



**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

February 23, 1996

Alameda County Health Care Services Agency  
Attention Ms. Juliet Shin  
1131 Harbor Bay Parkway, Room 250  
Alameda, CA 94621

96 FEB 26 AM 9:10  
RECEIVED  
FACILITY PROTECTION

RE: BP Oil Site No. 11117  
7210 Bancroft Avenue  
Oakland, CA

Dear Ms. Shin:

Enclosed please find a report titled Groundwater Monitoring and Sampling Report, dated December 22, 1995. Upon review of the results, you will note that petroleum hydrocarbons were detected in groundwater samples obtained from five of the monitoring wells. Liquid petroleum hydrocarbon (0.10 feet) was measured in well MW-2, and was subsequently removed. You will find a summary of product removal activities in the enclosed report. *Is it continuously batted?*

As mentioned in my January 4, 1996 letter to you, we have awarded a contract to perform a vapor extraction pilot test at this facility. I subsequently received a letter (attached) from the California Regional Water Quality Control Board dated January 16, 1996. The Board's letter described certain changes to the approach advocated for addressing petroleum hydrocarbon releases, and may be germane to this site. In order to ensure that the approach proposed in my January 4, 1996 letter remains consistent with Board policy, and to ensure reimbursement from the UST cleanup fund, I would like to confirm the ACHCSA's requirements for pilot testing at this location. I am operating under the assumption that the presence of product warrants the evaluation of SVE to remove "source material". Please respond to this letter *if* my assumption is not correct.

*Only if it appears to be posing a health threat.*

Please give me a call if you have any questions, comments or concerns regarding this matter. I can be reached at (206) 251-0689.

Sincerely,



Scott Hooton  
Environmental Remediation Management

attachments (2)

cc: site file

A. Lehane - Pacific Environmental Group (w/attachment)

RWQCB-SFBR, Attention E. So, 2101 Webster Street, Ste. 500, Oakland, CA  
94612 (w/attachment)

Bancroft Oakland Investment Company, Attention Mr. R.K. Barth, 9454 Wilshire  
Boulevard, Ste. 901, Beverly Hills, CA 90212 (w/attachment)

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

2101 WEBSTER STREET, SUITE 500

OAKLAND, CA 94612

(510) 286-1255



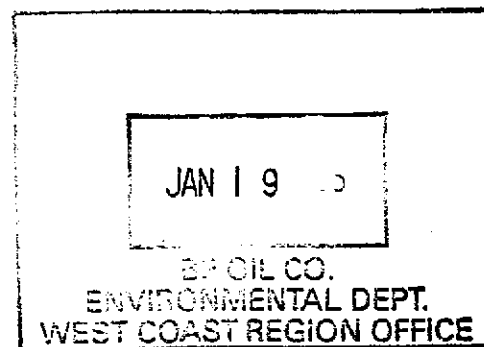
January 16, 1996  
FILE NO. 2198.15 (TAG)

MR SCOTT HOOTON  
BP OIL COMPANY  
ENVIRONMENTAL RESOURCES MANAGEMENT  
295 SW 41ST STREET  
BLDG 13, SITE N  
RENTON, WA 98055-4931

Dear Mr. Hooton:

The enclosed information pertains to the following Alameda County  
BP Oil Company sites:

RBFILENO	CASENO	STREETNO	STREET	CITY	SITENAME
01-0232		4997	STEVENSON BLVD	FREMONT	BP OIL
01-1001		46840	WARM SPRINGS BLVD	"	"
01-0228		35550	FREMONT BLVD	"	BP OIL/MOBIL
01-0229		37630	BLACOW RD	"	"
01-0230		4190	MOWRY AVE	"	"
01-0994		2492	WHIPPLE RD	HAYWARD	"
01-0273		35425	NEWARK BLVD	NEWARK	BP OIL
01-0225		31300	ALVARADO-NILES RD	UNION CITY	BP OIL/MOBIL
01-0226		31901	ALVARADO BLVD	"	"



# GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-018-04-001

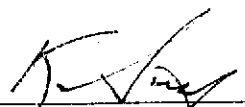
Prepared for:


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

December 22, 1995

  
\_\_\_\_\_  
Ken Simas  
Project Manager

  
\_\_\_\_\_  
Al Sevilla, P.E.  
Principal



# GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-018-04-001

December 22, 1995

## INTRODUCTION

This report presents the results and findings of the October 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 on Figure 1.

## FIELD PROCEDURES

Field activities were performed in accordance with the procedures and guidelines of the Alameda County Health Care Services Agency and the California Regional Water Quality Control Board, San Francisco Bay Region.

Before purging and sampling, the groundwater level in each well was measured from a permanent mark on top of the casing to the nearest 0.01 foot using an electronic sounder. The depth to groundwater and top of casing elevation data were used to calculate the groundwater elevation in each well. 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 on Figure 2. The results of groundwater analysis are shown on Figure 3. The laboratory report and chain of custody record are presented in Appendix B.



