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BP OIL

BP Oil Company
Environmental Resources Management
Building 13, Suite N
295 SW 41st Street
Renton, Washington 98055-4931
(206) 251-0667

August 8, 1994

Alameda County Health Care Services Agency
Division of Hazardous Materials
Attention Mr. Ron Owcarz
80 Swan Way, Room 200
Oakland, CA 94621

California Regional Water Quality Control Board
Attention Mr. Eddie So
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

*LAD
5878*

RE: **BP Oil Site No. 11132**
3201 35th Street
Oakland, CA

Greetings:

Attached please find a Groundwater Sampling and Monitoring Report dated May 25, 1994. Based upon the results of this, as well as previous sampling efforts, we plan to amend the sampling regime and sample monitoring wells MW-4, 6 and 7 on a semi-annual basis. We will, however, continue to obtain groundwater elevation measurements on a quarterly basis. Please note that fuel constituents have not been detected at concentrations exceeding California Maximum Contaminant Levels since 1991.

Please give me a call in the event you wish to discuss this matter further. I can be reached at (206) 251-0689.

Sincerely,

Scott T. Hooton
Environmental Resources Management

attachment

cc: site file
B. Nagle - Alisto

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11132
3201 35th Street
Oakland, California

BP OIL CO.
ENVIRONMENTAL DEPT.
OAKLAND, CALIFORNIA

Project No. 10-024-03-004

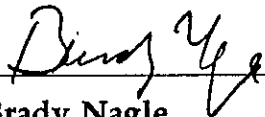
Prepared for:

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

Prepared by:

Alisto Engineering Group
1777 Oakland Boulevard, Suite 200
Walnut Creek, California

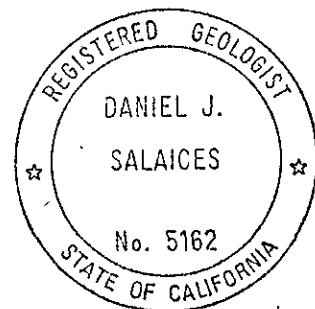
May 25, 1994



Brady Nagle
Project Manager



Dan Salaiques
Registered Geologist



GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11132
3201 35th Street
Oakland, California

Project No. 10-024-03-004

May 25, 1994

INTRODUCTION

This report presents the results and findings of the April 20, 1994 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11132, 3201 35th Street, Oakland, California. A site vicinity map is shown in 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, and electrical conductivity. 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 in Figure 2. The results of groundwater analysis are shown in Figure 3. The laboratory report and chain of custody record are presented in Appendix B.

FREE PRODUCT MONITORING AND RECOVERY

Product recovery canisters have been installed in Monitoring Wells MW-2, MW-8, MW-9, and MW-10 to recover liquid-phase product. Product thicknesses measured during this and previous monitoring events are presented in Table 1. The volume of free product recovered from the wells is presented in Table 2.



