BP OIL

BP Oil Company
Environmental Resources Management
Building 13, Suite N
295 SW 41st Street
Renton, Washington 98055-4931
(206) 251-0667
Fax No: (206) 251-0736

January 4, 1996

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

RE: BP OIL FACILITY #11117
7210 Bancroft Avenue
Oakland, CA 94621

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED August 29, 1995,** for the above referenced facility. Please note that Pacific Environmental Group has been contracted to perform a vapor extraction pilot test at this site.

If you should have any questions regarding this site, I may be reached at (206) 251-0689.

Respectfully,

Scott T. Hooton
Environmental Resources Management
Corrective Action Manager

STH:aa msword\ERM11117

cc: Ms Juliet Shin, Alameda County Health Care Services Agency
1131 Harbour Bay Parkway, Room 250, Alameda CA 94502-6577

Mr. Brady Nagle, Alisto , 1575 Treat Blvd, Ste 201, Walnut Creek, CA 94598

Mr. Robert K. Barth, Bancroft Oakland Investment Company, 9454 Wilshire Blvd, Suite 901, Beverly Hills, CA 98212

Mr. Larry Silva, TOSCO Northwest, 601 Union Street, Suite 2500, Seattle WA 98101

Site File

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11117
7210 Bancroft Avenue
Oakland, California

Project No. 10-018-04-001

Prepared for:

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

Prepared by:

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

August 29, 1995

Ken Simas
Project Manager

Al Sevilla, P.E.
Principal

REGISTERED PROFESSIONAL ENGINEER
ALBERTO SANCHEZ SEVILLA
26392
Exp. Date 3/31/96
CIVIL
STATE OF CALIFORNIA

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11117
7210 Bancroft Avenue
Oakland, California

Project No. 10-018-04-001

August 29, 1995

INTRODUCTION

This report presents the results and findings of the July 5, 1995 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11117, 7210 Bancroft Avenue, 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. 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.

FREE PRODUCT MONITORING AND RECOVERY

A passive product recovery canister has been installed in Monitoring Well MW-2 to recover liquid-phase product. Product thicknesses for this and previous monitoring events are presented in Table 1. The volume of free product recovered from the wells is presented in Table 2.

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.

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11117
7210 BANCROFT AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

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)	Organic Lead (ug/l)	DO (ppm)	LAB
MW-1	01/05/92	49.81	33.16	---	16.65	57000	50000	2400	1000	1100	3100	ND	---	---
MW-1	01/10/92	49.81	33.16	---	16.65	---	---	---	---	---	---	---	---	---
MW-1	06/05/92	49.81	29.01	---	20.80	31000	---	2800	2100	800	2300	---	---	---
MW-1	07/24/92	49.80	29.45	---	20.35	---	---	---	---	---	---	---	---	---
MW-1	07/27/92	49.80	29.45	---	20.35	---	---	---	---	---	---	---	---	---
MW-1	09/15/92	49.80	30.53	---	19.27	40000	1200 (c)	3400	3000	1300	3400	---	---	ANA
QC-1 (d)	09/15/92	---	---	---	---	36000	---	3800	3400	1400	3800	---	---	ANA
MW-1	12/15/92	49.80	31.26	---	18.54	27000	1100 (c)	1700	580	700	1900	---	---	ANA
QC-1 (d)	12/15/92	---	---	---	---	22000	---	1500	440	510	1300	---	---	ANA
MW-1	03/15/93	49.80	24.80	---	25.00	17000	580	1700	1200	590	1800	---	---	PACE
QC-1 (d)	03/15/93	---	---	---	---	15000	---	1100	860	440	1400	---	---	PACE
MW-1	06/07/93	49.80	25.01	---	24.79	750	100	0.8	0.8	ND<0.5	ND<0.5	---	---	PACE
QC-1 (d)	06/07/93	---	---	---	---	720	---	0.7	0.7	ND<0.5	ND<0.5	---	---	PACE
MW-1	09/23/93	49.80	28.70	---	21.10	---	---	---	---	---	---	---	---	---
MW-1	09/23/93	---	---	---	---	40000	770	4000	500	920	3000	---	---	PACE
MW-1	12/27/93	49.80	28.66	---	21.14	27000	---	2000	400	940	2600	---	---	PACE
QC-1 (d)	12/27/93	---	---	---	---	21000	---	1700	380	830	2400	---	---	PACE
MW-1	04/05/94	49.80	26.37	---	23.43	27000	---	3400	930	950	2900	---	---	PACE
QC-1 (d)	04/05/94	---	---	---	---	29000	---	3700	1000	1000	3100	---	1.3	PACE
MW-1	07/22/94	49.80	26.54	---	23.26	1700	---	220	2.3	2.0	3.4	---	2.0	PACE
MW-1	10/13/94	49.80	27.46	---	22.34	1200	---	250	21	ND<0.5	3.2	---	2.6	PACE
MW-1	01/25/95	49.80	20.96	---	28.84	1000	---	420	8	13	4	---	---	ATI
MW-1	04/19/95	49.80	19.59	---	30.21	5200	---	420	51	230	340	---	6.0	ATI
MW-1	07/05/95	49.80	19.61	---	30.19	320	---	4.2	ND<0.50	ND<0.50	ND<1.0	---	4.6	ATI
MW-2	01/05/92	51.07	DRY	---	DRY	---	---	---	---	---	---	---	---	---
MW-2	01/10/92	51.06	DRY	---	DRY	---	---	---	---	---	---	---	---	---
MW-2	06/05/92	51.06	30.05	---	21.01	11000	---	2000	180	490	1900	---	---	---
MW-2	07/24/92	51.07	30.72	---	20.35	---	---	---	---	---	---	---	---	---
MW-2	07/27/92	51.07	30.52	---	20.55	---	---	---	---	---	---	---	---	---
MW-2	09/15/92	51.07	31.56	---	19.51	75000	3200 (c)	2000	6500	2300	13000	---	---	ANA
MW-2	12/15/92	51.07	32.40	---	18.67	34000	1600 (c)	6200	8900	2000	7900	---	---	ANA
MW-2	03/15/93	51.07	26.14	---	24.93	150000	8400	12000	18000	3200	22000	---	---	PACE
MW-2 (e)	06/07/93	51.07	26.38	SHEEN	24.69	---	---	---	---	---	---	---	---	---
MW-2 (e)	09/23/93	51.07	31.43	1.92	21.08	---	---	---	---	---	---	---	---	---
MW-2 (e)	12/27/93	51.07	34.07	1.07	17.80	---	---	---	---	---	---	---	---	---
MW-2 (e)	04/05/94	51.07	30.44	3.30	23.11	---	---	---	---	---	---	---	---	---
MW-2 (e)	07/22/94	51.07	28.51	0.80	23.16	---	---	---	---	---	---	---	---	---
MW-2 (e)	10/13/94	51.07	29.33	0.70	22.27	---	---	---	---	---	---	---	---	---
MW-2 (e)	01/25/95	51.07	25.55	4.25	28.71	---	---	---	---	---	---	---	---	---
MW-2 (e)	04/19/95	51.07	19.78	0.12	31.38	---	---	---	---	---	---	---	---	---
MW-2	07/05/95	51.07	20.88	0.09	30.26	140000	---	14000	30000	3500	26000	---	---	ATI
MW-3	01/05/92	49.95	33.69	---	16.26	7400	4000	790	23	210	40	ND	---	---
MW-3	01/10/92	50.00	33.74	---	16.26	---	---	---	---	---	---	---	---	---
MW-3	06/05/92	50.00	29.65	---	20.35	2000	---	130	5.3	93	20	---	---	---
MW-3	07/24/92	49.95	30.14	---	19.81	---	---	---	---	---	---	---	---	---
MW-3	07/27/92	49.95	30.14	---	19.81	---	---	---	---	---	---	---	---	---
MW-3	09/15/92	49.95	31.07	---	18.88	450	ND<50	55	3.1	34	7.1	---	---	ANA
MW-3	12/15/92	49.95	31.93	---	18.02	12000	710 (c)	940	ND<50	310	120	---	---	ANA
MW-3	03/15/93	49.95	25.71	---	24.24	ND<50	60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	06/07/93	49.95	25.80	---	24.15	150	ND<50	3.6	ND<0.5	0.9	1.3	---	---	PACE
MW-3	09/23/93	49.95	29.18	---	20.77	---	---	---	---	---	---	---	---	---
MW-3	09/24/93	---	---	---	---	160	ND<50	8.4	ND<0.5	3.7	1.3	---	---	PACE
MW-3	12/27/93	49.95	29.25	---	20.70	9400	---	1100	48	530	120	---	---	PACE
MW-3	04/05/94	49.95	26.84	---	23.11	7000	---	860	19	330	52	---	2.0	PACE
MW-3	07/22/94	49.95	26.90	---	23.11	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	2.1	PACE
MW-3	10/13/94	49.95	27.83	---	22.12	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	2.6	PACE
MW-3	01/25/95	49.95	21.65	---	28.30	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	ATI
MW-3	04/19/95	49.95	19.33	---	30.62	2400	---	170	8.0	130	27	---	5.0	ATI
MW-3	07/05/95	49.95	20.27	---	29.68	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.4	ATI