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

ALISTO PROJECT NO. 10-018

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (e) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	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	08/05/92	49.81	29.01	--	20.80	31000	--	2800	2100	800	2300	--	--	--	--
MW-1	07/24/92	49.80	29.46	--	20.35	--	--	--	--	--	--	--	--	--	--
MW-1	07/27/92	49.80	29.46	--	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	--	2800	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	680	1700	1200	550	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	--	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	28.37	--	23.43	27000	--	3400	930	950	2000	--	--	--	PACE
QC-1 (d)	04/05/94	--	--	--	--	29000	--	3700	1000	1000	3100	--	--	--	PACE
MW-1	07/22/94	49.80	28.54	--	23.28	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-1	10/05/95	49.80	24.40	--	25.40	5800	--	1000	40	31	180	7800	--	2.3	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	31.58	--	19.51	75000	3200 (c)	2000	8500	2300	13000	--	--	--	ANA
MW-2	12/15/92	51.07	32.40	--	18.67	34000	1600 (c)	8200	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	24.89	--	--	--	--	--	--	--	--	--	--
MW-2 (e)	09/23/93	51.07	31.43	--	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-2	10/05/95	51.07	24.68	0.10	26.47	--	--	--	--	--	--	--	--	--	--
MW-3	01/05/92	49.95	33.69	--	16.28	7400	4000	780	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	83	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	80	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	3.8	ND<0.5	0.9	1.3	--	--	--	PACE
MW-3	09/23/93	49.95	29.18	--	20.77	--	--	--	--	--	--	--	--	--	--
MW-3	09/24/93	--	--	--	--	180	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	28.84	--	23.11	7000	--	880	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	ND<50	--	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
MW-3	10/05/95	49.95	23.73	--	26.22	2300	--	210	3.1	10	5.1	2400	--	4.2	ATI

*The amount of product expected to be readily clean.*

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)	MTBE (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)	7800	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	89000	1200	7600	15000	2500	11000	---	---	---	PACE
MW-4	06/07/93	50.76	25.67	---	25.09	79000	2500	10000	19000	3400	14000	---	---	---	PACE
MW-4	06/23/93	50.76	29.37	---	21.39	---	---	---	---	---	---	---	---	---	---
MW-4	08/24/93	---	---	---	---	69000	5700	11000	2100	8800	980	---	---	---	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	---	6600	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	50.78	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	50.78	21.85	---	28.91	26000	---	3600	9600	1200	6400	---	---	---	ATI
QC-1 (d)	01/25/95	---	---	---	---	28000	---	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-4	10/05/95	50.78	24.23	---	26.53	110000	---	10000	23000	3600	17000	34000	---	2.1	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	1.6	---	---	---	PACE
MW-6	09/23/93	50.32	29.64	---	20.69	---	---	---	---	---	---	---	---	---	---
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	---	22.96	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-6	10/05/95	50.32	24.20	---	26.12	860	---	ND<5.0	ND<5.0	ND<5.0	ND<10	3600	---	2.8	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
MW-7	10/05/95	51.4	28.21	---	23.19	83	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	77	---	4.6	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 (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	Organic Lead (ug/l)	DO (ppm)	LAB
MW-8	01/25/96	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	07/05/95	50.88	19.03	--	31.85	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	4.5	ATI
MW-8	10/05/95	50.88	24.40	--	26.48	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	--	4.1	ATI
MW-9	01/25/96	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
MW-9	10/05/95	51.05	24.33	--	26.72	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	2.3	ATI
QC-1 (f)	10/05/95	--	--	--	--	52	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	160	--	--	ATI
QC-2 (g)	09/16/92	--	--	--	--	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	ANA
QC-2 (g)	12/16/92	--	--	--	--	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	0.8	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<0.5	ND<0.50	ND<0.50	ND<1.0	--	--	--	ATI
QC-2 (g)	10/05/95	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	--	--	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  
 MTBE Methyl tert butyl ether  
 DO Dissolved oxygen  
 ug/l Micrograms per liter  
 ppm Parts per million  
 ND Not detected above reported detection limit  
 -- Not analyzed/applicable/measurable  
 ANA Anamtech, Inc.  
 PACE Pace, Inc.  
 ATI Analytical Technologies, Inc.

NOTES:

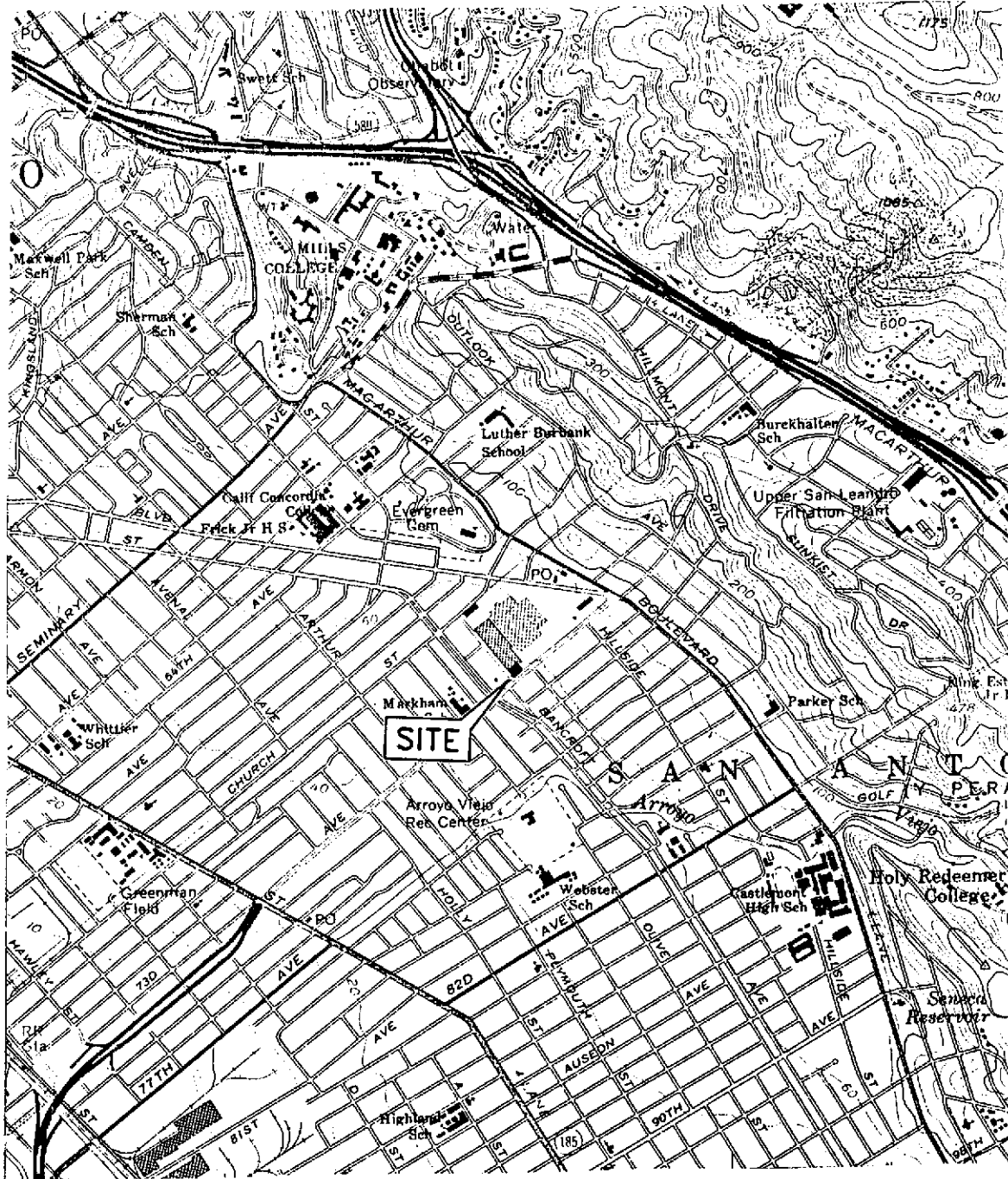
- (a) Casing elevations surveyed to the nearest 0.01 foot relative to mean sea level.  
 (b) Groundwater elevations adjusted assuming a specific gravity of 0.75 for the product.  
 (c) Concentrations reported as diesel from MW-1, MW-2, and MW-4 are primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene.  
 (d) Blind duplicate.  
 (e) Well not sampled due to presence of free product.  
 (f) Well inaccessible.  
 (g) Travel blank.