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-1	07/09/90	169.75	--	0.22	--	--	--	--	--	--	--	--
MW-1	12/21/90	169.75	--	0.58	--	--	--	--	--	--	--	--
MW-1	03/07/91	169.75	20.59	--	--	--	--	--	--	--	--	--
MW-1	06/27/91	169.75	--	0.18	--	--	--	--	--	--	--	--
MW-1	09/27/91	169.75	--	0.27	--	--	--	--	--	--	--	--
MW-1	12/18/91	169.75	--	0.28	--	--	--	--	--	--	--	--
MW-1	04/01/91	169.75	16.51	0.15	153.35	--	--	--	--	--	--	--
MW-1	07/03/92	169.75	22.30	0.27	147.65	--	--	--	--	--	--	--
MW-1	10/05/92	169.75	23.98	0.24	145.95	--	--	--	--	--	--	--
MW-1	01/13/93	169.75	17.03	0.24	152.90	--	--	--	--	--	--	--
MW-1	04/23/93	169.75	18.10	0.42	151.97	--	--	--	--	--	--	--
MW-1	07/12/93	169.75	22.02	0.49	148.10	--	--	--	--	--	--	--
MW-1	10/21/93	169.75	25.12	1.09	145.45	--	--	--	--	--	--	--
MW-1	01/21/94	169.75	23.02	0.76	147.30	--	--	--	--	--	--	--
MW-1	04/20/94	169.75	24.54	1.80	146.56	--	--	--	--	--	--	--
MW-2	07/09/90	168.14	--	0.10	--	--	--	--	--	--	--	--
MW-2	12/21/90	168.14	--	0.48	--	--	--	--	--	--	--	--
MW-2	03/07/91	168.14	19.18	--	--	--	--	--	--	--	--	--
MW-2	06/27/91	168.14	--	0.19	--	--	--	--	--	--	--	--
MW-2	09/27/91	168.14	--	0.15	--	--	--	--	--	--	--	--
MW-2	12/18/91	168.14	--	0.36	--	--	--	--	--	--	--	--
MW-2	04/01/91	168.14	15.21	0.10	153.01	--	--	--	--	--	--	--
MW-2	07/03/92	168.14	20.93	0.03	147.23	--	--	--	--	--	--	--
MW-2	10/05/92	168.14	22.74	0.21	145.56	--	--	--	--	--	--	--
MW-2	01/13/93	168.14	15.55	0.02	152.61	--	--	--	--	--	--	--
MW-2	04/23/93	168.14	16.54	0.21	151.76	--	--	--	--	--	--	--
MW-2	07/12/93	168.14	20.46	0.06	147.73	--	--	--	--	--	--	--
MW-2	10/21/93	168.14	24.91	0.31	143.46	--	--	--	--	--	--	--
MW-2	01/21/94	168.14	21.20	--	146.94	--	--	--	--	--	--	--
MW-2	04/20/94	168.14	22.44	--	145.70	1800	140	370	54	290	1.7	PACE
MW-3	07/09/90	167.17	--	--	--	140	5.3	4.6	2.0	3.8	--	--
MW-3	12/21/90	167.17	--	--	--	0.19	100	6.0	0.9	27	--	--
MW-3	03/07/91	167.17	17.40	--	149.77	0.4	69	22	6.1	57	--	--
MW-3	06/27/91	167.17	--	--	--	380	28	26	13	46	--	--
MW-3	09/27/91	167.17	--	--	--	0.07	7.9	ND	0.4	1.1	--	--
MW-3	12/18/91	167.17	--	--	--	0.26	34	24	0.8	28	--	--
MW-3	04/01/91	167.17	13.69	--	153.48	ND	ND	ND	ND	ND	--	--
MW-3	07/03/92	167.17	19.59	--	147.58	71	9.4	0.9	5.0	13	--	ANA
MW-3	10/05/92	167.17	21.22	--	145.95	67	5.1	1.1	6.1	8.1	--	ANA
QC-1 (c)	10/05/92	--	--	--	--	ND<50	2.2	ND<0.5	1.5	2.8	--	ANA
MW-3	01/13/93	167.17	13.63	--	153.54	830	50	34	42	89	--	PACE
MW-3	04/23/93	167.17	15.02	--	152.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-1 (c)	04/23/93	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-3	07/12/93	167.17	19.16	--	148.01	250	12	4.2	12	16	--	PACE
MW-3	10/21/93	167.17	21.81	--	145.36	52	4.4	1.4	4.7	3.3	--	PACE
QC-1 (c)	10/21/93	--	--	--	--	65	7.4	1.0	6.9	4.2	--	PACE
MW-3	01/21/94	167.17	19.94	--	147.23	57	3.0	3.4	3.6	9.0	--	PACE
MW-3	04/20/94	167.17	20.24	--	146.93	600	26	23	33	88	1.8	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-4	07/09/90	170.36	---	---	---	ND	ND	ND	ND	ND	---	---
MW-4	12/21/90	170.36	---	---	---	ND	ND	ND	ND	0.8	---	---
MW-4	03/07/91	170.36	20.72	---	149.64	ND	2.2	3.8	1.5	2.8	---	---
MW-4	06/27/91	170.36	---	---	---	ND	6.3	1.8	0.4	1.0	---	---
MW-4	09/27/91	170.36	---	---	---	ND	ND	ND	ND	ND	---	---
MW-4	12/18/91	170.36	---	---	---	ND	ND	ND	ND	ND	---	---
MW-4	04/01/91	170.36	17.49	---	152.87	ND	ND	ND	ND	ND	---	---
MW-4	07/03/92	170.36	22.16	---	148.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-4	10/05/92	170.36	23.38	---	146.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-4	01/13/93	170.36	17.58	---	152.78	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	04/23/93	170.36	15.72	---	154.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	07/12/93	170.36	21.74	---	148.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	10/21/93	170.36	23.84	---	146.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	01/21/94	170.36	22.42	---	147.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	04/20/94	170.36	22.66	---	147.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.2	PACE
MW-5	07/09/90	165.14	---	---	---	280	200	210	46	290	---	---
MW-5	12/21/90	165.14	---	---	---	0.69	300	34	8.4	39	---	---
MW-5	03/07/91	165.14	16.60	---	148.54	ND	17	0.9	0.7	1.6	---	---
MW-5	06/27/91	165.14	---	---	---	330	120	10	12	8	---	---
MW-5	09/27/91	165.14	---	---	---	0.73	230	16	20	22	---	---
MW-5	12/18/91	165.14	---	---	---	ND	ND	ND	ND	ND	---	---
MW-5	04/01/91	165.14	11.99	---	153.15	800	250	54	11	60	---	---
MW-5	07/03/92	165.14	18.65	---	146.49	150	36	ND<0.5	ND<0.5	1.1	---	ANA
MW-5	10/05/92	165.14	20.32	---	144.82	270	79	4	1.7	2.9	---	ANA
MW-5	01/13/93	165.14	13.03	---	152.11	180	59	6.0	1.8	7.6	---	PACE
MW-5	04/23/93	165.14	13.51	---	151.63	8700	440	96	35	136	---	PACE
MW-5	07/12/93	165.14	18.06	---	147.09	250	57	2.9	2.1	6.0	---	PACE
MW-5	10/21/93	165.14	20.41	---	144.73	210	82	1.5	ND<0.5	1.4	---	PACE
MW-5	01/21/94	165.14	18.86	---	146.28	110	36	1.2	ND<0.5	0.7	---	PACE
MW-5	04/20/94	165.14	17.30	---	147.84	690	230	4.5	1.6	11	1.3	PACE
MW-6	07/09/90	165.40	---	---	---	ND	ND	ND	ND	ND	---	---
MW-6	12/21/90	165.40	---	---	---	0.17	2.6	7.0	4.9	26	---	---
MW-6 (d)	03/07/91	165.40	---	---	---	---	---	---	---	---	---	---
MW-6 (d)	06/27/91	165.40	---	---	---	---	---	---	---	---	---	---
MW-6 (d)	09/27/91	165.40	---	---	---	---	---	---	---	---	---	---
MW-6	12/18/91	165.40	---	---	---	ND	1.3	22	ND	2.7	---	---
MW-6	04/01/91	165.40	11.79	---	153.61	ND	ND	ND	ND	ND	---	---
MW-6	07/03/92	165.40	17.77	---	147.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-6	10/05/92	165.40	19.46	---	145.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-6	01/13/93	165.40	11.34	---	154.06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-6	04/23/93	165.40	12.92	---	152.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-6	07/12/93	165.40	17.36	---	148.04	ND<50	ND<0.5	ND<0.5	ND<0.5	0.7	---	PACE
MW-6	10/21/93	165.40	19.98	---	145.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-6	01/21/94	165.40	18.10	---	147.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-6	04/20/94	165.40	18.68	---	146.72	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.0	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-7	07/09/90	167.61	--	--	--	ND	ND	ND	ND	ND	--	--
MW-7	12/21/90	167.61	--	--	--	ND	ND	ND	ND	ND	--	--
MW-7	03/07/91	167.61	19.04	--	148.57	ND	ND	0.4	0.3	2.4	--	--
MW-7	06/27/91	167.61	--	--	--	70	17	4	0.8	2.2	--	--
MW-7	09/27/91	167.61	--	--	--	ND	0.4	ND	ND	0.4	--	--
MW-7	12/18/91	167.61	--	--	--	ND	0.7	2.9	0.8	3.3	--	--
MW-7	04/01/91	167.61	15.18	--	152.43	ND	ND	ND	ND	ND	--	--
MW-7	07/03/92	167.61	20.28	--	147.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-7	10/05/92	167.61	21.56	--	146.05	ND<50	ND<0.5	ND<0.5	ND<0.5	1.5	--	ANA
MW-7	01/13/93	167.61	15.41	--	152.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	04/23/93	167.61	15.84	--	151.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	07/12/93	167.61	19.84	--	147.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	10/21/93	167.61	21.61	--	146.00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	01/21/94	167.61	20.49	--	147.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-1 (c)	01/21/94	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	04/20/94	167.61	20.54	--	147.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.5	PACE
MW-8	03/07/91	165.74	16.72	--	149.02	2.7	780	450	64	310	--	--
MW-8	06/27/91	165.74	--	--	--	12000	3400	1100	240	750	--	--
MW-8	09/27/91	165.74	--	--	--	41	5700	5200	1100	4300	--	--
MW-8	12/18/91	165.74	--	--	--	3.2	990	150	120	250	--	--
MW-8	04/01/91	165.74	12.54	--	153.20	15000	3600	2600	410	1900	--	--
MW-8	07/03/92	165.74	18.78	--	146.96	72000	19000	32000	3000	15000	--	ANA
MW-8	10/05/92	165.74	20.48	0.01	145.27	--	--	--	--	--	--	--
MW-8	01/13/93	165.74	12.87	0.01	152.88	--	--	--	--	--	--	--
MW-8	04/23/93	165.74	13.90	SHEEN	151.84	--	--	--	--	--	--	--
MW-8	07/12/93	165.74	18.30	SHEEN	147.44	--	--	--	--	--	--	--
MW-8	10/21/93	165.74	21.91	0.95	144.54	--	--	--	--	--	--	--
MW-8	01/21/94	165.74	19.12	0.03	146.64	--	--	--	--	--	--	--
MW-8	04/20/94	165.74	19.28	0.03	146.46	26000	1700	4100	960	4000	1.1	PACE
MW-9	03/07/91	166.20	16.79	--	149.41	7.1	220	4	2.4	2400	--	--
MW-9	06/27/91	166.20	--	--	--	3600	520	400	65	310	--	--
MW-9	09/27/91	166.20	--	--	--	3.2	720	150	50	180	--	--
MW-9	12/18/91	166.20	--	--	--	ND	2.5	1.1	0.3	5.8	--	--
MW-9	04/01/91	166.20	12.89	--	153.31	12000	2000	2600	360	1600	--	--
MW-9	07/03/92	166.20	18.89	--	147.31	5700	17000	840	230	800	--	ANA
MW-9	10/05/92	166.20	20.52	--	145.68	1400	440	17	14	100	--	ANA
MW-9	01/13/93	166.20	12.92	--	153.28	11000	1200	1700	340	1400	--	PACE
QC-1 (c)	01/13/93	--	--	--	0.00	11000	1200	1600	330	1300	--	PACE
MW-9	04/23/93	166.20	14.08	--	152.12	24000	2800	4500	730	3400	--	PACE
MW-9	07/12/93	166.20	18.44	--	147.76	13000	1400	1100	360	1400	--	PACE
QC-1 (c)	07/12/93	--	--	--	--	10000	1200	900	310	1200	--	PACE
MW-9	10/21/93	166.20	21.81	0.89	145.06	--	--	--	--	--	--	--
MW-9	01/21/94	166.20	19.28	--	146.92	--	--	--	--	--	--	--
MW-9	04/20/94	166.20	19.72	--	146.48	43000	2800	6800	1300	7900	1.7	PACE
QC-1 (c)	04/20/94	--	--	--	--	45000	2700	6800	1200	8200	--	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-10	03/07/91	167.01	18.09	--	148.92	1.6	120	190	32	230	--	--
MW-10	06/27/91	167.01	--	--	--	12000	7300	500	150	300	--	--
MW-10	09/27/91	167.01	--	--	--	57	12000	7200	1400	4600	--	--
MW-10	12/18/91	167.01	--	--	--	5.3	2500	120	36	79	--	--
MW-10	04/01/91	167.01	13.92	--	153.09	ND	ND	ND	ND	ND	--	--
MW-10	07/03/92	167.01	19.92	--	147.09	8600	5100	1300	180	690	--	ANA
MW-10	10/05/92	167.01	21.92	0.19	145.23	--	--	--	--	--	--	--
MW-10	01/13/93	167.01	14.43	0.03	152.60	--	--	--	--	--	--	--
MW-10	04/23/93	167.01	15.26	0.06	151.80	--	--	--	--	--	--	--
MW-10	07/12/93	167.01	19.78	0.45	147.57	--	--	--	--	--	--	--
MW-10	10/21/93	167.01	22.90	0.69	144.63	--	--	--	--	--	--	--
MW-10	01/21/94	167.01	20.25	0.06	146.81	--	--	--	--	--	--	--
MW-10	04/20/94	167.01	20.74	--	146.27	100000	12000	24000	2400	14000	1.0	PACE
RW-1	07/09/90	168.01	--	1.21	--	--	--	--	--	--	--	--
RW-1	12/21/90	168.01	--	0.01	--	--	--	--	--	--	--	--
RW-1	03/07/91	168.01	17.62	SHEEN	150.39	--	--	--	--	--	--	--
RW-1	06/27/91	168.01	--	0.04	--	--	--	--	--	--	--	--
RW-1	09/27/91	168.01	--	0.02	--	--	--	--	--	--	--	--
RW-1	12/18/91	168.01	--	0.02	--	--	--	--	--	--	--	--
RW-1	04/01/91	168.01	14.40	0.11	153.69	--	--	--	--	--	--	--
RW-1	07/03/92	168.01	20.66	SHEEN	147.35	--	--	--	--	--	--	--
RW-1	10/05/92	168.01	23.34	0.08	144.73	--	--	--	--	--	--	--
RW-1	01/13/93	168.01	16.59	0.05	151.46	--	--	--	--	--	--	--
RW-1	04/23/93	168.01	16.17	0.18	151.98	--	--	--	--	--	--	--
RW-1	07/12/93	168.01	20.18	0.06	147.88	--	--	--	--	--	--	--
RW-1	10/21/93	168.01	25.70	0.56	142.73	--	--	--	--	--	--	--
RW-1	01/21/94	168.01	21.24	0.40	147.07	--	--	--	--	--	--	--
RW-1	04/20/94	168.01	32.20	--	135.81	--	--	--	--	--	--	--
QC-2 (e)	10/05/92	--	--	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
QC-2 (e)	01/13/93	--	--	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-2 (e)	04/23/93	--	--	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-2 (e)	07/12/93	--	--	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-2 (e)	10/21/93	--	--	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-2 (e)	01/21/94	--	--	--	--	ND<0.5	ND<0.5	2.1	ND<0.5	2.1	--	PACE
QC-2 (e)	04/20/94	--	--	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE

ABBREVIATIONS:

