethylbenzene	ND	1 P	µg/L
Total Xylene	ND	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	83
4-Bromofluorobenzene	78

METHOD 8020***

Analyzed by: YN

Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
---------------------------------------	----	--------	------

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	83

CA LUFT - Gasoline

Analyzed by: YN

Date: 04/01/96 10:03:00

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. H9-9603B57-02

Alisto Engineering
 1575 Treat Blvd.
 Walnut Creek, CA 94598
 ATTN: Bill Howell

P.O.#
 G602076 , COC# 055961
 DATE: 04/03/96

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

PROJECT NO: 10-014-05-004
 MATRIX: WATER
 DATE SAMPLED: 03/21/96 12:07:00
 DATE RECEIVED: 03/23/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1 P	µg/L
Ethylbenzene	ND	1 P	µg/L
Total Xylene	ND	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	84
4-Bromofluorobenzene	72

METHOD 8020***
 Analyzed by: YN
 Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
---------------------------------------	----	--------	------

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	77

CA LUFT - Gasoline
 Analyzed by: YN
 Date: 04/01/96 10:29:00

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. H9-9603B57-03

Alisto Engineering
 1575 Treat Blvd.
 Walnut Creek, CA 94598
 ATTN: Bill Howell

P.O.#
 G602076 , COC# 055961
 DATE: 04/03/96

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

PROJECT NO: 10-014-05-004
 MATRIX: WATER
 DATE SAMPLED: 03/21/96 12:22:00
 DATE RECEIVED: 03/23/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1 P	µg/L
Ethylbenzene	ND	1 P	µg/L
Total Xylene	ND	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	83
4-Bromofluorobenzene	72

METHOD 8020***

Analyzed by: YN

Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
---------------------------------------	----	--------	------

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	77

CA LUFT - Gasoline

Analyzed by: YN

Date: 04/01/96 10:56:00

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. H9-9603B57-04

Alisto Engineering
1575 Treat Blvd.
Walnut Creek, CA 94598
ATTN: Bill Howell

P.O.#
G602076 , COC# 055961
DATE: 04/03/96

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

PROJECT NO: 10-014-05-004
MATRIX: WATER
DATE SAMPLED: 03/21/96 12:47:00
DATE RECEIVED: 03/23/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	41	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1 P	µg/L
Ethylbenzene	ND	1 P	µg/L
Total Xylene	ND	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	84
4-Bromofluorobenzene	72

METHOD 8020***
Analyzed by: YN
Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline ND 0.05 P mg/L

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	76

CA LUFT - Gasoline
Analyzed by: YN
Date: 04/01/96 11:22:00

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

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

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



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

Certificate of Analysis No. H9-9603B57-05

Alisto Engineering
 1575 Treat Blvd.
 Walnut Creek, CA 94598
 ATTN: Bill Howell

P.O.#
 G602076 , COC# 055961
 DATE: 04/03/96

PROJECT: BP Oil #11109
 SITE: Oakland, CA
 SAMPLED BY: Alisto Engineering
 SAMPLE ID: S-5

PROJECT NO: 10-014-05-004
 MATRIX: WATER
 DATE SAMPLED: 03/21/96 13:20:00
 DATE RECEIVED: 03/23/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	390	0.5 P	µg/L
Toluene	2	1 P	µg/L
Ethylbenzene	40	1 P	µg/L
Total Xylene	13	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	CI
4-Bromofluorobenzene	115

METHOD 8020***

Analyzed by: YN

Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline	1.0	0.05 P	mg/L
---------------------------------------	-----	--------	------

Surrogate	% Recovery
1,4-Difluorobenzene	123
4-Bromofluorobenzene	150

CA LUFT - Gasoline

Analyzed by: YN

Date: 04/01/96 11:48:00

ND - Not detected.

(P) - Practical Quantitation Limit

CI - Coeluting interference.

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. H9-9603B57-06

Alisto Engineering
 1575 Treat Blvd.
 Walnut Creek, CA 94598
 ATTN: Bill Howell

P.O.#
 G602076 , COC# 055961
 DATE: 04/03/96

PROJECT: BP Oil #11109
 SITE: Oakland, CA
 SAMPLED BY: Alisto Engineering
 SAMPLE ID: S-6

PROJECT NO: 10-014-05-004
 MATRIX: WATER
 DATE SAMPLED: 03/21/96 13:40:00
 DATE RECEIVED: 03/23/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	0.5	0.5 P	µg/L
Toluene	ND	1 P	µg/L
Ethylbenzene	ND	1 P	µg/L
Total Xylene	1	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	84
4-Bromofluorobenzene	84

METHOD 8020***
 Analyzed by: YN
 Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline ND 0.05 P mg/L