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11117
7210 BANCROFT AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

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)	Organic Lead (ug/l)	DO (ppm)	LAB
MW-4	07/24/92	50.76	30.02	---	20.74	42000	---	3200	3600	1400	4100	---	---	---
MW-4	07/27/92	50.76	30.02	---	20.74	---	---	---	---	---	---	---	---	---
MW-4	09/15/92	50.76	31.14	---	19.62	55000	1700 (c)	7600	13000	2800	9500	---	---	ANA
MW-4	12/15/92	50.76	31.98	---	18.78	36000	2200 (c)	3700	4700	1200	4000	---	---	ANA
MW-4	03/15/93	50.76	25.34	---	25.42	69000	1200	7600	15000	2500	11000	---	---	PACE
MW-4	06/07/93	50.76	25.67	---	25.09	73000	2500	10000	19000	3400	14000	---	---	PACE
MW-4	09/23/93	50.76	29.37	---	21.39	---	---	---	---	---	---	---	---	---
MW-4	09/24/93	---	---	---	---	68000	5700	11000	2100	8600	990	---	---	PACE
QC-1 (d)	09/24/93	---	---	---	---	59000	---	5300	10000	2200	8400	---	---	PACE
MW-4	12/27/93	50.76	29.40	---	21.36	32000	---	2500	4400	1300	4400	---	---	PACE
MW-4	04/05/94	50.76	27.09	---	23.67	64000	---	6500	14000	1900	9600	---	1.4	PACE
MW-4	07/22/94	50.76	27.33	---	23.43	85000	---	10000	20000	3200	13000	---	0.8	PACE
QC-1 (d)	07/22/94	---	---	---	---	85000	---	11000	21000	3300	14000	---	---	PACE
MW-4	10/13/94	50.76	28.25	---	22.51	51000	---	7100	13000	2100	8900	---	2.9	PACE
QC-1 (d)	10/13/94	---	---	---	---	51000	---	7400	13000	2100	9100	---	---	PACE
MW-4	01/25/95	50.76	21.85	---	28.91	26000	---	3600	9600	1200	6400	---	---	ATI
QC-1 (d)	01/25/95	---	---	---	---	26000	---	4200	12000	1500	7800	---	---	ATI
MW-4	04/19/95	50.76	19.44	---	31.32	89000	---	12000	24000	3500	18000	---	5.1	ATI
QC-1 (d)	04/19/95	---	---	---	---	100000	---	12000	26000	3800	21000	---	---	ATI
MW-4	07/05/95	50.76	20.52	---	30.24	130000	---	13000	29000	3300	25000	---	4.3	ATI
MW-6	07/24/92	50.32	30.63	---	19.69	ND	---	1.6	ND	ND	ND	---	---	---
MW-6	07/27/92	50.32	30.63	---	19.69	---	---	---	---	---	---	---	---	---
MW-6	09/15/92	50.32	31.52	---	18.80	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	12/15/92	50.32	32.42	---	17.90	58	ND<50	1.3	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	03/15/93	50.32	26.29	---	24.03	ND<50	ND<50	ND<0.5	0.6	ND<0.5	0.7	---	---	PACE
MW-6	06/07/93	50.32	26.33	---	23.99	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	1.5	---	---	PACE
MW-6	09/23/93	50.32	29.64	---	20.68	---	---	---	---	---	---	---	---	---
MW-6	09/24/93	---	---	---	---	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	12/27/93	50.32	29.75	---	20.57	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	04/05/94	50.32	27.26	---	23.06	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	1.7	PACE
MW-6	07/22/94	50.32	27.34	---	22.98	350	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.5	PACE
MW-6 (f)	10/13/94	50.32	---	---	---	---	---	---	---	---	---	---	---	---
MW-6	01/25/95	50.32	22.16	---	28.16	240	---	6	ND<0.5	ND<0.5	ND<1	---	---	ATI
MW-6 (f)	04/19/95	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-6	07/05/95	50.32	20.80	---	29.52	180	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.9	ATI
MW-7	01/25/95	51.4	21.67	---	29.73	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	7.0	ATI
MW-7	04/19/95	51.4	25.27	---	26.13	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	5.0	ATI
MW-7	07/05/95	51.4	24.63	---	26.77	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.2	ATI