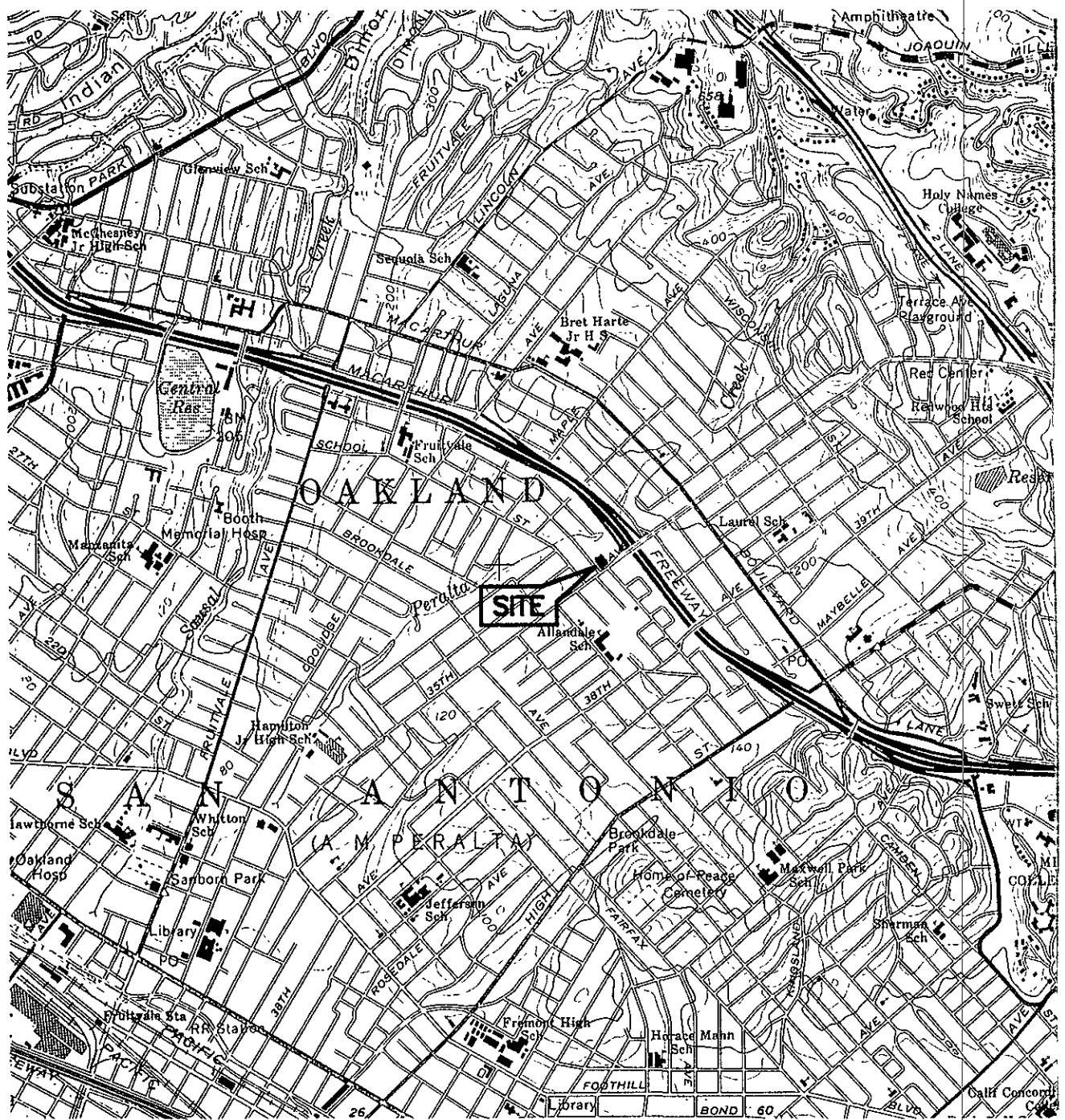
TPH-G Total petroleum hydrocarbons as gasoline
 B Benzene
 T Toluene
 E Ethylbenzene
 X Total xylenes
 DO Dissolved oxygen
 ppb Parts per billion
 ppm Parts per million
 -- Not analyzed/available/applicable/measurable
 ND Not detected above reported detection limit
 ANA Anametrix, Inc.
 PACE Pace Inc.

NOTES:

- (a) Casing elevations surveyed to the nearest 0.01 foot relative to mean sea level.
- (b) Groundwater elevations adjusted assuming a specific gravity of 0.75 for free product.
- (c) Blind duplicate.
- (d) Not sampled due to an abandoned vehicle parked over well.
- (e) Travel blank.

TABLE 2 - PRODUCT REMOVAL STATUS
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH STREET, OAKLAND, CALIFORNIA
 ALISTO PROJECT NO. 10-024

WELL ID	DATE	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)	
MW-2	09/29/93	0.10	0.10	
	10/05/93	0.10	0.20	
	10/14/93	0.10	0.30	
	10/20/93	0.25	0.55	
	11/02/93	0.10	0.65	
	12/07/93	0.05	0.70	
	12/17/93	<0.01	0.70	
	12/23/93	0.3	1.00	
	01/12/94	0.05	1.05	
	02/02/94	0.01	1.06	
	02/11/94	0.01	1.07	
	03/18/94	<0.01	1.07	
	MW-8	11/02/93	0.25	0.25
		11/10/93	0.10	0.35
11/16/93		0.10	0.45	
11/23/93		0.10	0.55	
11/30/93		0.10	0.65	
12/17/93		<0.01	0.65	
12/23/93		<0.01	0.65	
01/12/94		0.01	0.66	
02/02/94		0.05	0.71	
02/11/94		0.08	0.79	
02/18/94		<0.01	0.79	
03/18/94		0.01	0.80	
04/27/94		<0.01	0.80	
MW-9		11/02/93	0.10	0.10
	11/10/93	0.10	0.20	
	11/16/93	0.10	0.30	
	12/23/93	<0.01	0.30	
	01/12/94	0.01	0.31	
	01/20/93	0.05	0.36	
	02/02/94	0.05	0.41	
	02/11/94	0.01	0.42	
	02/18/94	<0.01	0.42	
	03/18/94	0.10	0.52	
	MW-10	09/07/93	0.10	0.10
09/14/93		0.10	0.20	
09/29/93		0.10	0.30	
10/05/93		1.60	1.90	
10/14/93		2.10	4.00	
10/20/93		1.00	5.00	
10/27/93		1.00	6.00	
11/02/93		0.30	6.30	
11/10/93		0.20	6.50	
11/16/93		0.10	6.60	
11/23/93		0.10	6.70	
11/30/93		0.30	7.00	
12/07/93		0.20	7.20	
12/17/93		0.30	7.50	
12/23/93		<0.01	7.50	
01/04/94		0.01	7.51	
01/12/94		0.01	7.52	
01/20/94		0.20	7.72	
02/02/94		0.01	7.73	
02/11/94		0.01	7.74	
02/18/94		0.20	7.94	