ENV10-018018-4-1.WQ2

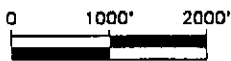
TABLE 2  
 PRODUCT REMOVAL STATUS  
 BP OIL COMPANY SERVICE STATION NO. 11117  
 7210 BANCROFT AVENUE, OAKLAND CALIFORNIA

ALISTO PROJECT NO. 10-018

WELL ID	DATE	PRODUCT THICKNESS	PRODUCT REMOVED (Gallons)	PRODUCT REMOVE CUMULATIVE (Gallons)
MW-2	02/01/94	1.78	<0.01	<0.01
MW-2	02/11/94	1.55	0.10	0.10
MW-2	02/18/94	1.62	0.90	1.00
MW-2	02/25/94	3.21	0.10	1.10
MW-2	03/04/94	3.92	0.10	1.20
MW-2	03/30/94	4.06	2.60	3.80
MW-2	04/13/95	3.10	0.10	3.90
MW-2	04/21/94	2.88	0.10	4.00
MW-2	04/24/95	6.00	0.10	4.10
MW-2	05/06/94	8.00	0.60	4.70
MW-2	05/13/94	7.00	0.10	4.80
MW-2	05/20/94	7.38	2.10	6.90
MW-2	05/26/94	2.00	2.00	8.90
MW-2	06/02/94	1.09	1.00	9.90
MW-2	06/09/94	1.70	1.00	10.90
MW-2	06/16/94	1.13	1.00	11.90
MW-2	06/23/94	1.24	0.75	12.65
MW-2	06/29/94	0.72	0.60	13.25
MW-2	07/07/94	0.56	0.50	13.75
MW-2	07/12/94	1.00	1.10	14.85
MW-2	07/20/94	0.72	0.75	15.60
MW-2	07/29/94	1.42	1.10	16.70
MW-2	08/05/94	1.04	0.76	17.46
MW-2	08/12/94	1.22	0.76	18.22
MW-2	08/18/94	1.33	0.43	18.65
MW-2	09/16/94	0.42	0.76	19.41
MW-2	09/23/94	0.19	0.17	19.58
MW-2	10/26/94	1.13	0.76	20.34
MW-2	11/03/94	0.77	1.10	21.44
MW-2	11/12/94	0.64	0.60	22.04
MW-2	11/16/94	0.67	0.67	22.71
MW-2	11/23/94	0.56	0.50	23.21
MW-2	12/01/94	0.49	0.60	23.81
MW-2	12/08/94	0.61	0.76	24.57
MW-2	04/19/05	0.12	<0.01	24.57
MW-2	05/23/95	SHEEN	<0.01	24.57
MW-2	06/15/95	0.10	<0.01	24.57
MW-2	10/05/95	0.10	0.25	24.82