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BP OIL COMPANY SERVICE STATION NO. 11117
7210 BANCROFT AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

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)	Organic Lead (ug/l)	DO (ppm)	LAB
MW-8	01/25/95	50.88	31.59	---	19.29	54	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	7.1	ATI
MW-8	04/19/95	50.88	19.18	---	31.70	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	5.1	ATI
MW-8	04/19/95	50.88	19.03	---	31.85	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.5	ATI
MW-9	01/25/95	51.05	22.32	---	28.73	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	7.4	ATI
MW-9	04/19/95	51.05	19.86	---	31.19	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1	---	5.2	ATI
MW-9	07/05/95	51.05	20.78	---	30.27	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.4	ATI
QC-2 (g)	09/15/92	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (g)	12/15/92	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (g)	03/15/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (g)	06/07/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (g)	09/24/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (g)	12/27/93	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (g)	04/05/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (g)	07/22/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (g)	10/13/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (g)	01/25/95	---	---	---	---	ND<50	---	ND<0.5	2	0.6	1	---	---	ATI
QC-2 (g)	04/19/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ATI
QC-2 (g)	07/05/95	---	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
ND	Not detected above reported detection limit
---	Not analyzed/applicable/measurable
ANA	Anametrix, Inc.
PACE	Pace, Inc.
ATI	Analytical Technologies, 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) Concentrations reported as diesel from MW-1, MW-2, and MW-4 are primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene.

(d) Blind duplicate.

(e) Well not sampled due to presence of free product.

(f) Well inaccessible.

(g) Travel blank.

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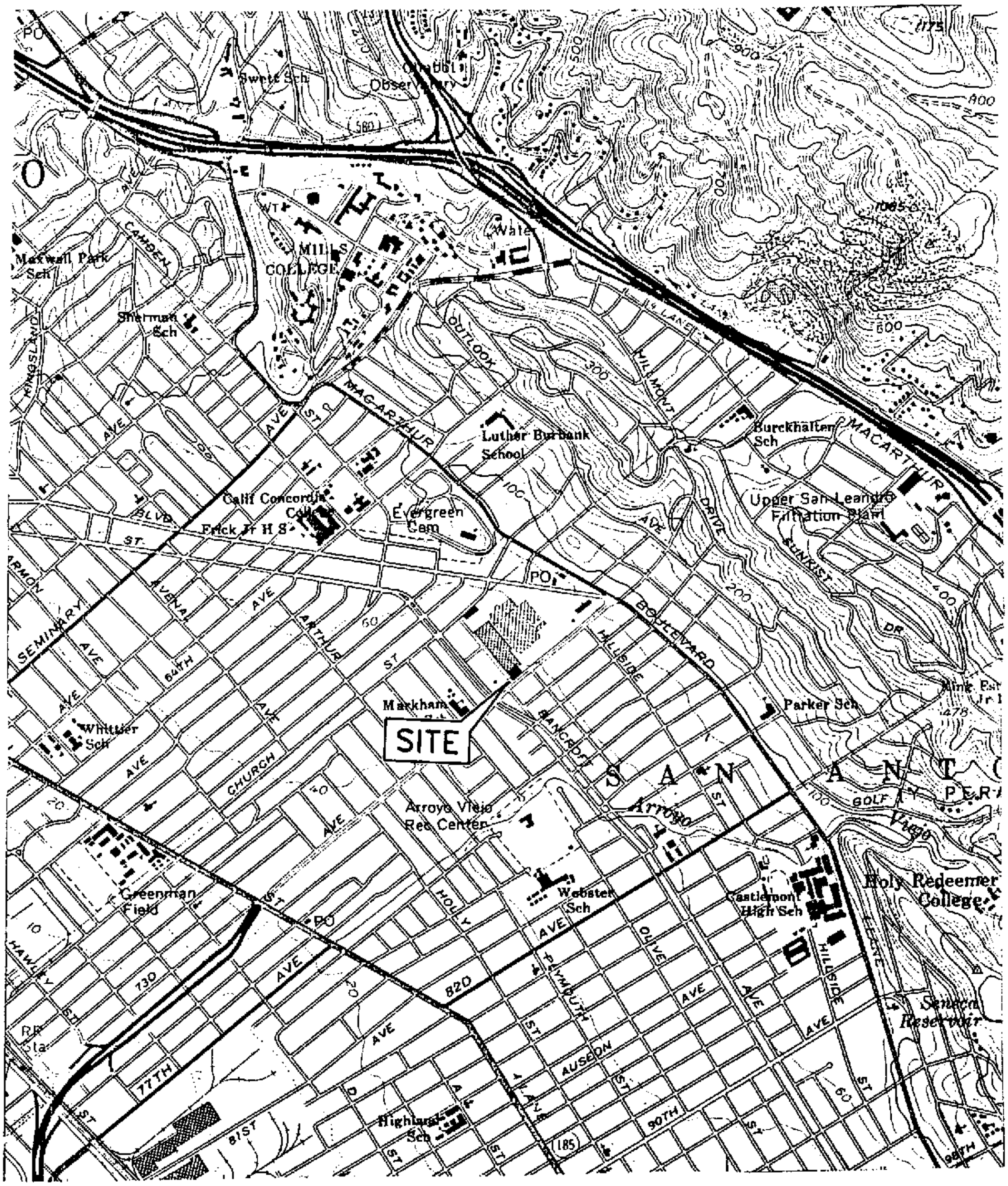
TABLE 2
PRODUCT REMOVAL STATUS

