



03
ALISTO ENGINEERING GROUP

ENVIRONMENTAL
PROTECTION

95 OCT 16 PM 2:59

October 12, 1995

*Appears to be effective in
removing Hcs.*

Ms. Eva Chu
Department of Environmental Health
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-657780

10-025-07-002

Subject: Sewer Discharge Permit - Semi-Annual Report
BP Oil Company Service Station No. 11133
2220 98th Avenue
Oakland, California
Wastewater Discharge Permit No. 503-00381

Dear Ms. Chu:

On behalf of BP Oil Company, we have enclosed a summary of analytical results for the remediation system sampling events and quantity discharged for BP Oil Company Service Station No. 11133, 2220 98th Avenue, Oakland, California. This report covers the period from April 1 to September 30, 1995.

The groundwater treatment system was started in March 1995. The total volume discharged for the period is presented in Table 1. The results of influent, intermediate, and effluent sample analysis are presented in Table 2. The sampling point locations are shown in Figure 1. The laboratory reports and chain of custody records are presented in Attachment A.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Ms. Eva Chu
October 12, 1995
Page 2

Please call if you have questions regarding this report.

Sincerely,

ALISTO ENGINEERING GROUP

A handwritten signature in dark ink, appearing to read "Peter Beaver", written over a light-colored background.

Peter Beaver
Engineering Manager

cc: Scott Hooton, BP Oil Company
Cynthia Adkinson, East Bay Municipal Utility District

TABLE 1 - FLOW DATA FOR GROUNDWATER TREATMENT SYSTEM
 BP OIL COMPANY SERVICE STATION NO. 11133
 2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

DATE	FLOW METER READING (Gallons)	EFFLUENT DISCHARGED (Gallons)	AVERAGE FLOW RATE (GPD)	AVERAGE FLOW RATE (GPM)
03/21/95	0	0	0	0.00
03/27/95	3069	3069	512	0.71
05/02/95	4280	1211	34	0.05
06/01/95	5390	1110	37	0.05
06/28/95	7634	2244	83	0.12
07/31/95	9480	1846	56	0.08
08/30/95	11869	2389	80	0.11
09/28/95	19572	7703	266	0.37
TOTAL FOR SIX MONTHS		16503	111	0.08

ABBREVIATIONS:

GPD Gallons per day
 GPM Gallons per minute

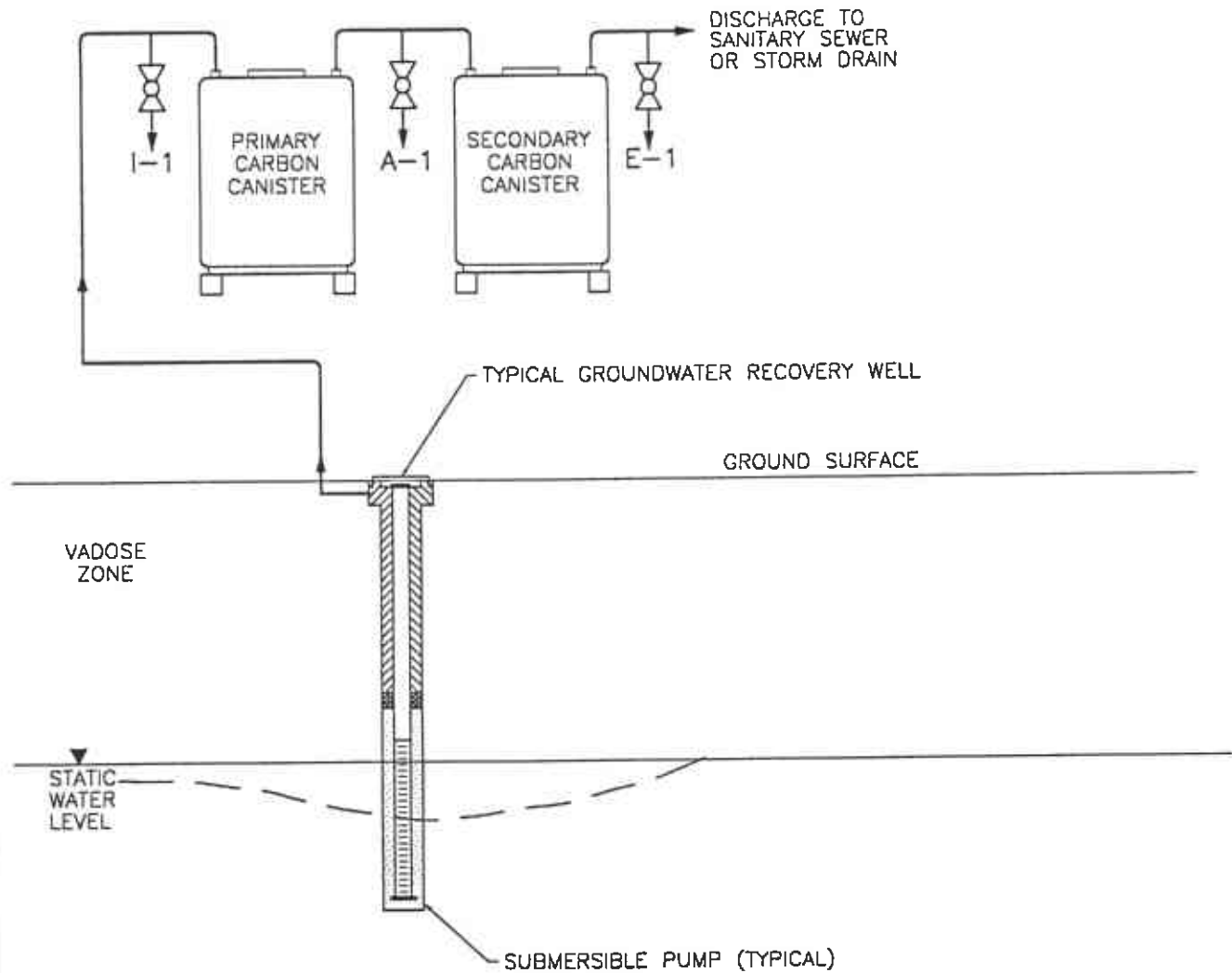
TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER TREATMENT SYSTEM OPERATION
 BP OIL COMPANY SERVICE STATION NO. 11133
 2220 98TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-025

Sample ID	Date	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DCE (ug/l)	Lead (mg/l)	LAB
I-1	03/21/95	180000	32000	55000	5100	27000	—	—	—	ATI
I-1	04/03/95	210000	31000	68000	6800	35000	—	—	—	ATI
I-1	05/23/95	160000	17000	38000	4400	26000	—	—	0.006	ATI
I-1	06/20/95	330000	27000	55000	7600	41000	—	—	—	ATI
QC-1	06/20/95	200000	21000	45000	5300	30000	—	—	—	ATI
I-1	08/29/95	160000	34000	54000	4700	24000	7600	ND<500	—	ATI
I-1	09/19/95	230000	28000	40000	3800	21000	—	440	—	ATI
PS-1	03/21/95	47000	690	4200	1400	8400	—	—	—	ATI
PS-1	04/03/95	150000	26000	42000	3500	18000	—	—	—	ATI
PS-1	05/23/95	35000	1400	4900	1100	6800	—	—	—	ATI
PS-1	06/20/95	60000	5200	11000	1400	9000	—	—	—	ATI
PS-1	08/29/95	25000	150	1000	500	3300	ND<250	—	—	ATI
PS-1	09/19/95	55000	—	—	—	—	—	—	—	ATI
A-1	03/21/95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—	ATI
A-1	04/03/95	ND<50	ND<0.50	0.50	ND<0.50	ND<1.0	—	—	—	ATI
A-1	05/23/95	1200	ND<1.0	2.2	3.4	22	—	—	—	ATI
A-1	06/20/95	88	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—	ATI
A-1	08/29/95	340	7.1	68	5.3	92	5.2	—	—	ATI
A-1	09/19/95	ND<500	ND<1	ND<2	ND<1	ND<1	—	ND<1	—	ATI
B-1	03/21/95	88	ND<0.50	2	ND<0.50	2	—	—	—	ATI
B-1	04/03/95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—	ATI
B-1	05/23/95	240	ND<0.50	0.68	0.93	7.2	—	—	—	ATI
B-1	06/20/95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—	ATI
B-1	08/29/95	37000	54	420	600	3500	260	—	—	ATI
B-1	09/19/95	550	ND<1	ND<2	ND<1	9	—	ND<1	—	ATI
E-1	03/21/95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	ND<0.002	ATI
E-1	04/03/95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	0.007	ATI
E-1	05/23/95	140	ND<0.50	ND<0.50	ND<0.50	2.3	—	—	—	ATI
QC-1	05/23/95	250	ND<0.50	ND<0.50	1.0	7.5	—	—	—	ATI
E-1	06/20/95	ND<50	ND<0.50	ND<0.50	ND<0.50	1.1	—	—	—	ATI
E-1	08/29/95	200	ND<1	ND<2	ND<1	ND<1	ND<5	—	—	ATI
E-1	09/19/95	ND<500	ND<1	ND<2	ND<1	ND<1	—	ND<1	—	ATI
QC-1	09/19/95	ND<500	—	—	—	—	—	—	—	ATI