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



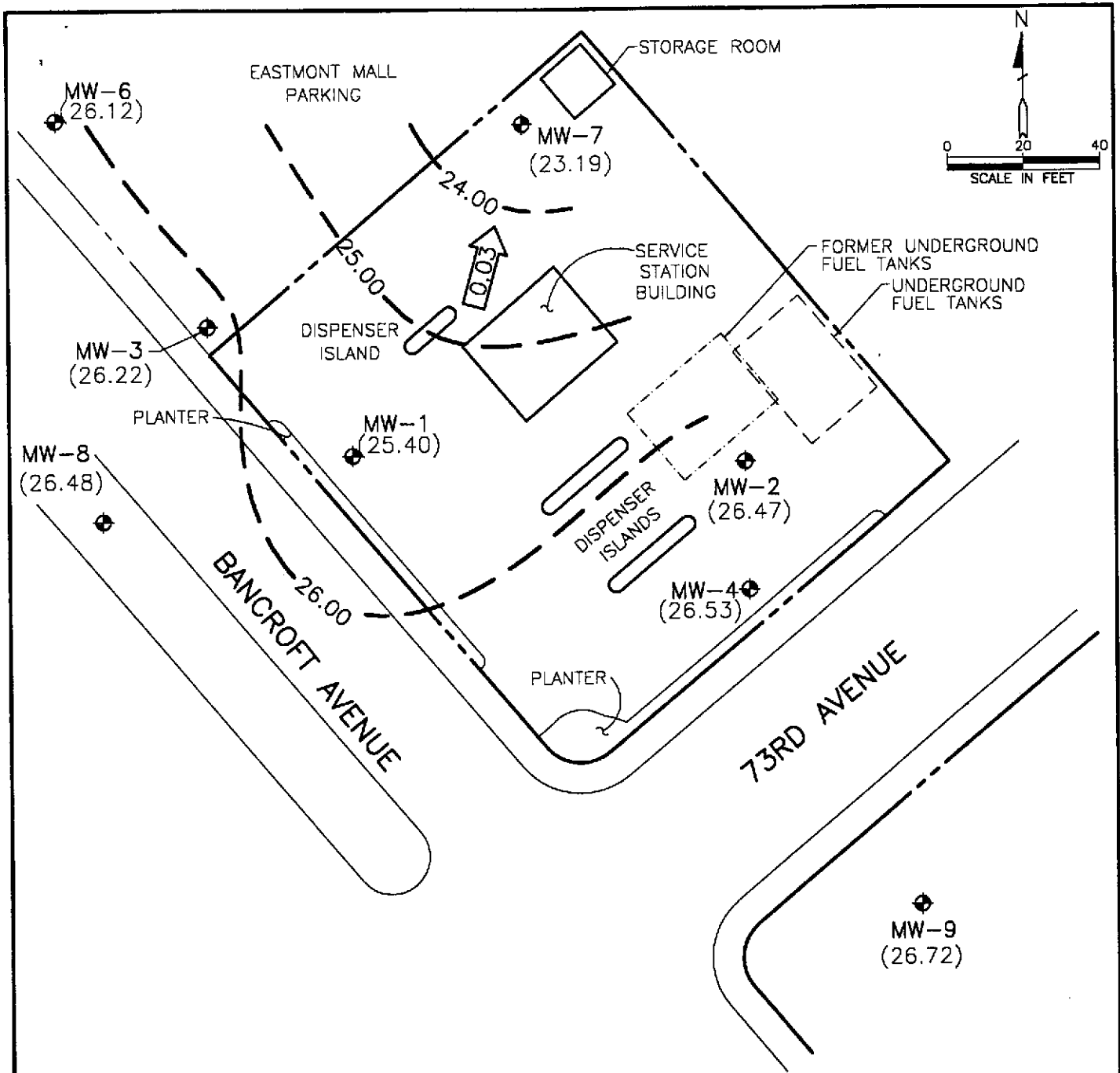
### FIGURE 1

#### SITE VICINITY MAP


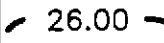

BP OIL SERVICE STATION NO. 11117  
 7210 BANCROFT AVENUE  
 OAKLAND, CALIFORNIA  
 PROJECT NO. 10-018



**ALISTO ENGINEERING GROUP**  
 WALNUT CREEK, CALIFORNIA



**LEGEND**

- 
 GROUNDWATER MONITORING WELL  
 (25.40) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 
 26.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL-1.00 FOOT)
- 
 0.03 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