BP OIL COMPANY SERVICE STATION NO. 11117
7210 BANCROFT STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-018

WELL ID	DATE	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)
MW-2	02/11/94	0.1	0.1
	02/18/94	0.9	1.0
	02/25/94	0.1	1.1
	03/04/94	0.1	1.2
	03/30/94	2.6	3.8
	04/05/94	4.0	7.8
	04/13/94	0.1	7.9
	04/21/94	0.1	8.0
	04/29/94	0.3	8.3
	05/06/94	0.6	8.9
	05/13/94	0.1	9.0
	05/20/94	1.1	10.1
	05/26/94	2.0	12.1
	06/02/94	1.0	13.1
	06/09/94	1.0	14.1
	06/16/94	1.1	15.2
	06/23/94	0.9	16.1
	06/29/94	0.6	16.7
	07/07/94	0.5	17.2
	07/12/94	1.0	18.2
	07/20/94	0.7	18.9
	07/29/94	1.1	20.0
	08/05/94	0.7	20.7
	08/12/94	0.7	21.4
	08/18/94	0.4	21.8
	09/16/94	0.8	22.6
	09/23/94	0.7	23.3
	10/26/94	0.4	23.7
	11/03/94	1.1	24.8
	11/12/94	0.6	25.4
	11/16/94	0.4	25.8
	11/23/94	0.6	26.4
	01/25/95	4	30.4
	02/08/95	0.3	30.7
	03/30/95	0.0	30.7
	04/13/95	0.0	30.7
	04/19/95	0.1	30.8
	05/23/95	0.1	30.9
	07/05/95	0.2	31.1



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

N

0 1000' 2000'

FIGURE 1

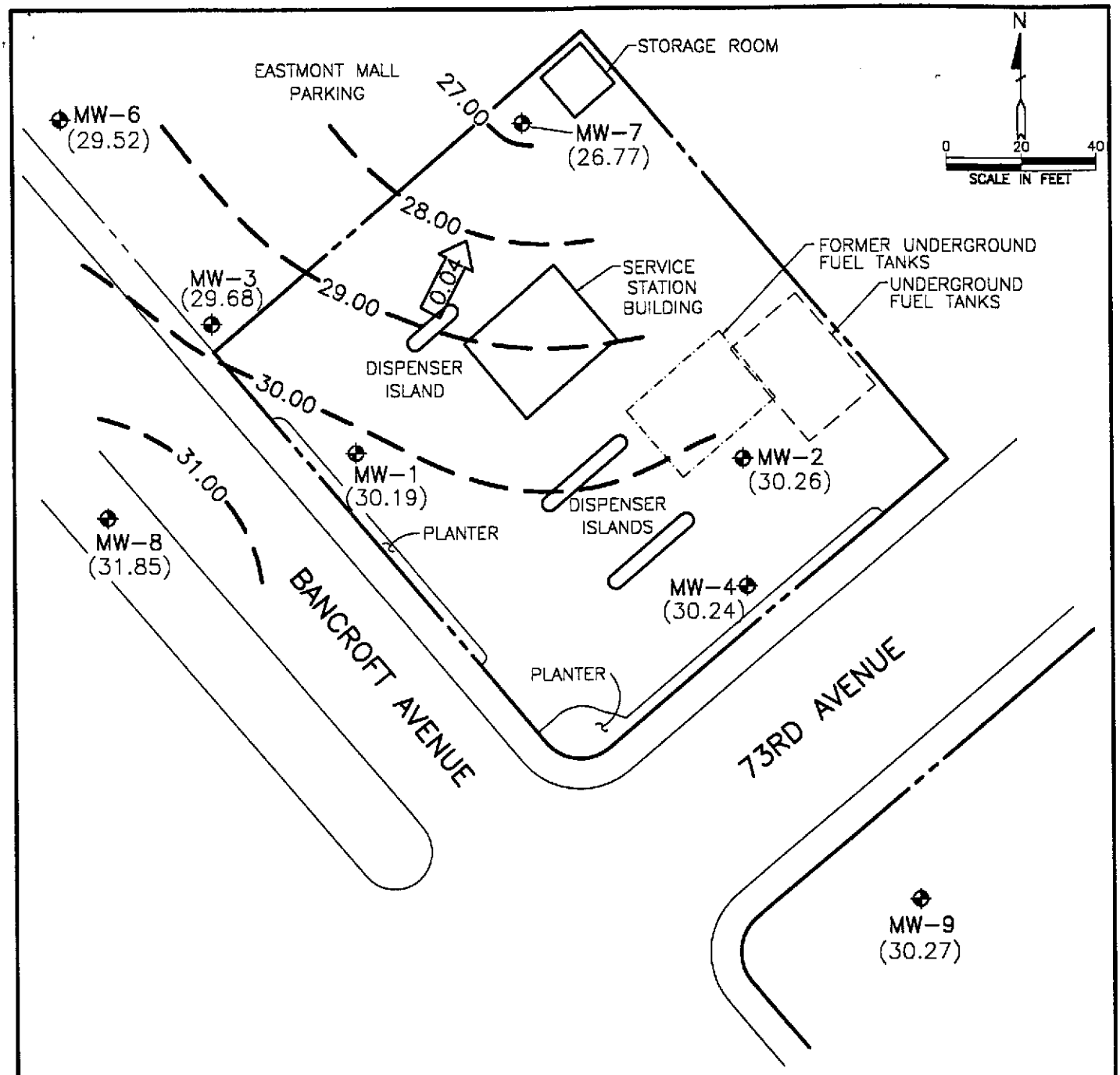
SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10-018