Surrogate	% Recovery
1,4-Difluorobenzene	96
4-Bromofluorobenzene	87

CA LUFT - Gasoline
 Analyzed by: YN
 Date: 04/01/96 12:15:00

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

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

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



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

Certificate of Analysis No. H9-9603B57-07

Alisto Engineering
 1575 Treat Blvd.
 Walnut Creek, CA 94598
 ATTN: Bill Howell

P.O.#
 G602076 , COC# 055961
 DATE: 04/03/96

PROJECT: BP Oil #11109
 SITE: Oakland, CA
 SAMPLED BY: Alisto Engineering
 SAMPLE ID: S-7

PROJECT NO: 10-014-05-004
 MATRIX: WATER
 DATE SAMPLED: 03/21/96 14:10:00
 DATE RECEIVED: 03/23/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	89	0.5 P	µg/L
Toluene	28	1 P	µg/L
Ethylbenzene	6	1 P	µg/L
Total Xylene	250	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	115
4-Bromofluorobenzene	106

METHOD 8020***

Analyzed by: YN

Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline	1.5	0.05 P	mg/L
---------------------------------------	-----	--------	------

Surrogate	% Recovery
1,4-Difluorobenzene	133
4-Bromofluorobenzene	192 <

CA LUFT - Gasoline

Analyzed by: YN

Date: 04/01/96 12:41:00

ND - Not detected.

(P) - Practical Quantitation Limit

< - Recovery beyond control limits.

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. H9-9603B57-08

Alisto Engineering
 1575 Treat Blvd.
 Walnut Creek, CA 94598
 ATTN: Bill Howell

P.O.#
 G602076 , COC# 055961
 DATE: 04/03/96

PROJECT: BP Oil #11109
 SITE: Oakland, CA
 SAMPLED BY: Alisto Engineering
 SAMPLE ID: S-8

PROJECT NO: 10-014-05-004
 MATRIX: WATER
 DATE SAMPLED: 03/21/96
 DATE RECEIVED: 03/23/96

PARAMETER	ANALYTICAL DATA		UNITS
	RESULTS	DETECTION LIMIT	
MTBE	ND	10 P	µg/L
Benzene	92	0.5 P	µg/L
Toluene	30	1 P	µg/L
Ethylbenzene	7	1 P	µg/L
Total Xylene	270	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	106
4-Bromofluorobenzene	112

METHOD 8020***
 Analyzed by: YN
 Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline	1.9	0.05 P	mg/L
---------------------------------------	-----	--------	------

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	177 <

CA LUFT - Gasoline
 Analyzed by: YN
 Date: 04/01/96 04:45:00

ND - Not detected. (P) - Practical Quantitation Limit
 < - Recovery beyond control limits.

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. H9-9603B57-09

Alisto Engineering
 1575 Treat Blvd.
 Walnut Creek, CA 94598
 ATTN: Bill Howell

P.O.#
 G602076 , COC# 055961
 DATE: 04/03/96

PROJECT: BP Oil #11109
 SITE: Oakland, CA
 SAMPLED BY: Alisto Engineering
 SAMPLE ID: S-9

PROJECT NO: 10-014-05-004
 MATRIX: WATER
 DATE SAMPLED: 03/21/96
 DATE RECEIVED: 03/23/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1 P	µg/L
Ethylbenzene	ND	1 P	µg/L
Total Xylene	ND	1 P	µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	84
4-Bromofluorobenzene	70

METHOD 8020***

Analyzed by: YN

Date: 04/01/96

Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
---------------------------------------	----	--------	------

Surrogate	% Recovery
1,4-Difluorobenzene	95
4-Bromofluorobenzene	74

CA LUFT - Gasoline

Analyzed by: YN

Date: 04/01/96 03:10:00

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



Matrix: Aqueous
Units: µg/L

Batch Id: HP_J960401123300

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	48	96.0	20 - 110
Benzene	ND	50	51	102	62 - 121
Toluene	ND	50	49	98.0	66 - 136
EthylBenzene	ND	50	50	100	70 - 136
O Xylene	ND	50	51	102	74 - 134
M & P Xylene	ND	100	110	110	77 - 140

M A T R I X S P I K E S

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
MTBE	ND	20	16	80.0	16	80.0	0	20	39 - 150
BENZENE	ND	20	17	85.0	17	85.0	0	25	39 - 150
TOLUENE	ND	20	17	85.0	17	85.0	0	26	56 - 134
ETHYLBENZENE	ND	20	17	85.0	17	85.0	0	38	61 - 128
O XYLENE	ND	20	18	90.0	18	90.0	0	29	40 - 130
M & P XYLENE	ND	40	35	87.5	34	85.0	2.90	20	43 - 152