**FIGURE 2**

**POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP**

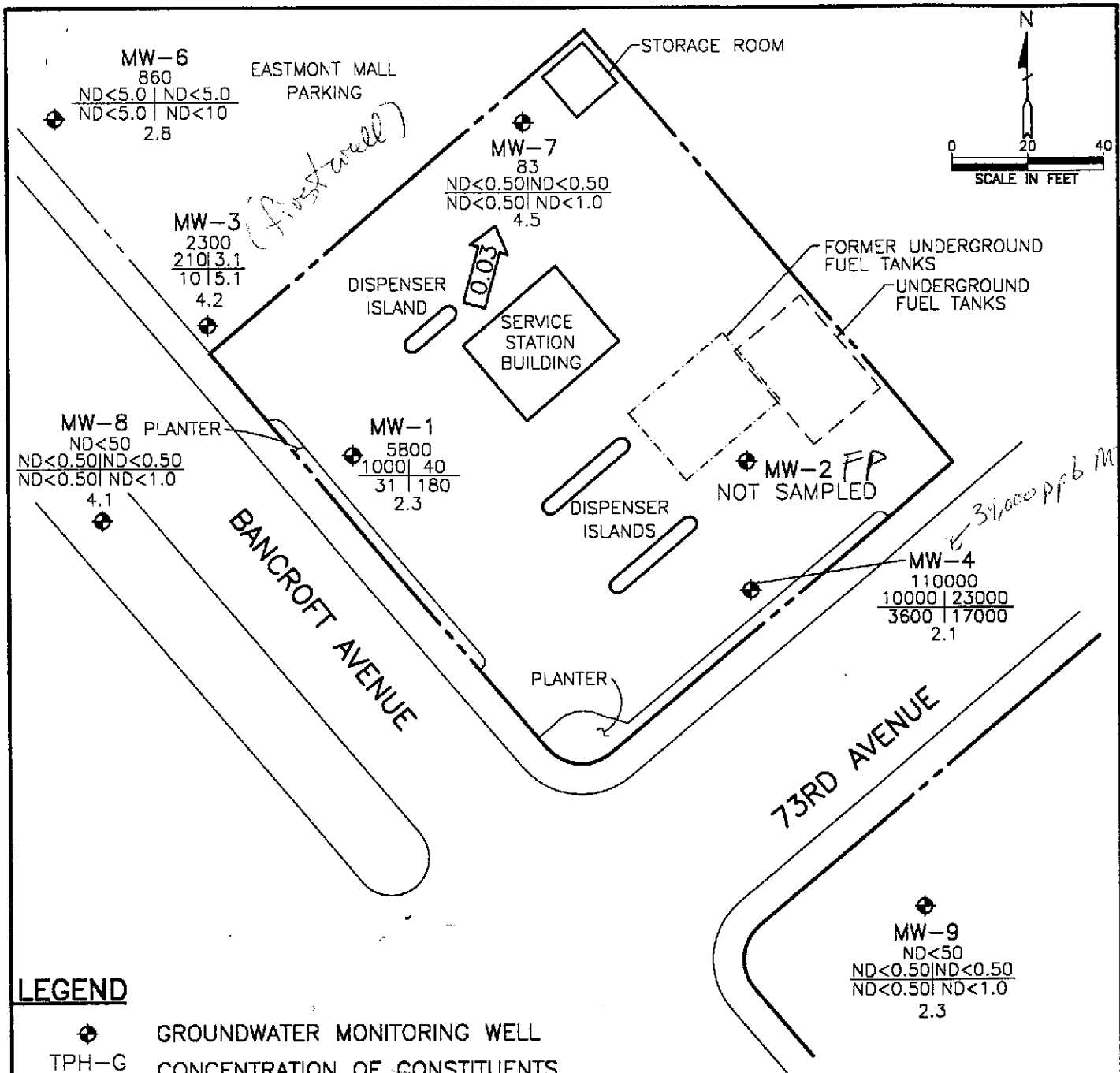
**OCTOBER 5, 1995**

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

PROJECT NO. 10-018



**ALISTO ENGINEERING GROUP**  
 WALNUT CREEK, CALIFORNIA



**LEGEND**

- ◆ GROUNDWATER MONITORING WELL
- TPH-G CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
- B | T
- E | X
- DO
- ND
- 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
- ←0.03 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

**FIGURE 3**  
**CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER**  
**OCTOBER 5, 1995**  
 BP OIL SERVICE STATION NO. 11117  
 7210 BANCROFT AVENUE  
 OAKLAND, CALIFORNIA  
 PROJECT NO. 10-018



**APPENDIX A**

**WATER SAMPLING FIELD SURVEY FORMS**

# ALISTO

## Field Report / Sampling Data Sheet

ENGINEERING  
GROUP  
1575 TREAT BOULEVARD, SUITE 201

Project No. 10-018-04-001 Date: 10/5/95  
Address 7210 Bancroft Ave. Day: M T W TH F  
Contract No. G602089 City: Oakland  
Station No. BP 11117 Sampler: CD

### DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME SAMPLED	COMMENTS:
MW-1	S-6	2"	36.12	24.40		1600	
* MW-2	Not sampled		?	24.68	.10		
MW-3	S-2		42.40	23.73		1410	
MW-4	S-7		40.00	24.23		1630	
* MW-5	?						No MW-5 !!
MW-6	S-5		40.00	24.20		1530	
MW-7	S-3		44.72	28.21		1435	
MW-8	S-4		39.50	24.40		1505	
MW-9	S-1		38.86			1340	

### FIELD INSTRUMENT CALIBRATION DATA

Ph METER  4.00  7.00  10.00 TEMPERATURE COMPENSATED  Y  N TIME 1200  
D.O. METER Aqua-deck ZERO d.O. SOLUTION \_\_\_\_\_ BAROMETRIC PRESSURE \_\_\_\_\_ TEMP 80° WEATHER Sunny  
CONDUCTIVITY METER Aqua-deck 10,000 TURBIDITY METER \_\_\_\_\_ 5.0 NTU OTHER \_\_\_\_\_

Well ID	Depth to Water	Diam	Cap/Lock	Product	Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.	TIME/SAMPLE ID
MW-9	24.33	2"	ON	Ø		Y (N)	2	1325	20.4°C	7.20	879µs	2.4 ppm	<input type="radio"/> EPA 601 <input checked="" type="radio"/> TPH-G/BTEX <input type="radio"/> TPH Diesel <input type="radio"/> TOG 5520 TIME/SAMPLE ID 1340 / S-1
Total Depth - Water Level = x Well Vol. Factor = x vol. to Purge Purge Vol.							4	1330	19.9°C	7.22	886µs		
38.86 - 24.33 = 14.53 x .16 = 2.32 x 3 = 6.97							7	1335	19.7°C	7.25	899µs	2.3 ppm	
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port													
Comments: OC-1 is S-1													
MW-3	23.73	2"	ON	Ø		Y (N)	3	1355	22.6°C	7.39	816µs	4.0	<input type="radio"/> EPA 601 <input checked="" type="radio"/> TPH-G/BTEX <input type="radio"/> TPH Diesel <input type="radio"/> TOG 5520 TIME/SAMPLE ID 1410 / S-2
Total Depth - Water Level = x Well Vol. Factor = x vol. to Purge Purge Vol.							6	1400	22.1°C	7.38	792µs		
42.40 - 23.73 = 18.67 x .16 = 2.99 x 3 = 8.96							9	1405	21.9°C	7.38	779µs	4.2	
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port													
Comments:													

# ALISTO

## Field Report / Sampling Data Sheet

ENGINEERING

GROUP

1575 TREAT BOULEVARD, SUITE 201

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

Project No.

10-018-04-001

Address

7210 Bancroft Ave.

Contract No.

G602089

Station No.