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10018B—DWG 11-12-93 RKW 1=1



LEGEND

⊕	GROUNDWATER MONITORING WELL
(26.77)	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
27.00	GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–1.00 FOOT)
0.04	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

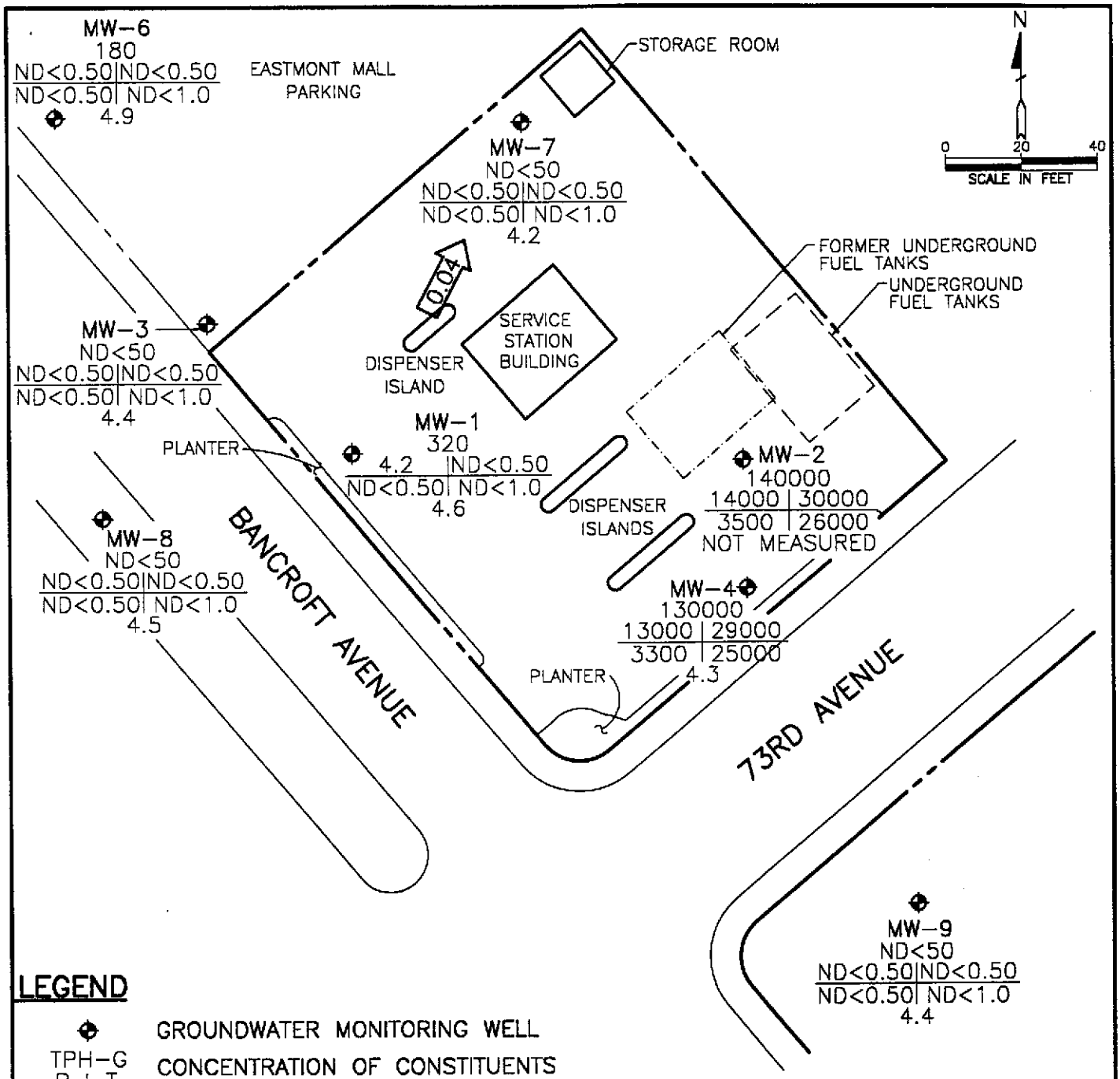
JULY 5, 1995

BP OIL SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10–018

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10018D-0.DWG 8-10-95 RKW 1=40



LEGEND

◆	GROUNDWATER MONITORING 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	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
DO	DISSOLVED OXYGEN
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
← 0.04	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

JULY 5, 1995

BP OIL SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 10-018

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10018E-0.DWG 8-10-95 RKW 1=40

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

ENGINEERING

GROUP

1575 TREAT BOULEVARD, SUITE 201

WALNUT CREEK CA 94596 (510) 295-1650 FAX 295-1823

Field Report / Sampling Data Sheet

04-001 cDA

Ø Groundwater Sampling

Date: 7/5/95 Project No. 10-018 ~~-03-004~~

Day: Wed Station No. 1117

Weather: Clear Address Oakland, Ca

SAMPLER: CB

Well ID	SAMPLE#	WATER	DEPTH	Well ID	SAMPLE #	WATER	DEPTH	Well ID	SAMPLE	WATER DEPTH
MW-1	S-6	19.61		MW-7	S-3	24.63				
MW-2	S-8	20.88		MW-8	S-4	19.03				
MW-3	S-2	20.27		MW-9	S-1	20.78				
MW-4	S-7	20.52								
MW-6	S-5	20.80								

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-9	20.78	2"	OK	Ø	Ø	3	1202	70.2	6.98	487 µS	4.3
						6		69.1	6.90	482 µS	
						9	1220	68.7	6.88	479 µS	4.4

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

38.86 - 20.78 = 18.08 X .16 = 2.89 X 3 = 8.67

Purge Method: OSurface Pump ODisp.Tube OWinch ØDisp. Baller(s) 1 OSys Port

Comments:

O EPA 601 ____
Ø TPH-G/BTEX HCl
O TPH Diesel ____
O TOG 5520 ____

Time Sampled: 1230

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-3	20.27	2"	OK	Ø	Ø	4	1247	67.5	7.40	457 µS	4.1
						7		67.1	7.31	449 µS	
						11	1305	66.6	7.25	445 µS	4.4