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

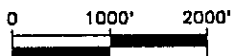


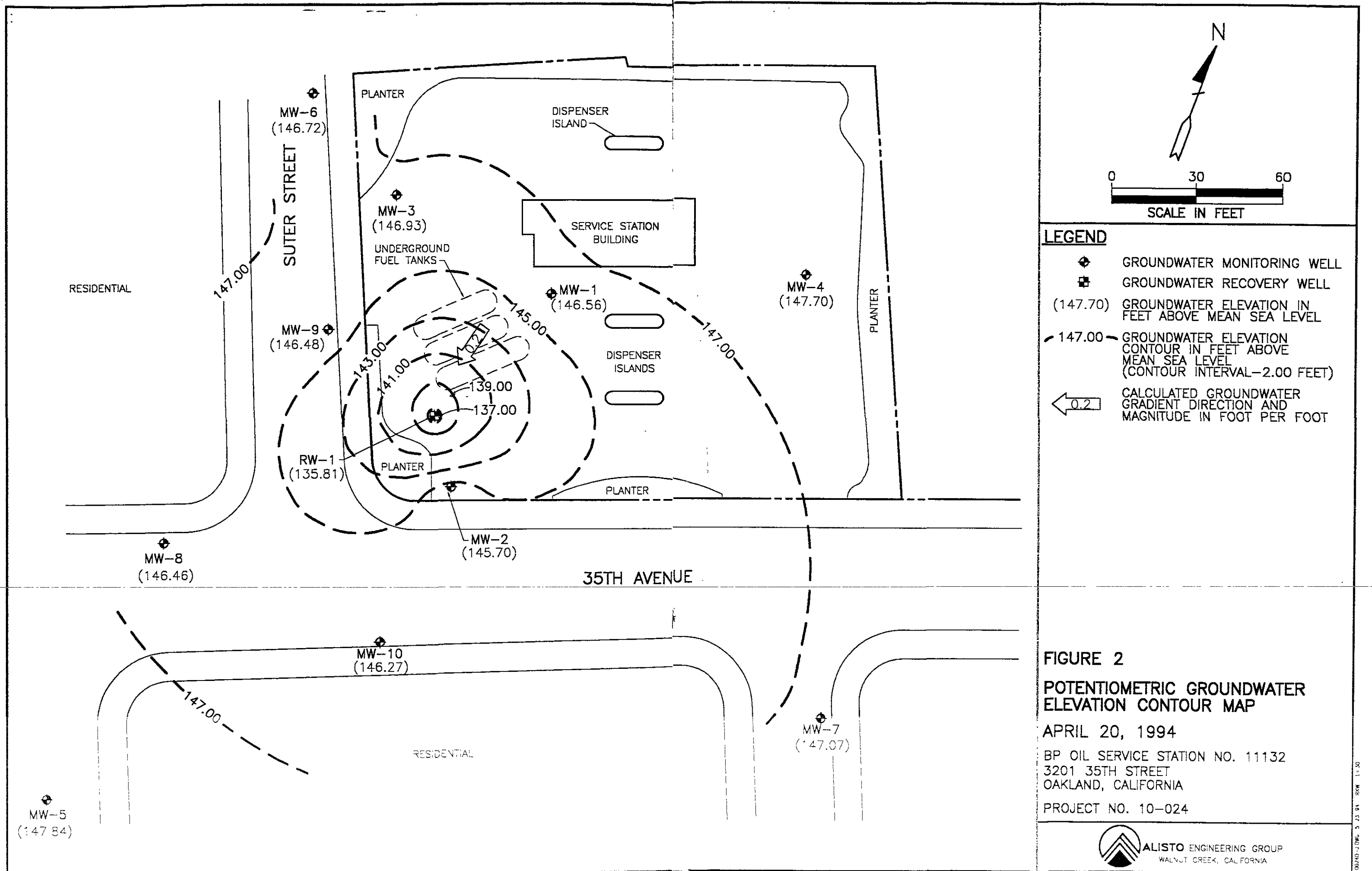
FIGURE 1

SITE VICINITY MAP

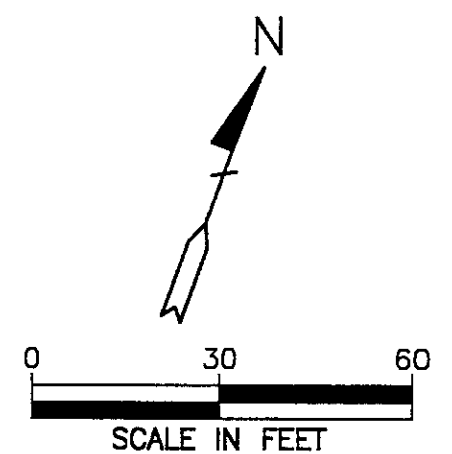
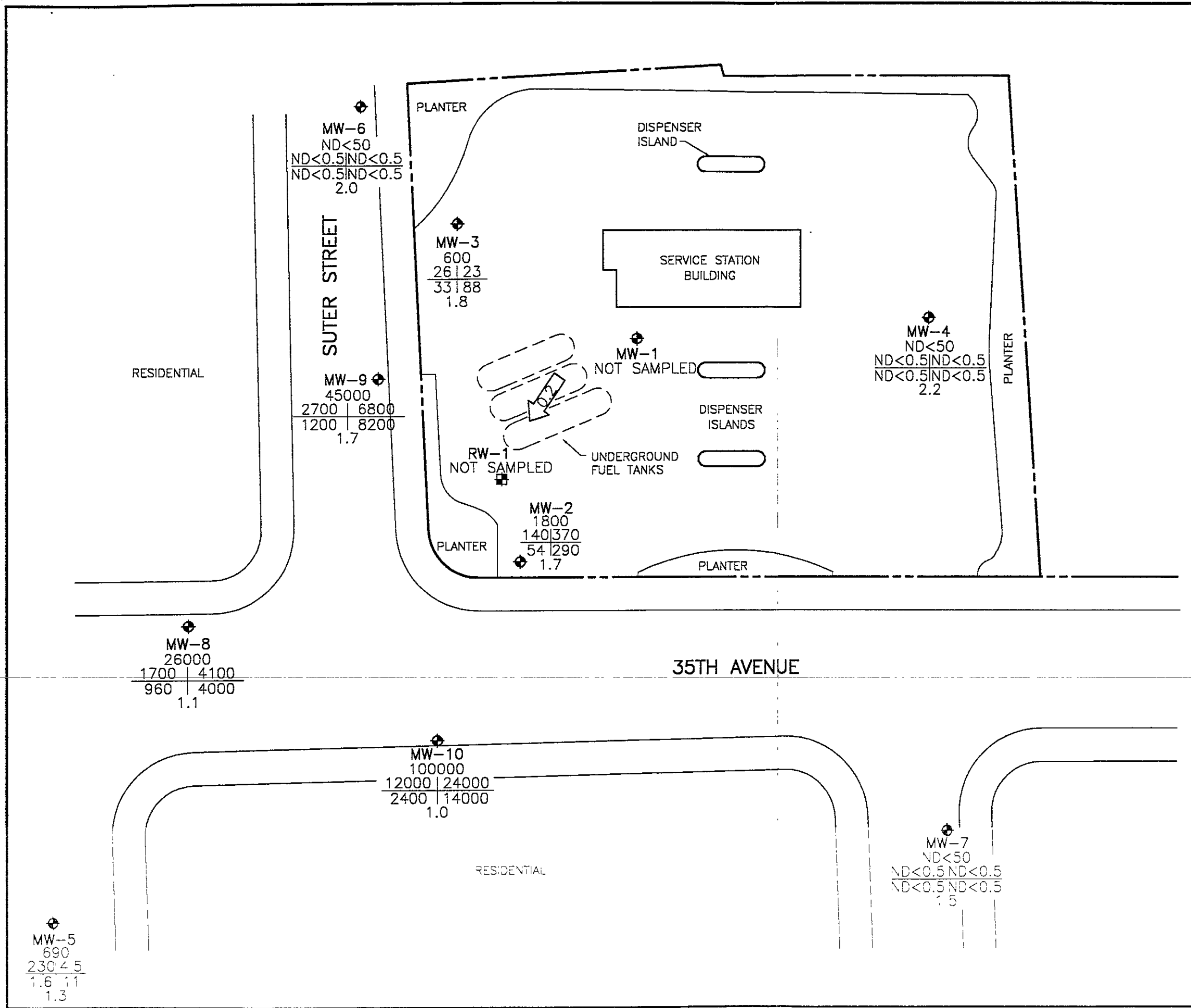
BP OIL SERVICE STATION NO. 11132
 3201 35TH STREET
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-024



ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA



100740-DWG 5 23 84 BOW 11-80



LEGEND

- ◆ GROUNDWATER MONITORING WELL
- ⊕ GROUNDWATER RECOVERY WELL
- TPH-G CONCENTRATION OF CONSTITUENTS IN PARTS PER BILLION, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
- B | T
- E | X
- DO
- TPH-G TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X TOTAL XYLENES
- DO DISSOLVED OXYGEN
- ND NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- ← 0.2 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3
CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER
 APRIL 20, 1994
 BP OIL SERVICE STATION NO. 11132
 3201 35TH STREET
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-024

APPENDIX A
WATER SAMPLING FIELD SURVEY FORMS



Field Report / Sampling Data Sheet

Consultant: **ALISTO ENGINEERING GROUP**

Engineering

Groundwater Sampling

Date: 4-20-94

Project No. 10-024-03-004

Group

Groundwater Monitoring

Day: WED

Station No. BP11132

1777 Oakland Blvd., Ste200

Well Development

Weather: HOT

Address 3201 35Th Street

Walnut Creek CA 94596 (SIO) 295-1650 Fax 295-1823

Oakland

MEASURED DEPTH TO GROUND WATER SUMMARY

Well ID	Depth to Water	Prod Thickness	Well ID	Depth to Water	Product	Thickness	Well ID	D T Water	Prod thickness	
MW-1	24.54'	1.80'	MW-5	17.30	NONE		MW-9	QC-1	19.72	Sheen
MW-2	22.44'		MW-6	18.68	NONE		MW-10		20.74	Sheen
MW-3	20.24'	NONE	MW-7	20.54	NONE		RW-1	SYSTEM	32.20	
MW-4	22.66'	NONE	MW-8	19.20'	NONE					

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.			
MW-1	24.54'	2"	OR	22.74'	1.80'									
Total Depth - Water Level =						x Well Vol. Factor =						x#vol. to Purge =		PurgeVol.
44.09 - 24.54' =						11.87 x .16 =						1.9 x 3 =		5.6
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port														
Comments: <u>PPRS EMPTY + 2 gals product bailed.</u>														
												<input type="checkbox"/> EPA 601 _____		
												<input type="checkbox"/> TPH-G/BTEX _____		
												<input type="checkbox"/> TPH Diesel _____		
												<input type="checkbox"/> TOG 5520 BF _____		
												Time Sampled		
												<u>NOT</u>		

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.			
MW-2	22.44'	2"	OR	22.44'	Sheen	1955	2	69.7	6.41	699	1.7			
Total Depth - Water Level =						x Well Vol. Factor =						x#vol. to Purge =		PurgeVol.
34.31 - 22.44' =						11.87 x .16 =						1.9 x 3 =		5.7
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port														
Comments: <u>PPRS EMPTY</u>														
												<input type="checkbox"/> EPA 601 _____		
												<input checked="" type="checkbox"/> TPH-G/BTEX <u>He</u>		
												<input type="checkbox"/> TPH Diesel _____		
												<input type="checkbox"/> TOG 5520 BF _____		
												Time Sampled		
												<u>2000</u>		

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.			
MW-3	20.24'	2"	OR	NONE	—	2	1010	73.1	6.45	0.78	1.8			
Total Depth - Water Level =						x Well Vol. Factor =						x#vol. to Purge =		PurgeVol.
34.58 - 20.24' =						14.34 x .16 =						2.9 x 3 =		6.88
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port														
Comments:														
												<input type="checkbox"/> EPA 601 _____		
												<input checked="" type="checkbox"/> TPH-G/BTEX <u>He</u>		
												<input type="checkbox"/> TPH Diesel _____		
												<input type="checkbox"/> TOG 5520 BF _____		
												Time Sampled		
												<u>1614</u>		

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.			
MW-4	22.66'	2"	OR	NONE		3	1715	71.5	6.85	459	2.0			
Total Depth - Water Level =						x Well Vol. Factor =						x#vol. to Purge =		PurgeVol.
38.74 - 22.66' =						16.08 x .16 =						2.5 x 3 =		7.7
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port														
Comments:														
												<input type="checkbox"/> EPA 601 _____		
												<input checked="" type="checkbox"/> TPH-G/BTEX <u>He</u>		
												<input type="checkbox"/> TPH Diesel _____		
												<input type="checkbox"/> TOG 5520 BF _____		
												Time Sampled		
												<u>1721</u>		

Alisto

Field Report / Sampling Data Sheet

Consultant: **ALISTO ENGINEERING GROUP**

Engineering

 Groundwater SamplingDate: **4-20-94**Project No. **10-024-03-004**

Group

 Groundwater MonitoringDay: **WED**Station No. **BP11132**

1777 Oakland Blvd., Ste 200

 Well DevelopmentWeather: **Clear**Address **3201 35th Street**

Walnut Creek CA 94596 (SIO) 295-1650 Fax 295-1823

Oakland

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.	
MW-5	17.30	2"	OK	NONE	NONE	2	1735	70.0	6.78	859	1.5	<input type="checkbox"/> EPA 601 <input checked="" type="checkbox"/> TPH-G/BTEX Hel
Total Depth - Water Level = x Well Vol. Factor = x#vol. to Purge = PurgeVol.						4	1739	67.9	6.79	850	1.3	<input type="checkbox"/> TPH Diesel
$30.89 - 17.30 = 13.59 \times .16 = 2.17 \times 3 = 6.5$						7	1743	67.7	6.77	852	1.3	<input type="checkbox"/> TOG 5520 BF
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												Time Sampled
Comments:												1743
MW-6	18.68	2"	OK	NONE	---	2	1700	77.1	6.96	536	2.4	<input type="checkbox"/> EPA 601 <input checked="" type="checkbox"/> TPH-G/BTEX Hel
Total Depth - Water Level = x Well Vol. Factor = x#vol. to Purge = PurgeVol.						4	1702	71.7	6.95	300	2.3	<input type="checkbox"/> TPH Diesel
$34.56 - 18.68 = 15.88 \times .16 = 2.5 \times 3 = 7.6$						5	1703	71.9	6.95	313	2.5	<input type="checkbox"/> TOG 5520 BF
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port						8	1705	71.9	6.95	380	2.6	Time Sampled
Comments:												1765
MW-7	20.54	2"	OK	NONE	NONE	2	1810	66.9	7.09	508	1.9	<input type="checkbox"/> EPA 601 <input checked="" type="checkbox"/> TPH-G/BTEX Hel
Total Depth - Water Level = x Well Vol. Factor = x#vol. to Purge = PurgeVol.						4	1812	65.7	7.10	507	1.6	<input type="checkbox"/> TPH Diesel
$34.49 - 20.54 = 13.95 \times .16 = 2.23 \times 3 = 6.6$						7	1817	65.8	7.11	506	1.5	<input type="checkbox"/> TOG 5520 BF
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												Time Sampled
Comments:												1817
MW-8	19.28	2"	OK	NONE	NONE	3	1839	67.3	6.60	115	1.2	<input type="checkbox"/> EPA 601 <input checked="" type="checkbox"/> TPH-G/BTEX Hel
Total Depth - Water Level = x Well Vol. Factor = x#vol. to Purge = PurgeVol.						6	1842	67.0	6.61	113	1.2	<input type="checkbox"/> TPH Diesel
$38.72 - 19.28 = 19.44 \times .16 = 3.11 \times 3 = 9.33$						9.5	1845	66.9	6.60	110	1.1	<input type="checkbox"/> TOG 5520 BF
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												Time Sampled
Comments: PPRS empty - NO SHEEN OBSERVED												1845
MW-9	19.72	2"	New Lock	Sheen	Sheen	1	1907	69.1	6.76	818	1.6	<input type="checkbox"/> EPA 601 <input checked="" type="checkbox"/> TPH-G/BTEX Hel
Total Depth - Water Level = x Well Vol. Factor = x#vol. to Purge = PurgeVol.						2	1911	69.7	6.71	812	1.7	<input type="checkbox"/> TPH Diesel
$29.49 - 19.72 = 9.77 \times .16 = 0.76 \times 3 = 2.3$						3	1914	69.4	6.67	815	1.7	<input type="checkbox"/> TOG 5520 BF
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												Time Sampled
Comments: QC-1 - New Lock + Plug												1914