BP 11117

Sampler:

CD

Date:

10/5/95

Day:

MTWTHF

City:

Oakland

Well ID	Depth to Water	Diam	Cap/Lock	Product	Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-7	28.21	2"	ON	Ø	Y (N)		2.5	1420	23.3°C	7.20	1126µs	4.7
Total Depth - Water Level=							5	1425	23.0°C	7.24	1120µs	
44.72 - 28.21 = 16.51 x .16 = 2.64 x 3 = 7.92							8	1430	22.8°C	7.27	1098µs	4.5
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												
Comments:												

- EPA 601 \_\_\_\_\_
  - TPH-G/BTEX \_\_\_\_\_
  - TPH Diesel \_\_\_\_\_
  - TOG 5520 \_\_\_\_\_
- TIME/SAMPLE ID

1435 / 5-3

Well ID	Depth to Water	Diam	Cap/Lock	Product	Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-8	24.40	2"	ON	Ø	Y (N)		2	1450	18.3°C	7.28	559µs	4.8
Total Depth - Water Level=							4.5	1455	17.4°C	7.41	561µs	
39.50 - 24.40 = 15.10 x .16 = 2.42 x 3 = 7.25							7	1500	16.9°C	7.50	563µs	4.1
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												
Comments:												

- EPA 601 \_\_\_\_\_
  - TPH-G/BTEX \_\_\_\_\_
  - TPH Diesel \_\_\_\_\_
  - TOG 5520 \_\_\_\_\_
- TIME/SAMPLE ID

1505 / 5-4

Well ID	Depth to Water	Diam	Cap/Lock	Product	Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-6	24.20	2"	ON	Ø	Y (N)		2	1515	20.3°C	7.36	868µs	4.0 ppm
Total Depth - Water Level=							4	1520	20.3°C	7.36	871µs	
40.00 - 24.20 = 15.80 x .16 = 2.53 x 3 = 7.58							7.5	1525	20.3°C	7.35	884µs	2.8 ppm
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												
Comments:												

- EPA 601 \_\_\_\_\_
  - TPH-G/BTEX \_\_\_\_\_
  - TPH Diesel \_\_\_\_\_
  - TOG 5520 \_\_\_\_\_
- TIME/SAMPLE ID

1530 / 5-5

Well ID	Depth to Water	Diam	Cap/Lock	Product	Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-1	24.40	2"	ON	Ø	Y (N)		2	1545	20.4°C	7.32	674µs	3.1
Total Depth - Water Level=							4	1550	20.2°C	7.34	758µs	
36.12 - 24.40 = 11.72 x .16 = 1.88 x 3 = 5.63							6	1555	20.0°C	7.36	824µs	2.3
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												
Comments:												

- EPA 601 \_\_\_\_\_
  - TPH-G/BTEX \_\_\_\_\_
  - TPH Diesel \_\_\_\_\_
  - TOG 5520 \_\_\_\_\_
- TIME/SAMPLE ID

1600 / 5-6

Well ID	Depth to Water	Diam	Cap/Lock	Product	Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-4	24.23	2"	ON	Ø	Y (N)		2.5	1615	21.1°C	7.31	1.18µs	2.7
Total Depth - Water Level=							5	1620	21.0°C	7.30	1.16µs	
40.00 - 24.23 = 15.77 x .16 = 2.52 x 3 = 7.57							7.5	1625	20.9°C	7.30	1.16µs	2.1
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input checked="" type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> OSys Port												
Comments:												

- EPA 601 \_\_\_\_\_
  - TPH-G/BTEX \_\_\_\_\_
  - TPH Diesel \_\_\_\_\_
  - TOG 5520 \_\_\_\_\_
- TIME/SAMPLE ID

1630 / 5-7



# ALISTO

## Field Report / Sampling Data Sheet

ENGINEERING  
GROUP

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

Project No. 10-018-04-001

Address 7210 Bancroft Ave.

Contract No. G602089

Station No. BP 11117

Date: 10/5/95

Day: M T W TH F

City: Oakland

Sampler: CD

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-2	24.68	2"	ON	.10	Y N						
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.											
Bailed out 5 gallons. Removed free product.											
Purge Method: OSurface Pump ODisp.Tube OWinch <input checked="" type="checkbox"/> Disp. Bailer(s) 1 OSys Port											
Comments:											

- EPA 601 \_\_\_\_\_
- TPH-G/BTEX \_\_\_\_\_
- TPH Diesel \_\_\_\_\_
- TOG 5520 \_\_\_\_\_
- TIME/SAMPLE ID

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
					Y N						
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/SAMPLE ID

QC-1 is S-8

~~S-8~~ @ MW QC-1 is S-1

S-9 is the trip blank

**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.: 510056

October 19, 1995

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

Project Name: BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.  
Project # : G602089/10-018-04-001


Attention: KEV SIMAS


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

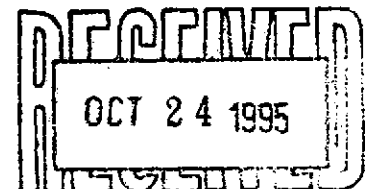
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
October 07, 1995	9	WATER

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



SAMPLE CROSS REFERENCE

Client : ALISTO ENGINEERING  
 Project # : G602089/10-018-04-001  
 Project Name: BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.

Report Date: October 19, 1995  
 ATI I.D. : 510056

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

---TOTALS---

<u>Matrix</u>	<u># Samples</u>
WATER	9

ATI STANDARD DISPOSAL PRACTICE

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

ANALYTICAL SCHEDULE

Client : ALISTO ENGINEERING  
Project # : G602089/10-018-04-001  
Project Name: BP SITE#111117/7210 BANCROFT AVE. OAKLAND, CA.