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

42.40 - 20.27 = 22.13 X .16 = 3.54 X 3 = 10.62

Purge Method: OSurface Pump ODisp.Tube OWinch ØDisp. Baller(s) 1 OSys Port

Comments:

O EPA 601 ____
Ø TPH-G/BTEX HCl
O TPH Diesel ____
O TOG 5520 ____

Time Sampled: 1318

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-7	24.63	2"	OK	Ø	Ø	3	1333	69.6	7.17	664 µS	4.4
						6		68.2	7.08	658 µS	
						10	1400	67.7	7.03	652 µS	4.2

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

44.72 - 24.63 = 20.09 X .16 = 3.21 X 3 = 9.63

Purge Method: OSurface Pump ODisp.Tube OWinch ØDisp. Baller(s) 1 OSys Port

Comments:

O EPA 601 ____
Ø TPH-G/BTEX HCl
O TPH Diesel ____
O TOG 5520 ____

Time Sampled: 1402

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-8	19.03	2"	OK	Ø	Ø	3	1415	68.0	7.96	302 µS	4.7
						7		67.0	7.82	299 µS	
						10	1439	66.4	7.76	295 µS	4.5

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

39.50 - 19.03 = 20.47 X .16 = 3.28 X 3 = 9.84

Purge Method: OSurface Pump ODisp.Tube OWinch ØDisp. Baller(s) 1 OSys Port

Comments:

O EPA 601 ____
Ø TPH-G/BTEX HCl
O TPH Diesel ____
O TOG 5520 ____

Time Sampled: 1450

ALISTO

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

Field Report / Sampling Data Sheet

04-001

⊗ Groundwater Sampling

Date: 7/5/95 Project No. 10-018-~~03~~/004
Day: Wed Station No. 11117
Weather: Clear Address Oakland
SAMPLER: MB

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-6	20.80	2"	OK	∅	∅	3	1518	67.6	7.22	493 MS	4.8
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.			6		67.0	7.13	489 µS	
Approx 40.00 - 20.80 = 19.20 X.16 =	3.07 X 3 =	9.21				9.5	1539	66.7	7.06	486 µS	4.9

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

EPA 601_____ TPH-G/BTEX ~~HCl~~ ✓ TPH Diesel____ TOG 5520 ___ **Time Sampled** 1545

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-1	19.61	2"	OK	∅	∅	2	1602	67.4	7.14	438 µS	4.4
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.			5		67.1	7.02	430 µS	
36.12 - 19.61 = 16.51 X.16 =	2.64 X 3 =	7.92				8	1615	66.9	6.98	427 µS	4.6

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

EPA 601_____ TPH-G/BTEX ~~HCl~~ ✓ TPH Diesel____ TOG 5520 ___ **Time Sampled** 1618

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-4	20.52	2"	OK	∅	∅	3	1638	68.6	6.89	.94 MS	4.1
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.			6		67.7	6.82	.91 MS	
40.00 - 20.52 = 19.48 X.16 =	3.12 X 3 =	9.36				9.5	1655	67.3	6.80	.90 MS	4.3

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: QC-1 Dup taken from this well

EPA 601_____ TPH-G/BTEX ~~HCl~~ ✓ TPH Diesel____ TOG 5520 ___ **Time Sampled** 1700

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-2	20.88	2"	OK	20.79	.09						
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.								
Emptied PRS + Bailed FP											

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: 30z FP 5gal TF Bailer ✓

EPA 601_____ TPH-G/BTEX___ TPH Diesel____ TOG 5520 ___ **Time Sampled**

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.								

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

EPA 601_____ TPH-G/BTEX___ TPH Diesel____ TOG 5520 ___ **Time Sampled**

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

Analytical**Technologies,** Inc. Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 507057

July 20, 1995

ALISTO ENGINEERING
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK, CA 94598

Project Name: BP SITE#11117/OAKLAND, CA
Project # : G317860/10-018-~~03/004~~ 04-001

Attention: BILL HOWELL

Analytical Technologies, Inc. has received the following sample(s):

Date Received	Quantity	Matrix
July 11, 1995	9	WATER

The sample(s) were analyzed with EPA methodology or equivalent methods as specified in the enclosed analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. If any flags appear next to the analytical data in this report, please see the attached list of flag definitions.

The results of these analyses and the quality control data are enclosed. Please note that the Sample Condition Upon Receipt Checklist is included at the end of this report.

GARY STEWART
VOLATILES SUPERVISOR

ALAN J. KLEINSCHMIDT
LABORATORY MANAGER

Analytical Technologies, Inc.

SAMPLE CROSS REFERENCE

Client : ALISTO ENGINEERING
Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

Report Date: July 20, 1995
ATI I.D. : 507057

ATI #	Client Description	Matrix	Date Collected
1	S-1	WATER	05-JUL-95
2	S-2	WATER	05-JUL-95
3	S-3	WATER	05-JUL-95
4	S-4	WATER	05-JUL-95
5	S-5	WATER	05-JUL-95
6	S-6	WATER	05-JUL-95
7	S-7	WATER	05-JUL-95
8	S-8	WATER	05-JUL-95
9	S-9	WATER	05-JUL-95

---TOTALS---

Matrix	# Samples
WATER	9

ATI STANDARD DISPOSAL PRACTICE

The sample(s) from this project will be disposed of in twenty-one (21) days from the date o this report. If an extended storage period is required, please contact our sample contro department before the scheduled disposal date.

Analytical Technologies, Inc.