Field Report / Sampling Data Sheet

Consultant: **ALISTO ENGINEERING GROUP**

Engineering

Groundwater Sampling

Date: 4-20-94

Project No. 10-024-03-004

Group

Groundwater Monitoring

Day: WED

Station No. BP11132

1777 Oakland Blvd., Ste 200

Well Development

Weather: Clear

Address 3201 35th Street

Walnut Creek CA 94596 (SIO) 295-1650 Fax 295-1823

Oakland

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.	
MW-10	20.74	2"	OR	20.74	Skern	2	1930	66.6	6.60	114	1.0	<input type="checkbox"/> EPA 601
Total Depth - Water Level =						4	1935	66.2	6.71	112	1.0	<input checked="" type="checkbox"/> TPH-G/BTEX <i>Hel</i>
34.00 - 20.74 = 13.26 x .16 = 2.12 x 3 = 6.36						7	1938	65.9	6.70	110	1.0	<input type="checkbox"/> TPH Diesel
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> Sys Port												<input type="checkbox"/> TOG 5520 BF
Comments: <u>PPRS EMPTY.</u>												Time Sampled
												<u>1938</u>

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.	
RW-1		6"										<input type="checkbox"/> EPA 601
Total Depth - Water Level =												<input type="checkbox"/> TPH-G/BTEX
38.41 - = x 1.47 = x 3 =												<input type="checkbox"/> TPH Diesel
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> Sys Port												<input type="checkbox"/> TOG 5520 BF
Comments: <u>SYSTEM RUNNING UNABLE TO SAMPLE</u>												Time Sampled
												<u>NOT</u>

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.	
QC-1												<input type="checkbox"/> EPA 601
Total Depth - Water Level =												<input checked="" type="checkbox"/> TPH-G/BTEX <i>Hel</i>
DUPLICATE OF MW-9												<input type="checkbox"/> TPH Diesel
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> Sys Port												<input type="checkbox"/> TOG 5520 BF
Comments:												Time Sampled
												<u>1916</u>

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp *F	pH	E.C.	D.O.	
QC-2												<input type="checkbox"/> EPA 601
Total Depth - Water Level =												<input checked="" type="checkbox"/> TPH-G/BTEX <i>Hel</i>
TRIP BLANK SUPPLIED BY PACE												<input type="checkbox"/> TPH Diesel
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> Sys Port												<input type="checkbox"/> TOG 5520 BF
Comments:												Time Sampled

Purged water pumped into remediation system at site.
 Bailed product put in product tank of remediation system.

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



REPORT OF LABORATORY ANALYSIS

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

May 05, 1994
PACE Project Number: 440428510

Attn: Mr. Bill Howell

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312442
Date Collected: 04/20/94
Date Received: 04/28/94
Client Sample ID: MW-2

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
------------------	--------------	------------	----------------------

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	05/02/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	1800	05/02/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	05/02/94
Benzene	ug/L	0.5	140	05/02/94
Toluene	ug/L	0.5	370	05/02/94
Ethylbenzene	ug/L	0.5	54	05/02/94
Xylenes, Total	ug/L	0.5	290	05/02/94



REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
Page 2

May 05, 1994
PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312450
Date Collected: 04/20/94
Date Received: 04/28/94
Client Sample ID: MW-3

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	05/02/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	600	05/02/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	05/02/94
Benzene	ug/L	0.5	26	05/02/94
Toluene	ug/L	0.5	23	05/02/94
Ethylbenzene	ug/L	0.5	33	05/02/94
Xylenes, Total	ug/L	0.5	88	05/02/94

REPORT OF LABORATORY ANALYSIS

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May 05, 1994
 PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312469
 Date Collected: 04/20/94
 Date Received: 04/28/94
 Client Sample ID: MW-4

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	05/02/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	05/02/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	05/02/94
Benzene	ug/L	0.5	ND	05/02/94
Toluene	ug/L	0.5	ND	05/02/94
Ethylbenzene	ug/L	0.5	ND	05/02/94
Xylenes, Total	ug/L	0.5	ND	05/02/94



REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
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May 05, 1994
PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312477
Date Collected: 04/20/94
Date Received: 04/28/94
Client Sample ID: MW-5

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS			
TOTAL FUEL HYDROCARBONS, (LIGHT):			
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	690
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			
Benzene	ug/L	0.5	230
Toluene	ug/L	0.5	4.5
Ethylbenzene	ug/L	0.5	1.6
Xylenes, Total	ug/L	0.5	11

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
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May 05, 1994
 PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312485
 Date Collected: 04/20/94
 Date Received: 04/28/94
 Client Sample ID: MW-6

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	05/02/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	05/02/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	05/02/94
Benzene	ug/L	0.5	ND	05/02/94
Toluene	ug/L	0.5	ND	05/02/94
Ethylbenzene	ug/L	0.5	ND	05/02/94
Xylenes, Total	ug/L	0.5	ND	05/02/94

REPORT OF LABORATORY ANALYSIS

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May 05, 1994
 PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312493
 Date Collected: 04/20/94
 Date Received: 04/28/94
 Client Sample ID: MW-7

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	05/02/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	05/02/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	05/02/94
Benzene	ug/L	0.5	ND	05/02/94
Toluene	ug/L	0.5	ND	05/02/94
Ethylbenzene	ug/L	0.5	ND	05/02/94
Xylenes, Total	ug/L	0.5	ND	05/02/94

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
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May 05, 1994
 PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312507
 Date Collected: 04/20/94
 Date Received: 04/28/94
 Client Sample ID: MW-8

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

<u>PURGEABLE FUELS AND AROMATICS</u>			
TOTAL FUEL HYDROCARBONS, (LIGHT):		-	05/02/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	2500	26000
<u>PURGEABLE AROMATICS (BTXE BY EPA 8020M):</u>			
Benzene	ug/L	2.5	1700
Toluene	ug/L	25	4100
Ethylbenzene	ug/L	2.5	960
Xylenes, Total	ug/L	2.5	4000

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
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May 05, 1994
 PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312515
 Date Collected: 04/20/94
 Date Received: 04/28/94
 Client Sample ID: MW-9

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	05/03/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	1000	43000	05/03/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	05/03/94
Benzene	ug/L	10	2800	05/03/94
Toluene	ug/L	10	6800	05/03/94
Ethylbenzene	ug/L	10	1300	05/03/94
Xylenes, Total	ug/L	10	7900	05/03/94



REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
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May 05, 1994
PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312523
Date Collected: 04/20/94
Date Received: 04/28/94
Client Sample ID: MW-10

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	05/03/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	5000	100000	05/03/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):				
Benzene	ug/L	50	12000	05/03/94
Toluene	ug/L	50	24000	05/03/94
Ethylbenzene	ug/L	50	2400	05/03/94
Xylenes, Total	ug/L	50	14000	05/03/94



REPORT OF LABORATORY ANALYSIS

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May 05, 1994
PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312531
Date Collected: 04/20/94
Date Received: 04/28/94
Client Sample ID: QC-1

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS			
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	2500	45000
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			
Benzene	ug/L	25	2700
Toluene	ug/L	25	6800
Ethylbenzene	ug/L	25	1200
Xylenes, Total	ug/L	25	8200

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May 05, 1994
 PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PACE Sample Number: 70 0312540
 Date Collected: 04/20/94
 Date Received: 04/28/94
 Client Sample ID: QC-2


<u>Parameter</u>	<u>Units</u>	<u>MDL</u>		<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	05/02/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	05/02/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	05/02/94
Benzene	ug/L	0.5	ND	05/02/94
Toluene	ug/L	0.5	ND	05/02/94
Ethylbenzene	ug/L	0.5	ND	05/02/94
Xylenes, Total	ug/L	0.5	ND	05/02/94

These data have been reviewed and are approved for release.


 Darrell C. Cain
 Regional Director

Mr. Bill Howell
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FOOTNOTES
for pages 1 through 11

May 05, 1994
PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

May 05, 1994
 PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PURGEABLE FUELS AND AROMATICS

Batch: 70 30060

Samples: 70 0312442, 70 0312450, 70 0312477, 70 0312485, 70 0312493
 70 0312515, 70 0312523, 70 0312531, 70 0312540

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700311772	Spike	Spike Recv	Spike Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	1000	105%	100%	5%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	1000	97%	95%	2%

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
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QUALITY CONTROL DATA

May 05, 1994
 PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

PURGEABLE FUELS AND AROMATICS
 Batch: 70 30106
 Samples: 70 0312469, 70 0312507

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700312469		Spike		Spike Dupl	
			MW-4	Spike	Recv	Recv	RPD	
Benzene	ug/L	0.5	ND	100	91%	89%	2%	
Toluene	ug/L	0.5	ND	100	92%	91%	1%	
Ethylbenzene	ug/L	0.5	ND	100	86%	83%	4%	
Xylenes, Total	ug/L	0.5	ND	300	90%	87%	3%	

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference		Dupl	
			Value	Recv	Recv	RPD
Benzene	ug/L	0.5	100	97%	98%	1%
Toluene	ug/L	0.5	100	102%	105%	3%
Ethylbenzene	ug/L	0.5	100	99%	98%	1%
Xylenes, Total	ug/L	0.5	300	104%	105%	1%

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FOOTNOTES
for pages 13 through 14

May 05, 1994
PACE Project Number: 440428510

Client Reference: BP Site #11132/10-024-03-004

MDL Method Detection Limit
ND Not detected at or above the MDL.
RPD Relative Percent Difference