ATI I.D.: 510056

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

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)  
 Client : ALISTO ENGINEERING ATI I.D. : 510056  
 Project # : G602089/10-018-04-001  
 Project Name: BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	S-1	WATER	05-OCT-95	N/A	12-OCT-95	1.00
2	S-2	WATER	05-OCT-95	N/A	12-OCT-95	5.00
3	S-3	WATER	05-OCT-95	N/A	12-OCT-95	1.00

Parameter	Units	1	2	3	
METHYL T-BUTYL ETHER	UG/L	160	2400	77	
BENZENE	UG/L	<0.50	210	<0.50	
TOLUENE	UG/L	<0.50	3.1	<0.50	
ETHYLBENZENE	UG/L	<0.50	10	<0.50	
XYLENES (TOTAL)	UG/L	<1.0	5.1	<1.0	
FUEL HYDROCARBONS	UG/L	<50	2300	83	
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12	
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE	
<u>SURROGATES</u>					
TRIFLUOROTOLUENE	%	96	104	104	

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)  
 Client : ALISTO ENGINEERING  
 Project # : G602089/10-018-04-001  
 Project Name: BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.  
 ATI I.D. : 510056

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	S-4	WATER	05-OCT-95	N/A	12-OCT-95	1.00
5	S-5	WATER	05-OCT-95	N/A	16-OCT-95	10.00
6	S-6	WATER	05-OCT-95	N/A	16-OCT-95	20.00

Parameter	Units	4	5	6
METHYL T-BUTYL ETHER	UG/L	<5.0	3600	7800
BENZENE	UG/L	<0.50	<5.0	1000
TOLUENE	UG/L	<0.50	<5.0	40
METHYLBENZENE	UG/L	<0.50	<5.0	31
XYLENES (TOTAL)	UG/L	<1.0	<10	180
FUEL HYDROCARBONS	UG/L	<50	860	5800
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
<u>SURROGATES</u>				
TRIFLUOROTOLUENE	%	97	89	93

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)  
 Client : ALISTO ENGINEERING  
 Project # : G602089/10-018-04-001  
 Project Name: BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.

ATI I.D. : 510056

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
7	S-7	WATER	05-OCT-95	N/A	16-OCT-95	250.00
8	S-8	WATER	05-OCT-95	N/A	17-OCT-95	1.00
9	S-9	WATER	05-OCT-95	N/A	16-OCT-95	1.00

Parameter	Units	7	8	9
METHYL T-BUTYL ETHER	UG/L	34000	160	<5.0
BENZENE	UG/L	10000	<0.50	<0.50
TOLUENE	UG/L	23000	<0.50	<0.50
ETHYLBENZENE	UG/L	3600	<0.50	<0.50
XYLENES (TOTAL)	UG/L	17000	<1.0	<1.0
FUEL HYDROCARBONS	UG/L	110000	52	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE

SURROGATES

TRIFLUOROTOLUENE	%	98	93	97
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GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test	: MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)	ATI I.D.	: 510056
Blank I.D.	: 37031	Date Extracted:	N/A
Client	: ALISTO ENGINEERING	Date Analyzed	: 11-OCT-95
Project #	: G602089/10-018-04-001	Dil. Factor	: 1.00
Project Name:	BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.		

Parameters	Units	Results
METHYL T-BUTYL ETHER	UG/L	<5.0
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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	101

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test	: MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)	ATI I.D.	: 510056
Blank I.D.	: 37032	Date Extracted:	N/A
Client	: ALISTO ENGINEERING	Date Analyzed	: 12-OCT-95
Project #	: G602089/10-018-04-001	Dil. Factor	: 1.00
Project Name: BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.			

Parameters	Units	Results
METHYL T-BUTYL ETHER	UG/L	<5.0
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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	92

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)      ATI I.D. : 510056  
 Blank I.D. : 37099      Date Extracted: N/A  
 Client : ALISTO ENGINEERING      Date Analyzed : 16-OCT-95  
 Project # : G602089/10-018-04-001      Dil. Factor : 1.00  
 Project Name: BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.

Parameters	Units	Results
METHYL T-BUTYL ETHER	UG/L	<5.0
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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	105

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test	: MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)	ATI I.D.	: 510056
Blank I.D.	: 37100	Date Extracted:	N/A
Client	: ALISTO ENGINEERING	Date Analyzed	: 17-OCT-95
Project #	: G602089/10-018-04-001	Dil. Factor	: 1.00
Project Name:	BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.		

Parameters	Units	Results
METHYL T-BUTYL ETHER	UG/L	<5.0
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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	102

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)  
 MSMSD # : 79267  
 Client : ALISTO ENGINEERING

ATI I.D. : 510056  
 Date Extracted: N/A  
 Date Analyzed : 12-OCT-95  
 Sample Matrix : WATER  
 REF I.D. : 510056-09

Project # : G602089/10-018-04-001  
 Project Name: BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	UG/L	<0.50	5.0	4.8	96	4.8	96	0
TOLUENE	UG/L	<0.50	5.0	4.9	98	4.9	98	0

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

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE) ATI I.D. : 510056  
 Blank Spike #: 59395 Date Extracted: N/A  
 Client : ALISTO ENGINEERING Date Analyzed : 11-OCT-95  
 Project # : G602089/10-018-04-001 Sample Matrix : WATER  
 Project Name : BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.

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

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

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)      ATI I.D. : 510056  
 Blank Spike #: 59396      Date Extracted: N/A  
 Client : ALISTO ENGINEERING      Date Analyzed : 12-OCT-95  
 Project # : G602089/10-018-04-001      Sample Matrix : WATER  
 Project Name : BP SITE#11117/7210 BANCROFT AVE. OAKLAND, CA.

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	4.5	5.0	90
TOLUENE	UG/L	<0.50	4.6	5.0	92

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

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)      ATI I.D. : 510056  
 Blank Spike #: 59484      Date Extracted: N/A  
 Client : ALISTO ENGINEERING      Date Analyzed : 16-OCT-95  
 Project #: G602089/10-018-04-001      Sample Matrix : WATER  
 Project Name : BP SITE#111117/7210 BANCROFT AVE. OAKLAND, CA.