ANALYTICAL SCHEDULE

Client : ALISTO ENGINEERING
Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

ATI I.D.: 507057

Analysis	Technique/Description
MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)	GC/FLAME ION./PHOTO IONIZATION DETECTOR

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING ATI I.D. : 507057
Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	S-1	WATER	05-JUL-95	N/A	17-JUL-95	1.00
2	S-2	WATER	05-JUL-95	N/A	17-JUL-95	1.00
3	S-3	WATER	05-JUL-95	N/A	17-JUL-95	1.00

Parameter	Units	1	2	3
BENZENE	UG/L	<0.50	<0.50	<0.50
TOLUENE	UG/L	<0.50	<0.50	<0.50
ETHYLBENZENE	UG/L	<0.50	<0.50	<0.50
XYLENES (TOTAL)	UG/L	<1.0	<1.0	<1.0
FUEL HYDROCARBONS	UG/L	<50	<50	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
SURROGATES				
TRIFLUOROTOLUENE	%	102	104	103

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING ATI I.D. : 507057
Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	S-4	WATER	05-JUL-95	N/A	17-JUL-95	1.00
5	S-5	WATER	05-JUL-95	N/A	18-JUL-95	1.00
6	S-6	WATER	05-JUL-95	N/A	17-JUL-95	1.00

Parameter	Units	4	5	6
BENZENE	UG/L	<0.50	<0.50	4.2@E
TOLUENE	UG/L	<0.50	<0.50	<0.50
ETHYLBENZENE	UG/L	<0.50	<0.50	<0.50
XYLENES (TOTAL)	UG/L	<1.0	<1.0	<1.0
FUEL HYDROCARBONS	UG/L	<50	180	320
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
SURROGATES				
TRIFLUOROTOLUENE	%	105	101	139*H

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING ATI I.D. : 507057
Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
7	S-7	WATER	05-JUL-95	N/A	18-JUL-95	500.00
8	S-8	WATER	05-JUL-95	N/A	18-JUL-95	500.00
9	S-9	WATER	05-JUL-95	N/A	18-JUL-95	1.00

Parameter	Units	7	8	9
BENZENE	UG/L	13000	14000	<0.50
TOLUENE	UG/L	29000	30000	<0.50
ETHYLBENZENE	UG/L	3300	3500	<0.50
XYLENES (TOTAL)	UG/L	25000	26000	<1.0
FUEL HYDROCARBONS	UG/L	130000	140000	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
SURROGATES				
TRIFLUOROTOLUENE	%	97	96	96

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 36112
Client : ALISTO ENGINEERING
Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

ATI I.D. : 507057
Date Extracted: N/A
Date Analyzed : 17-JUL-95
Dil. Factor : 1.00

Parameters	Units	Results
BENZENE	UG/L	<0.50
TOLUENE	UG/L	<0.50
ETHYLBENZENE	UG/L	<0.50
XYLENES (TOTAL)	UG/L	<1.0
FUEL HYDROCARBONS	UG/L	<50
HYDROCARBON RANGE		C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE
SURROGATES		
TRIFLUOROTOLUENE	%	99

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 36113
Client : ALISTO ENGINEERING
Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

ATI I.D. : 507057
Date Extracted: N/A
Date Analyzed : 18-JUL-95
Dil. Factor : 1.00

Parameters	Units	Results
BENZENE	UG/L	<0.50
TOLUENE	UG/L	<0.50
ETHYLBENZENE	UG/L	<0.50
XYLENES (TOTAL)	UG/L	<1.0
FUEL HYDROCARBONS	UG/L	<50
HYDROCARBON RANGE		C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE
SURROGATES		
TRIFLUOROTOLUENE	%	98

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
MSMSD # : 77185
Client : ALISTO ENGINEERING

Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

ATI I.D. : 507057
Date Extracted: N/A
Date Analyzed : 17-JUL-95
Sample Matrix : WATER
REF I.D. : 507036-01

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	UG/L	<0.50	5.0	4.6	92	5.1	102	10
TOLUENE	UG/L	<0.50	5.0	4.7	94	4.8	96	2

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative % Difference) = (Spiked Sample Result - Duplicate Spike Result)*100/Average Resul

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
MSMSD # : 77226
Client : ALISTO ENGINEERING

Project # : G317860/10-018-03/004
Project Name: BP SITE#11117/OAKLAND, CA

ATI I.D. : 507057
Date Extracted: N/A
Date Analyzed : 18-JUL-95
Sample Matrix : WATER
REF I.D. : 507058-02

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	UG/L	<0.50	5.0	4.4	88	4.4	88	0
TOLUENE	UG/L	<0.50	5.0	4.6	92	4.6	92	0

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative % Difference) = (Spiked Sample Result - Duplicate Spike Result)*100/Average Result

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank Spike #: 57737
Client : ALISTO ENGINEERING
Project # : G317860/10-018-03/004
Project Name : BP SITE#11117/OAKLAND, CA

ATI I.D. : 507057
Date Extracted: N/A
Date Analyzed : 17-JUL-95
Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	4.7	5.0	94
TOLUENE	UG/L	<0.50	4.9	5.0	98

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative % Difference) = (Spiked Sample - Blank Result)*100/Average Result

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank Spike #: 57738
Client : ALISTO ENGINEERING
Project # : G317860/10-018-03/004
Project Name : BP SITE#11117/OAKLAND, CA

ATI I.D. : 507057
Date Extracted: N/A
Date Analyzed : 18-JUL-95
Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	4.7	5.0	94
TOLUENE	UG/L	<0.50	4.9	5.0	98

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative % Difference) = (Spiked Sample - Blank Result)*100/Average Result