440428.510

CHAIN OF CUSTODY

No. 052952 Page 1 of 1

CONSULTANT'S NAME ALISTO ENGINEERING		ADDRESS 1777 OAKLAND BLVD., STE 200 WALNUT CREEK CA 94596		CITY	STATE	ZIP CODE
BP SITE NUMBER BP1132	BP CORNER ADDRESS/CITY 3201 55TH ST. OAKLAND			CONSULTANT PROJECT NUMBER 10-024-03-004		
CONSULTANT PROJECT MANAGER 10-024-03-004		PHONE NUMBER BILL HOWELL	FAX NUMBER 510 295 1823		CONSULTANT CONTRACT NUMBER	
BP CONTACT SCOTT HOOKER		BP ADDRESS		PHONE NUMBER	FAX NO.	
LAB CONTACT JIM OYES		LABORATORY ADDRESS 11 DIGITAL DR. NOVATO		PHONE NUMBER	FAX NO.	
SAMPLED BY (Please Print Name) DAW BIRCH		SAMPLED BY (Signature) <i>[Signature]</i>		SHIPMENT DATE		SHIPMENT METHOD

TAT: <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 1 Week <input type="checkbox"/> Standard 2 Weeks	ANALYSIS REQUIRED	AIRBILL NUMBER
--	-------------------	----------------

SAMPLE DESCRIPTION	COLLECTION DATE	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	ANALYSIS REQUIRED										COMMENTS							
	COLLECTION TIME		NO.	TYPE (VOL.)	LAB SAMPLE #																		
MW-2	4-20-94	Water	3	VOA	31244.2	X																	
MW-3	{	{	{		31245.0	X																	
MW-4					31246.9	X																	
MW-5					31247.7	X																	
MW-6					31248.5	X																	
MW-7					31249.3	X																	
MW-8					31250.7	X																	
MW-9					31251.5	X																	
MW-10					31252.3	X																	
QC-1					31253.1	X																	
QC-2							1		31254.0	X													

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>[Signature]</i>	4/25/94	1730	<i>[Signature]</i>	4/25/94	1740	14/2
<i>[Signature]</i>	4/28	1720	<i>[Signature]</i>	4/28/94	1720	

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-1	07/09/90	169.75	--	0.22	--	--	--	--	--	--	--	--
MW-1	12/21/90	169.75	--	0.58	--	--	--	--	--	--	--	--
MW-1	03/07/91	169.75	20.59	--	--	--	--	--	--	--	--	--
MW-1	06/27/91	169.75	--	0.18	--	--	--	--	--	--	--	--
MW-1	09/27/91	169.75	--	0.27	--	--	--	--	--	--	--	--
MW-1	12/18/91	169.75	--	0.28	--	--	--	--	--	--	--	--
MW-1	04/01/91	169.75	16.51	0.15	153.35	--	--	--	--	--	--	--
MW-1	07/03/92	169.75	22.30	0.27	147.65	--	--	--	--	--	--	--
MW-1	10/05/92	169.75	23.98	0.24	145.95	--	--	--	--	--	--	--
MW-1	01/13/93	169.75	17.03	0.24	152.90	--	--	--	--	--	--	--
MW-1	04/23/93	169.75	18.10	0.42	151.97	--	--	--	--	--	--	--
MW-1	07/12/93	169.75	22.02	0.49	148.10	--	--	--	--	--	--	--
MW-1	10/21/93	169.75	25.12	1.09	145.45	--	--	--	--	--	--	--
MW-1	01/21/94	169.75	23.02	0.76	147.30	--	--	--	--	--	--	--
MW-1	04/20/94	169.75	24.54	1.80	146.56	--	--	--	--	--	--	--
MW-1	08/01/94	169.75	24.11	0.35	145.90	--	--	--	--	--	--	--
MW-2	07/09/90	168.14	--	0.10	--	--	--	--	--	--	--	--
MW-2	12/21/90	168.14	--	0.48	--	--	--	--	--	--	--	--
MW-2	03/07/91	168.14	19.18	--	--	--	--	--	--	--	--	--
MW-2	06/27/91	168.14	--	0.19	--	--	--	--	--	--	--	--
MW-2	09/27/91	168.14	--	0.15	--	--	--	--	--	--	--	--
MW-2	12/18/91	168.14	--	0.36	--	--	--	--	--	--	--	--
MW-2	04/01/91	168.14	15.21	0.10	153.01	--	--	--	--	--	--	--
MW-2	07/03/92	168.14	20.93	0.03	147.23	--	--	--	--	--	--	--
MW-2	10/05/92	168.14	22.74	0.21	145.56	--	--	--	--	--	--	--
MW-2	01/13/93	168.14	15.55	0.02	152.61	--	--	--	--	--	--	--
MW-2	04/23/93	168.14	16.54	0.21	151.76	--	--	--	--	--	--	--
MW-2	07/12/93	168.14	20.46	0.06	147.73	--	--	--	--	--	--	--
MW-2	10/21/93	168.14	24.91	0.31	143.46	--	--	--	--	--	--	--
MW-2	01/21/94	168.14	21.20	--	146.94	--	--	--	--	--	--	--
MW-2	04/20/94	168.14	22.44	--	145.70	1800	140	370	54	290	1.7	PAGE
MW-2	08/01/94	168.14	22.24	0.04	145.93	--	--	--	--	--	--	--

7/6/94

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-3	07/09/90	167.17	--	--	--	140	5.3	4.6	2.0	3.8	--	--
MW-3	12/21/90	167.17	--	--	--	0.19	100	6.0	0.9	27	--	--
MW-3	03/07/91	167.17	17.40	--	149.77	0.4	69	22	6.1	57	--	--
MW-3	06/27/91	167.17	--	--	--	380	28	26	13	46	--	--
MW-3	09/27/91	167.17	--	--	--	0.07	7.9	ND	0.4	1.1	--	--
MW-3	12/18/91	167.17	--	--	--	0.26	34	24	0.8	28	--	--
MW-3	04/01/91	167.17	13.69	--	153.48	ND	ND	ND	ND	ND	--	--
MW-3	07/03/92	167.17	19.59	--	147.58	71	9.4	0.9	5.0	13	--	ANA
MW-3	10/05/92	167.17	21.22	--	145.95	67	5.1	1.1	6.1	8.1	--	ANA
QC-1 (c)	10/05/92	--	--	--	--	ND<50	2.2	ND<0.5	1.5	2.8	--	ANA
MW-3	01/13/93	167.17	13.63	--	153.54	830	50	34	*42	89	--	PACE
MW-3	04/23/93	167.17	15.02	--	152.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-1 (c)	04/23/93	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-3	07/12/93	167.17	19.16	--	148.01	250	12	4.2	12	16	--	PACE
MW-3	10/21/93	167.17	21.81	--	145.36	52	4.4	1.4	4.7	3.3	--	PACE
QC-1 (c)	10/21/93	--	--	--	--	65	7.4	1.0	6.9	4.2	--	PACE
MW-3	01/21/94	167.17	19.94	--	147.23	57	3.0	3.4	3.6	9.0	--	PACE
MW-3	04/20/94	167.17	20.24	--	146.93	600	26	23	33	88	1.8	PACE
MW-3	08/01/94	167.17	20.74	--	146.43	99	6.2	1.1	4.5	5.2	1.4	PACE
QC-1 (c)	08/01/94	--	--	--	--	120	7.7	1.6	5.9	6.7	--	PACE
MW-4	07/09/90	170.36	--	--	--	ND	ND	ND	ND	ND	--	--
MW-4	12/21/90	170.36	--	--	--	ND	ND	ND	ND	0.8	--	--
MW-4	03/07/91	170.36	20.72	--	149.64	ND	2.2	3.8	1.5	2.8	--	--
MW-4	06/27/91	170.36	--	--	--	ND	6.3	1.8	0.4	1.0	--	--
MW-4	09/27/91	170.36	--	--	--	ND	ND	ND	ND	ND	--	--
MW-4	12/18/91	170.36	--	--	--	ND	ND	ND	ND	ND	--	--
MW-4	04/01/91	170.36	17.49	--	152.87	ND	ND	ND	ND	ND	--	--
MW-4	07/03/92	170.36	22.16	--	148.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-4	10/05/92	170.36	23.38	--	146.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-4	01/13/93	170.36	17.58	--	152.78	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-4	04/23/93	170.36	15.72	--	154.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-4	07/12/93	170.36	21.74	--	148.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-4	10/21/93	170.36	23.84	--	146.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-4	01/21/94	170.36	22.42	--	147.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-4	04/20/94	170.36	22.66	--	147.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.2	PACE
MW-4	08/01/94	170.36	23.01	--	147.35	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.9	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-5	07/09/90	165.14	--	--	--	280	200	210	46	290	--	--
MW-5	12/21/90	165.14	--	--	--	0.69	300	34	8.4	39	--	--
MW-5	03/07/91	165.14	16.60	--	148.54	ND	17	0.9	0.7	1.6	--	--
MW-5	06/27/91	165.14	--	--	--	330	120	10	12	8	--	--
MW-5	09/27/91	165.14	--	--	--	0.73	230	16	20	22	--	--
MW-5	12/18/91	165.14	--	--	--	ND	ND	ND	ND	ND	--	--
MW-5	04/01/91	165.14	11.99	--	153.15	800	250	54	11	60	--	--
MW-5	07/03/92	165.14	18.65	--	146.49	150	36	ND<0.5	ND<0.5	1.1	--	ANA
MW-5	10/05/92	165.14	20.32	--	144.82	270	79	4	1.7	2.9	--	ANA
MW-5	01/13/93	165.14	13.03	--	152.11	180	59	6.0	1.8	7.6	--	PACE
MW-5	04/23/93	165.14	13.51	--	151.63	8700	440	96	35	136	--	PACE
MW-5	07/12/93	165.14	18.06	--	147.08	250	57	2.9	2.1	6.0	--	PACE
MW-5	10/21/93	165.14	20.41	--	144.73	210	82	1.5	ND<0.5	1.4	--	PACE
MW-5	01/21/94	165.14	18.86	--	146.28	110	36	1.2	ND<0.5	0.7	--	PACE
MW-5	04/20/94	165.14	17.30	--	147.84	690	230	4.5	1.6	11	1.3	PACE
MW-5	08/01/94	165.14	17.53	--	147.61	170	44	1.6	0.9	2.7	0.9	PACE
MW-6	07/09/90	165.40	--	--	--	ND	ND	ND	ND	ND	--	--
MW-6	12/21/90	165.40	--	--	--	0.17	2.6	7.0	4.9	26	--	--
MW-6 (d)	03/07/91	165.40	--	--	--	--	--	--	--	--	--	--
MW-6 (d)	06/27/91	165.40	--	--	--	--	--	--	--	--	--	--
MW-6 (d)	09/27/91	165.40	--	--	--	--	--	--	--	--	--	--
MW-6	12/18/91	165.40	--	--	--	ND	1.3	22	ND	2.7	--	--
MW-6	04/01/91	165.40	11.79	--	153.61	ND	ND	ND	ND	ND	--	--
MW-6	07/03/92	165.40	17.77	--	147.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-6	10/05/92	165.40	19.46	--	145.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-6	01/13/93	165.40	11.34	--	154.06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	04/23/93	165.40	12.92	--	152.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	07/12/93	165.40	17.36	--	148.04	ND<50	ND<0.5	ND<0.5	ND<0.5	0.7	--	PACE
MW-6	10/21/93	165.40	19.98	--	145.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	01/21/94	165.40	18.10	--	147.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	04/20/94	165.40	18.68	--	146.72	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.0	PACE
MW-6	08/01/94	165.40	18.90	--	146.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.5	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-7	07/09/90	167.61	--	--	--	ND	ND	ND	ND	ND	--	--
MW-7	12/21/90	167.61	--	--	--	ND	ND	ND	ND	ND	--	--
MW-7	03/07/91	167.61	19.04	--	148.57	ND	ND	0.4	0.3	2.4	--	--
MW-7	06/27/91	167.61	--	--	--	70	17	4	0.8	2.2	--	--
MW-7	09/27/91	167.61	--	--	--	ND	0.4	ND	ND	0.4	--	--
MW-7	12/18/91	167.61	--	--	--	ND	0.7	2.9	0.8	3.3	--	--
MW-7	04/01/91	167.61	15.18	--	152.43	ND	ND	ND	ND	ND	--	--
MW-7	07/03/92	167.61	20.28	--	147.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-7	10/05/92	167.61	21.56	--	146.05	ND<50	ND<0.5	ND<0.5	ND<0.5	1.5	--	ANA
MW-7	01/13/93	167.61	15.41	--	152.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	04/23/93	167.61	15.84	--	151.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	07/12/93	167.61	19.84	--	147.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	10/21/93	167.61	21.61	--	146.00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	01/21/94	167.61	20.49	--	147.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-1 (c)	01/21/94	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-7	04/20/94	167.61	20.54	--	147.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.5	PACE
MW-7	08/01/94	167.61	20.99	--	146.62	ND<50	0.7	ND<0.5	ND<0.5	ND<0.5	1.9	PACE
MW-8	03/07/91	165.74	16.72	--	149.02	2.7	780	450	64	310	--	--
MW-8	06/27/91	165.74	--	--	--	12000	3400	1100	240	750	--	--
MW-8	09/27/91	165.74	--	--	--	41	5700	5200	1100	4300	--	--
MW-8	12/18/91	165.74	--	--	--	3.2	990	150	120	250	--	--
MW-8	04/01/91	165.74	12.54	--	153.20	15000	3600	2600	410	1900	--	--
MW-8	07/03/92	165.74	18.78	--	146.96	72000	19000	32000	3000	15000	--	ANA
MW-8	10/05/92	165.74	20.48	0.01	145.27	--	--	--	--	--	--	--
MW-8	01/13/93	165.74	12.87	0.01	152.88	--	--	--	--	--	--	--
MW-8	04/23/93	165.74	13.90	SHEEN	151.84	--	--	--	--	--	--	--
MW-8	07/12/93	165.74	18.30	SHEEN	147.44	--	--	--	--	--	--	--
MW-8	10/21/93	165.74	21.91	0.95	144.54	--	--	--	--	--	--	--
MW-8	01/21/94	165.74	19.12	0.03	146.64	--	--	--	--	--	--	--
MW-8	04/20/94	165.74	19.28	0.03	146.46	26000	1700	4100	960	4000	1.1	PACE
MW-8	08/01/94	165.74	--	--	--	--	--	--	--	--	--	--