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	4.7	5.0	94
TOLUENE	UG/L	<0.50	4.8	5.0	96

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



GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)  
 Blank Spike #: 59486  
 Client : ALISTO ENGINEERING  
 Project # : G602089/10-018-04-001  
 Project Name : BP SITE#111117/7210 BANCROFT AVE. OAKLAND, CA.

ATI I.D. : 510056  
 Date Extracted: N/A  
 Date Analyzed : 17-OCT-95  
 Sample Matrix : WATER

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

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

ACCESSION #: 510056

INITIALS: ZY

**ATI-SanDiego**  
**SAMPLE CONDITION UPON RECEIPT CHECKLIST**  
**(FOR RE-ACCESSIONS, COMPLETE #7 THRU #9)**

1	Does this project require special handling according to NFESC Levels C, D, AFCEE or CLP protocols? If yes, complete a) and b) a) pH sample aliquoted: yes / no / na b) Either 1) Record Bottle Lot #'s: Or 2) Attach Sample Kit Request Form(s)	YES	<u>NO</u>
2	Number of Coolers Received If more than one cooler received attach Multiple Cooler Documentation Form (MCD) Indicate "see MCD" on Item 11 below	<u>7</u> <u>(#2035)</u>	
3	Are custody seals required for this project ?	YES	<u>N/A</u>
	a) are Custody Seals present on Cooler(s) ?	YES	<u>NO</u>
	If yes, are seals intact ?	YES	NO
	b) are Custody Seals present on the sample ?	YES	<u>NO</u>
	If yes, are seals intact ?	YES	NO
4	Is there a Chain-Of-Custody (COC) per cooler ? if not, if a problem is found indicate which samples/test were in the affected cooler on the MCD.	<u>YES</u>	NO
5	Is the COC complete per cooler ? Relinquished: <u>yes</u> no Requested analysis: <u>yes</u> /no	<u>YES</u>	NO
6	Is the COC in agreement with the samples received? # Samples: <u>yes</u> /no Sample ID's: <u>yes</u> /no Date sampled: <u>yes</u> /no Matrix: <u>yes</u> /no # containers: <u>yes</u> /no	<u>YES</u>	NO
7	Are the samples preserved correctly?	<u>YES</u>	NO
8	Is there enough sample for all the requested analyses?	<u>YES</u>	NO
9	Are all samples within holding times for the requested analyses?	<u>YES</u>	NO
10	Record cooler temperature. Contact PM if temperature is not 4°C ± 2°C.	<u>2.6 °C</u>	
	Is ice present in cooler?	<u>YES</u>	NO
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	<u>YES</u>	NO
12	Are samples requiring no headspace, headspace free? N/A	<u>YES</u>	NO
13	Are VOA 1st stickers required?	YES	<u>NO</u>
14	Are there special comments on the Chain of Custody which require client contact?	YES	<u>N/A</u>
15	If yes, was ATI Project Manager notified?	YES	NO

Describe "no" items: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Was client contacted? yes / no  
If yes, Date: \_\_\_\_\_ Name of Person contacted: \_\_\_\_\_

Describe actions taken or client instructions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*Or other representative documents, letters, and/or shipping memos



ATI # 5100856 <sup>10-7-95</sup>

CHAIN OF CUSTODY

No. 066916

Page 1 of 1

CONSULTANT'S NAME Alisto Engineering Group		ADDRESS 1575 Treat Blvd.		CITY Walnut Creek	STATE Ca.	ZIP CODE 94596
BP SITE NUMBER 11117	BP CORNER ADDRESS/CITY 7210 Bancroft Ave. Oakland, Ca.			CONSULTANT PROJECT NUMBER 10-018-04-001		
CONSULTANT PROJECT MANAGER Kew Simas		PHONE NUMBER (510) 295-1650	FAX NUMBER (510) 295-1823		CONSULTANT CONTRACT NUMBER G602089	
BP CONTACT Scott Hooten		BP ADDRESS Renton, Wa.	PHONE NUMBER (206) 251-8208		FAX NO.	
LAB CONTACT ATI		LABORATORY ADDRESS San Diego, Ca.	PHONE NUMBER (619) 458-9141		FAX NO.	
SAMPLED BY (Please Print Name) Clay DeB 10/5/95		SAMPLED BY (Signature) <i>Clay DeB</i>		SHIPMENT DATE 10-6-95		SHIPMENT METHOD Fed Ex

TAT:  24 Hours  48 Hours  1 Week  Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER  
168123613

SAMPLE DESCRIPTION	COLLECTION DATE	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE		TPH-6	BTEX												COMMENTS	
	COLLECTION TIME		NO.	TYPE (VOL.)	LAB SAMPLE #																
S-1 1340	10/5/95	H2O	2	Voa	01	X	X														
S-2 1410	↓	↓	↓	↓	02	↓	↓														
S-3 1435	↓	↓	↓	↓	03	↓	↓														
S-4 1505	↓	↓	↓	↓	04	↓	↓														
S-5 1530	↓	↓	↓	↓	05	↓	↓														
S-6 1600	↓	↓	↓	↓	06	↓	↓														
S-7 1630 Week 4	↓	↓	↓	↓	07	↓	↓														
S-8 1645	↓	↓	↓	↓	08	↓	↓														
S-9 1655	↓	↓	↓	↓	09	↓	↓														

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>Clay DeB</i>	10/5/95	1000	<i>Patricia Yector</i>	10/6/95	1005	
<i>Patricia Yector</i>	10/6/95	1600	<i>Bill Jones / ATE</i>	10-7-95	09:10	

2.0015 RIT 2035 = 2.62