ANALYTICAL TECHNOLOGIES, INC.
SAN DIEGO
FLAGS

ORGANICS

FLAG	MESSAGE DESCRIPTION
A	A TIC IS A SUSPECTED ALDOL-CONDENSATION PRODUCT
B	ANALYTE FOUND IN THE ASSOCIATED REAGENT BLANK
C	PESTICIDE, WHERE THE IDENTIFICATION WAS CONFIRMED BY GC/MS
CO	THESE COMPOUNDS CO-ELUTE AND ARE QUANTITATED AS ONE PEAK
D	COMPOUND IDENTIFIED IN AN ANALYSIS AT SECONDARY DILUTION
E	ANALYTE AMOUNT EXCEEDS THE CALIBRATION RANGE
J	ESTIMATED VALUE
H	QUANTIFIED AS DIESEL BUT CHROMATOGRAPHIC PATTERN DOES NOT MATCH THAT OF DIESEL
K	QUANTIFIED AS KEROSENE BUT CHROMATOGRAPHIC PATTERN DOES NOT MATCH THAT OF KEROSENE
L	QUANTIFIED AS GASOLINE BUT CHROMATOGRAPHIC PATTERN DOES NOT MATCH THAT OF GASOLINE
N	PRESUMPTIVE EVIDENCE OF A COMPOUND
P	PESTICIDE/AROCLOR TARGET ANALYTE, WHERE THERE IS GREATER THAN 25% DIFFERENCE FOR DETECTED CONCENTRATION BETWEEN 2 GC COLUMNS
TR	COMPOUND DETECTED AT AN UNQUANTIFIABLE TRACE LEVEL
U	COMPOUND WAS ANALYZED FOR BUT NOT DETECTED
X	SEE CASE NARRATIVE
Y	SEE CASE NARRATIVE
Z	SEE CASE NARRATIVE
*	OUTSIDE OF QUALITY CONTROL LIMITS
*D	COMPOUND ANALYZED FROM A SECONDARY ANALYSIS
*F	RESULT OUTSIDE OF ATI'S QUALITY CONTROL LIMITS
*G	RESULT OUTSIDE QUALITY CONTROL LIMITS. INSUFFICIENT SAMPLE FOR RE-EXTRACTION/ANALYSIS
*H	RESULT OUTSIDE OF LIMITS DUE TO SAMPLE MATRIX INTERFERENCE
*I	BECAUSE OF NECESSARY SAMPLE DILUTION, VALUE WAS OUTSIDE QC LIMITS
*K	DUE TO THE NECESSARY DILUTION OF THE SAMPLE, RESULT WAS NOT ATTAINABLE
*L	ANALYTE IS A SUSPECTED LAB CONTAMINANT
*P	A STANDARD WAS USED TO QUANTITATE THIS VALUE
*R	DATA IS NOT USABLE
*T	SURROGATE RECOVERY IS OUTSIDE QC CONTROL LIMITS. NO CORRECTIVE ACTION INDICATED BY METHOD
*V	SAMPLE RESULT IS >4X SPIKED CONCENTRATION, THEREFORE SPIKE IS NOT DETECTABLE
*Y	RESULT NOT ATTAINABLE DUE TO SAMPLE MATRIX INTERFERENCE
@A	RESULTS OUT OF LIMITS DUE TO SAMPLE NON-HOMOGENEITY
@C	*VARIABLE MESSAGE*
@D	RESULT COULD NOT BE CONFIRMED DUE TO MATRIX INTERFERENCE ON THE CONFIRMATION COLUMN
@E	RESULT MAY BE FALSELY ELEVATED DUE TO SAMPLE MATRIX INTERFERENCE
@F	RESULT OUTSIDE OF CONTRACT SPECIFIED QUALITY CONTROL LIMITS
@G	RESULT OUTSIDE OF CONTRACT SPECIFIED ADVISORY LIMITS
@H	DETECTION LIMIT ELEVATED DUE TO MATRIX INTERFERENCE
@M	RESULT NOT CONFIRMED BY U.V. DUE TO SAMPLE MATRIX INTERFERENCE
@N	RESULT NOT CONFIRMED BY FLUORESCENCE DUE TO SAMPLE MATRIX INTERFERENCE
@P	RESULT QUANTITATED USING FLUORESCENCE ONLY DUE TO THE LOW CONCENTRATION
@Q	DETECTION LIMIT ELEVATED DUE TO LIMITED SAMPLE FOR ANALYSIS
@T	RESULT DUE TO TCLP EXTRACTION MATRIX INTERFERENCE. NO QC LIMITS HAVE BEEN ESTABLISHED
@U	SAMPLE CHROMATOGRAM DOES NOT RESEMBLE COMMON FUEL HYDROCARBON FINGERPRINTS
@Z	SAMPLE CHROMATOGRAM DOES NOT RESEMBLE A FUEL HYDROCARBON

BP

ATI # 507057

CHAIN OF CUSTODY

No. 055941 Page 1 of 1

CONSULTANT'S NAME	ADDRESS	CITY	STATE	ZIP CODE
Alisto Engineering	1575 Treat Blvd #201	Walnut Creek	Ca	94596

BP SITE NUMBER	BP CORNER ADDRESS/CITY	CONSULTANT PROJECT NUMBER
1117	Oakland, Ca	10-018-03/004

CONSULTANT PROJECT MANAGER	PHONE NUMBER	FAX NUMBER	CONSULTANT CONTRACT NUMBER
Bill Howell	(510) 295-1650 ~~Renton, WA~~	295-1823	631760

BP CONTACT	BP ADDRESS	PHONE NUMBER	FAX NO.
Scott Hooton	Renton, WA		

LAB CONTACT	LABORATORY ADDRESS	PHONE NUMBER	FAX NO.
ATI	San Diego, Ca		

SAMPLED BY (Please Print Name)	SAMPLED BY (Signature)	SHIPMENT DATE	SHIPMENT METHOD
Larry Buenavida	[signature]		Fed Express

TAT: ☐ 24 Hours ☐ 48 Hours ☐ 1 Week ☒ Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER 1819921020

SAMPLE DESCRIPTION	COLLECTION DATE / COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	TYPE (VOL.) / PRESERVATIVE	LAB SAMPLE #	TPH-G/BTEX	COMMENTS
S-1	7/5/95	W	2	HCL	01	X	
S-2	↓	↓	↓	↓	02	↓	
S-3	↓	↓	↓	↓	03	↓	
S-4	↓	↓	↓	↓	04	↓	
S-5	↓	↓	↓	↓	05	↓	
S-6	↓	↓	↓	↓	06	↓	
S-7	↓	↓	↓	↓	07	↓	It looks like samples were taken to lab 6 days after sample collection
S-8	↓	↓	↓	↓	08	↓	
S-9	↓	↓	↓	↓	09	↓	

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
[signature]	7/8/95		[signature] / ATI	7-11-95	9:15	wonder why 3 days before received
						Cooler # 1195 - 3.0°C

CLV-16722

Distribution: White - Original (with Data) Yellow - BP Pink - Lab Blue - Consultant Field Staff