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-9	03/07/91	166.20	16.79	--	149.41	7.1	220	4	2.4	2400	--	--
MW-9	06/27/91	166.20	--	--	--	3600	520	400	85	310	--	--
MW-9	09/27/91	166.20	--	--	--	3.2	720	150	50	180	--	--
MW-9	12/18/91	166.20	--	--	--	ND	2.5	1.1	0.3	5.8	--	--
MW-9	04/01/91	166.20	12.89	--	153.31	12000	2000	2600	360	1600	--	--
MW-9	07/03/92	166.20	18.89	--	147.31	5700	17000	840	230	800	--	ANA
MW-9	10/05/92	166.20	20.52	--	145.68	1400	440	17	14	100	--	ANA
MW-9	01/13/93	166.20	12.92	--	153.28	11000	1200	1700	340	1400	--	PACE
QC-1 (c)	01/13/93	--	--	--	0.00	11000	1200	1600	330	1300	--	PACE
MW-9	04/23/93	166.20	14.08	--	152.12	24000	2800	4500	730	3400	--	PACE
MW-9	07/12/93	166.20	18.44	--	147.76	13000	1400	1100	360	1400	--	PACE
QC-1 (c)	07/12/93	--	--	--	--	10000	1200	900	310	1200	--	PACE
MW-9	10/21/93	166.20	21.81	0.89	145.06	--	--	--	--	--	--	--
MW-9	01/21/94	166.20	19.28	--	146.92	--	--	--	--	--	--	--
MW-9	04/20/94	166.20	19.72	--	146.48	43000	2800	6800	1300	7900	1.7	PACE
QC-1 (c)	04/20/94	--	--	--	--	45000	2700	6800	1200	8200	--	PACE
MW-9	08/01/94	166.20	20.18	0.05	146.06	--	--	--	--	--	--	--
MW-10	03/07/91	167.01	18.09	--	148.92	1.6	120	190	32	230	--	--
MW-10	06/27/91	167.01	--	--	--	12000	7300	500	150	300	--	--
MW-10	09/27/91	167.01	--	--	--	57	12000	7200	1400	4600	--	--
MW-10	12/18/91	167.01	--	--	--	5.3	2500	120	36	79	--	--
MW-10	04/01/91	167.01	13.92	--	153.09	ND	ND	ND	ND	ND	--	--
MW-10	07/03/92	167.01	19.92	--	147.09	8600	5100	1300	180	690	--	ANA
MW-10	10/05/92	167.01	21.92	0.19	145.23	--	--	--	--	--	--	--
MW-10	01/13/93	167.01	14.43	0.03	152.60	--	--	--	--	--	--	--
MW-10	04/23/93	167.01	15.26	0.06	151.80	--	--	--	--	--	--	--
MW-10	07/12/93	167.01	19.78	0.45	147.57	--	--	--	--	--	--	--
MW-10	10/21/93	167.01	22.90	0.69	144.63	--	--	--	--	--	--	--
MW-10	01/21/94	167.01	20.25	0.06	146.81	--	--	--	--	--	--	--
MW-10	04/20/94	167.01	20.74	--	146.27	100000	12000	24000	2400	14000	1.0	PACE
MW-10	08/01/94	167.01	22.00	0.28	145.22	--	--	--	--	--	--	--

TABLE 2 - PRODUCT REMOVAL STATUS

BP OIL COMPANY SERVICE STATION NO. 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

WELL ID	DATE	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)	
MW-2	09/29/93	0.10	0.10	
	10/05/93	0.10	0.20	
	10/14/93	0.10	0.30	
	10/20/93	0.25	0.55	
	11/02/93	0.10	0.65	
	12/07/93	0.05	0.70	
	12/17/93	<0.01	0.70	
	12/23/93	0.3	1.00	
	01/12/94	0.05	1.05	
	02/02/94	0.01	1.06	
	02/11/94	0.01	1.07	
	03/18/94	<0.01	1.07	
	MW-8	11/02/93	0.25	0.25
		11/10/93	0.10	0.35
11/16/93		0.10	0.45	
11/23/93		0.10	0.55	
11/30/93		0.10	0.65	
12/17/93		<0.01	0.65	
12/23/93		<0.01	0.65	
01/12/94		0.01	0.66	
02/02/94		0.05	0.71	
02/11/94		0.08	0.79	
02/18/94		<0.01	0.79	
03/18/94		0.01	0.80	
MW-9	11/02/93	0.10	0.10	
	11/10/93	0.10	0.20	
	11/16/93	0.10	0.30	
	12/23/93	<0.01	0.30	
	01/12/94	0.01	0.31	
	01/20/93	0.05	0.36	
	02/02/94	0.05	0.41	
	02/11/94	0.01	0.42	
	02/18/94	<0.01	0.42	
	03/18/94	0.10	0.52	
MW-10	09/07/93	0.10	0.10	
	09/14/93	0.10	0.20	
	09/29/93	0.10	0.30	
	10/05/93	1.60	1.90	
	10/14/93	2.10	4.00	
	10/20/93	1.00	5.00	
	10/27/93	1.00	6.00	
	11/02/93	0.30	6.30	
	11/10/93	0.20	6.50	
	11/16/93	0.10	6.60	
	11/23/93	0.10	6.70	
	11/30/93	0.30	7.00	
	12/07/93	0.20	7.20	
	12/17/93	0.30	7.50	
	12/23/93	<0.01	7.50	
	01/04/94	0.01	7.51	
	01/12/94	0.01	7.52	
	01/20/94	0.20	7.72	
	02/02/94	0.01	7.73	
	02/11/94	0.01	7.74	
02/18/94	0.20	7.94		
05/27/94	<0.01	7.94		