Analyst: AA

* = Values Outside QC Range

Sequence Date: 04/01/96

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

SPL ID of sample spiked: 9603B61-01A

ND = Not Detected/Below Detection Limit

Sample File ID: J__361.TX0

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

Method Blank File ID:

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

Blank Spike File ID: J__350.TX0

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

Matrix Spike File ID: J__353.TX0

(**) = Source: SPL-Houston Historical Data (3rd Q '95)

Matrix Spike Duplicate File ID: J__354.TX0

(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9603B61-01A 9603A20-01A 9603B61-02A 9603B57-01A
 9603B57-02A 9603B57-03A 9603B57-04A 9603B57-05A
 9603B57-06A 9603B57-07A 9603B57-09A 9603A21-02A
 9603B57-08A 9603B53-01A 9603B61-03A

QC Officer



** SPL BATCH QUALITY CONTROL REPORT **
CA LUFT

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

Matrix: Aqueous
Units: mg/L

Batch Id: HP_J960401021800

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 %	
Petroleum Hydrocarbons-Gas	ND	0.90	1.09	121	50 - 150

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
PETROLEUM HYDROCARBONS-GAS	ND	0.9	0.95	106	0.87	96.7	9.18	50	50 - 150

Analyst: AA

Sequence Date: 04/01/96

SPL ID of sample spiked: 9603A20-01A

Sample File ID: JJ_362.TX0

Method Blank File ID:

Blank Spike File ID: JJ_356.TX0

Matrix Spike File ID: JJ_358.TX0

Matrix Spike Duplicate File ID: JJ_359.TX0

* = Values Outside QC Range

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

ND = Not Detected/Below Detection Limit

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

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

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

(**) = Source: Temporary Limits

(***) = Source: Temporary Limits

SAMPLES IN BATCH(SPL ID):

9603B61-01A 9603A20-01A 9603B61-02A 9603B57-01A
 9603B57-02A 9603B57-03A 9603B57-04A 9603B57-05A
 9603B57-06A 9603B57-07A 9603B57-09A 9603B57-08A
 9603B53-01A 9603B53-02A 9603B53-05A 9603B61-03A

 QC Officer

CHAIN OF CUSTODY
AND
SAMPLE RECEIPT CHECKLIST



TC/8/23/96

9603B57 8/23/96

CHAIN OF CUSTODY

No.055961

Page 1 of 1

CONSULTANT'S NAME Alisto Engineering		ADDRESS 1575 Trent Blvd Walnut Creek CA 94598		CITY Walnut Creek CA	STATE CA	ZIP CODE 94598
BP SITE NUMBER 11109	BP CORNER ADDRESS/CITY 4280 Foothill Blvd Oakland CA			CONSULTANT PROJECT NUMBER 10-014-05-004		
CONSULTANT PROJECT MANAGER Bill Howell		PHONE NUMBER (510) 295 1650	FAX NUMBER (510) 295 1823		CONSULTANT CONTRACT NUMBER 9602076	
BP CONTACT Scott Horton		BP ADDRESS Renton WA		PHONE NUMBER		FAX NO.
LAB CONTACT A SPL		LABORATORY ADDRESS Houston Texas		PHONE NUMBER		FAX NO.
SAMPLED BY (Please Print Name) Dave Wallace		SAMPLED BY (Signature) <i>Dave Wallace</i>		SHIPMENT DATE 8-22-96		SHIPMENT METHOD Feed Ex

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER
9360716514

SAMPLE DESCRIPTION	COLLECTION DATE	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	COMMENTS
	COLLECTION TIME		NO.	TYPE (VOL.)	LAB SAMPLE #	
S-1 1140	3/21/96	H2O	3	VJA	TPHGB BTEX MTBE X	
S-2 1207	↓	↓	↓	↓	↓	
S-3 1222	↓	↓	↓	↓	↓	
S-4 1247	↓	↓	↓	↓	↓	
S-5 1320	↓	↓	↓	↓	↓	
S-6 1340	↓	↓	↓	↓	↓	
S-7 1410	↓	↓	↓	↓	↓	
S-8 -	↓	↓	3	↓	↓	
S-9 -	↓	↓	2	↓	↓	

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>Dave Wallace Alisto</i>	3/21/96	1700	<i>P. Galt</i>	3/21/96	1705	
<i>P. Galt</i>	3/22/96	1500	<i>S. West</i>	3/23/96	0945	

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 3/23/96	Time: 0945
---------------	------------

SPL Sample ID: 9603857

		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 #) 9360716514	
		Other:	
11	Method of sample disposal:	SPL Disposal	
		HOLD	
		Return to Client	

Name: <i>Armin Salas</i>	Date: 3/23/96
--------------------------	---------------