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

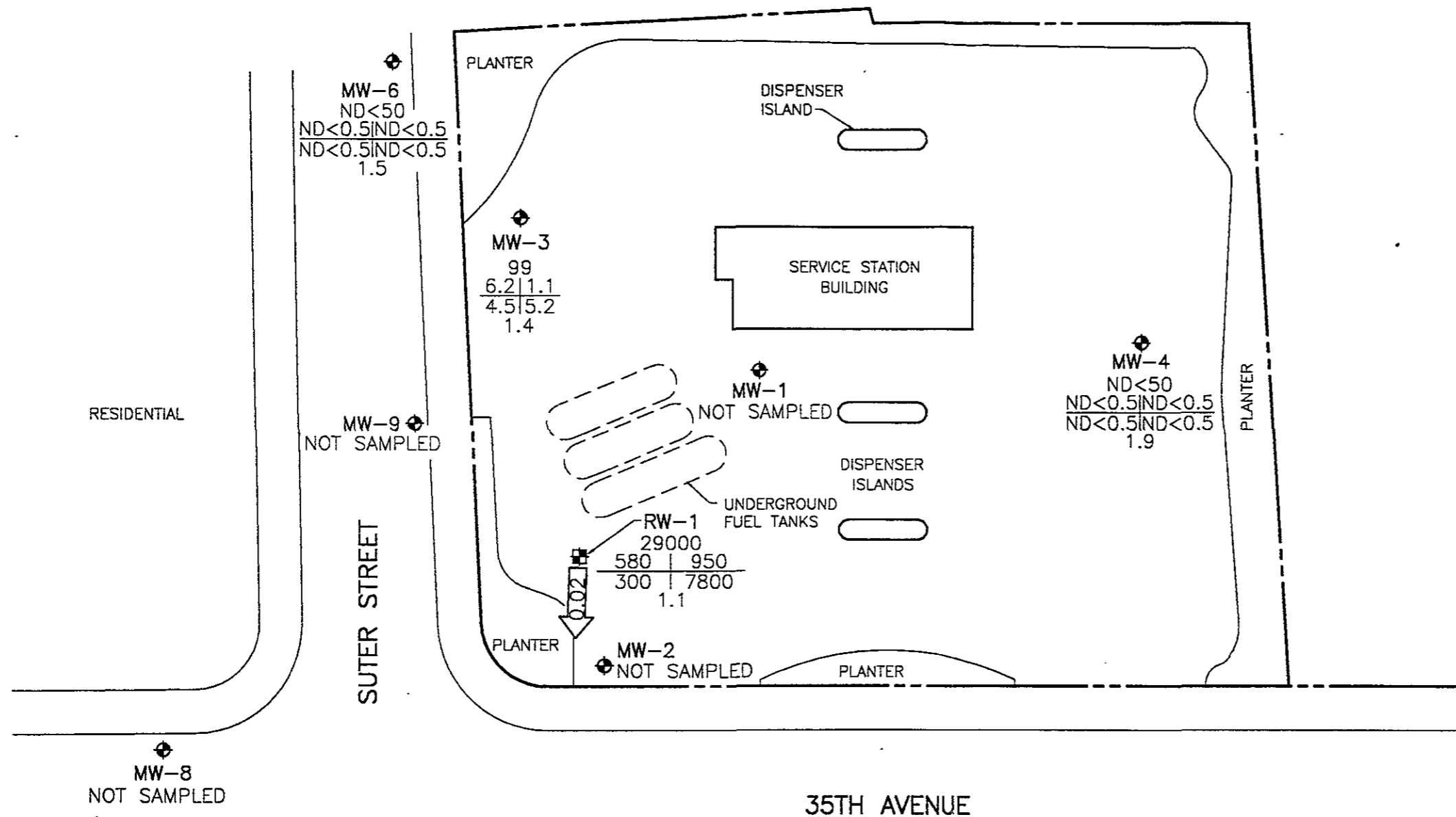
WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
RW-1	07/09/90	168.01	--	1.21	--	--	--	--	--	--	--	--
RW-1	12/21/90	168.01	--	0.01	--	--	--	--	--	--	--	--
RW-1	03/07/91	168.01	17.62	SHEEN	150.39	--	--	--	--	--	--	--
RW-1	06/27/91	168.01	--	0.04	--	--	--	--	--	--	--	--
RW-1	09/27/91	168.01	--	0.02	--	--	--	--	--	--	--	--
RW-1	12/18/91	168.01	--	0.02	--	--	--	--	--	--	--	--
RW-1	04/01/91	168.01	14.40	0.11	153.69	--	--	--	--	--	--	--
RW-1	07/03/92	168.01	20.66	SHEEN	147.35	--	--	--	--	--	--	--
RW-1	10/05/92	168.01	23.34	0.08	144.73	--	--	--	--	--	--	--
RW-1	01/13/93	168.01	16.59	0.05	151.46	--	--	--	--	--	--	--
RW-1	04/23/93	168.01	16.17	0.18	151.98	--	--	--	--	--	--	--
RW-1	07/12/93	168.01	20.18	0.06	147.88	--	--	--	--	--	--	--
RW-1	10/21/93	168.01	25.70	0.56	142.73	--	--	--	--	--	--	--
RW-1	01/21/94	168.01	21.24	0.40	147.07	--	--	--	--	--	--	--
RW-1	04/20/94	168.01	32.20	--	135.81	--	--	--	--	--	--	--
RW-1	08/01/94	168.01	21.70	--	146.31	29000	580	950	300	7800	1.1	PACE
QC-2 (e)	10/05/92	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
QC-2 (e)	01/13/93	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-2 (e)	04/23/93	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-2 (e)	07/12/93	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-2 (e)	10/21/93	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-2 (e)	01/21/94	--	--	--	--	ND<50	ND<0.5	2.1	ND<0.5	2.1	--	PACE
QC-2 (e)	04/20/94	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline
 B Benzene
 T Toluene
 E Ethylbenzene
 X Total xylenes
 DO Dissolved oxygen
 ppb Parts per billion
 ppm Parts per million
 -- Not analyzed/available/applicable/measurable
 ND Not detected above reported detection limit
 ANA Anamatrix, Inc.
 PACE Pace Inc.

NOTES:

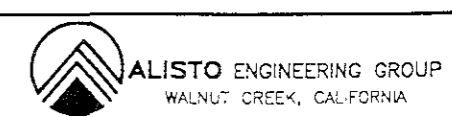
- (a) Casing elevations surveyed to the nearest 0.01 foot relative to mean sea level.
- (b) Groundwater elevations adjusted assuming a specific gravity of 0.75 for free product.
- (c) Blind duplicate.
- (d) Not sampled due to an abandoned vehicle parked over well.
- (e) Travel blank.



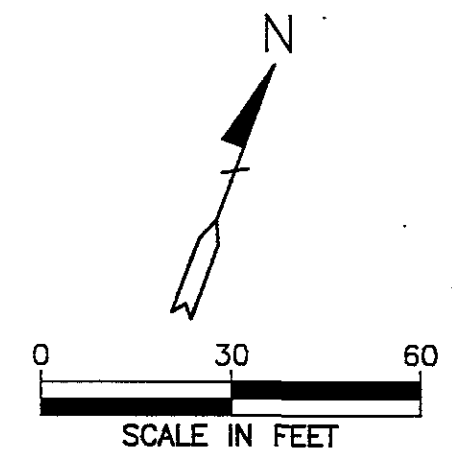
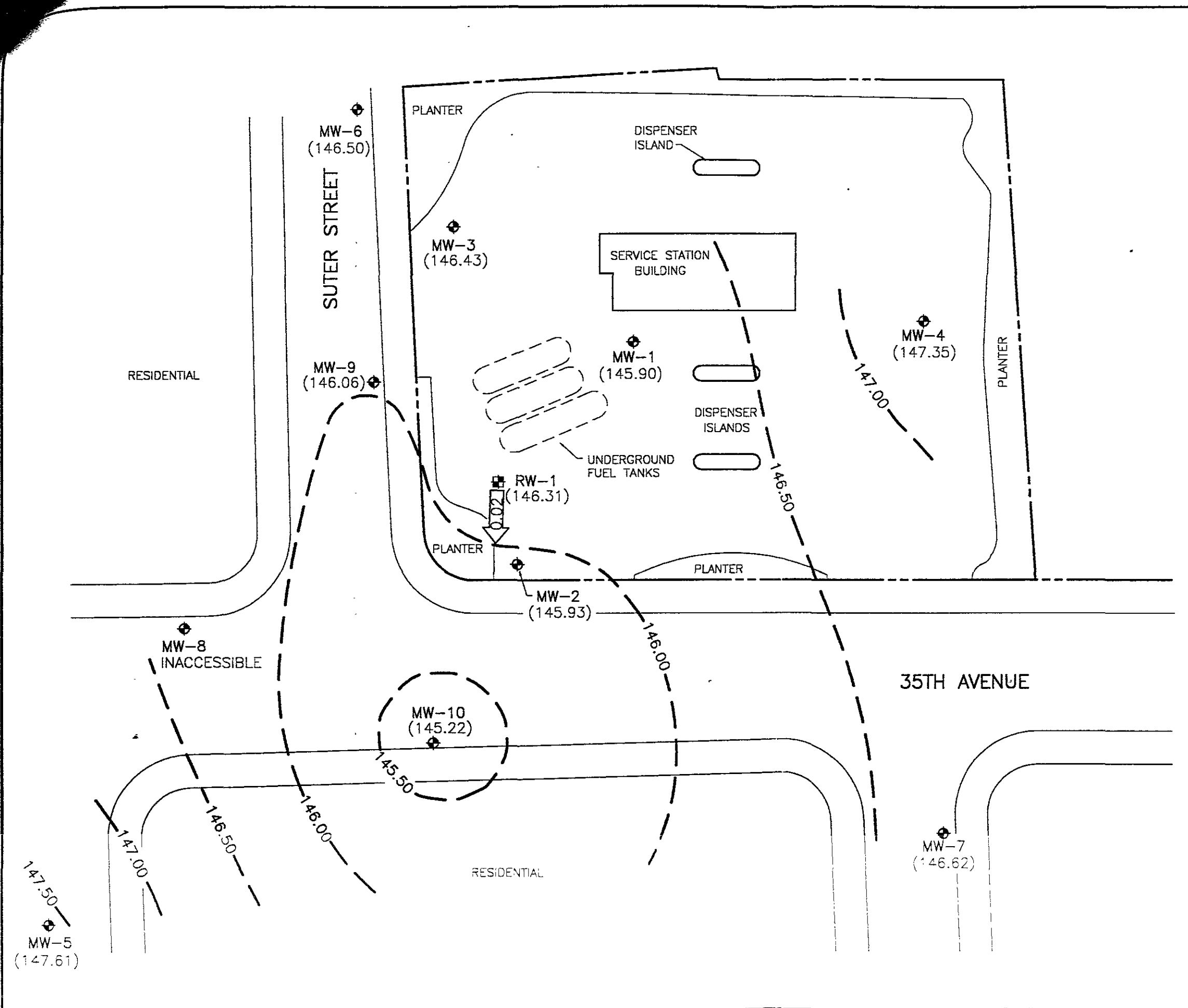
LEGEND

- ◆ GROUNDWATER MONITORING WELL
- ⊕ GROUNDWATER RECOVERY WELL
- TPH-G CONCENTRATION OF CONSTITUENTS IN PARTS PER BILLION, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
- B | T
- E | X
- DO
- TPH-G 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
 AUGUST 1, 1994
 BP OIL SERVICE STATION NO. 11132
 3201 35TH STREET
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-024



10024E-N.DWG 9 23 94 RW 1-30



- LEGEND**
- ⊕ GROUNDWATER MONITORING WELL
 - ⊞ GROUNDWATER RECOVERY WELL
 - (147.35) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
 - 147.00 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL=0.50 FOOT)
 - ← 0.02 → CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
 AUGUST 1, 1994
 BP OIL SERVICE STATION NO. 11132
 3201 35TH STREET
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-024