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
DCE	1,2-Dichloroethane
ug/l	Micrograms per liter
mg/l	Milligrams per liter
I-1	Influent sampling port
PS-1	Post air stripper sampling port
A-1	Intermediate sampling port
B-1	Intermediate sampling port
E-1	Effluent sampling port
QC-1	Field blank
ND	Not detected above reported detection limit
—	Not analyzed
ATI	Analytical Technologies, Inc.



LEGEND


- I = INFLUENT
- A = INTERMEDIATE
- E = EFFLUENT
-  SAMPLE PORT

FIGURE 1

ACTIVATED CARBON TREATMENT SYSTEM SAMPLING LOCATIONS

BP OIL SERVICE STATION NO. 11133
 2220 98TH AVENUE
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-025



ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA

1003203-DWG-11-02 10/11/02

ATTACHMENT A
LABORATORY REPORTS AND CHAIN OF CUSTODY RECORDS



ATI I.D.: 504044

April 14, 1995

ALISTO ENGINEERING
1777 OAKLAND BOULEVARD, SUITE 200
WALNUT CREEK, CA 94596

Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA
Project # : G418846/10-025-07-001

Attention: PETER BEAVER

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

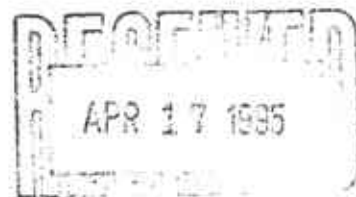
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
April 06, 1995	5	WATER

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 # : G418846/10-025-07-001
Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

Report Date: April 14, 1995
ATI I.D. : 504044

ATI #	Client Description	Matrix	Date Collected
1	STA#11133 INF	WATER	03-APR-95
2	STA#11133 PS	WATER	03-APR-95
3	STA#11133 A	WATER	03-APR-95
4	STA#11133 B	WATER	03-APR-95
5	STA#11133 EFF	WATER	03-APR-95

---TOTALS---

<u>Matrix</u>	<u># Samples</u>
WATER	5

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 # : G418846/10-025-07-001
Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

ATI I.D.: 504044

Analysis	Technique/Description
EPA 7421 (LEAD)	ATOMIC ABSORPTION/GRAPHITE FURNACE
MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTEX)	GC/FLAME ION./PHOTO IONIZATION DETECTOR



METALS RESULTS

Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

ATI I.D.: 504044

Sample #	Client ID	Matrix	Date Sampled	Date Received
5	STA#11133 EFF	WATER	03-APR-95	06-APR-95
Parameter	Units 5			
LEAD	MG/L 0.007			

METALS - QUALITY CONTROL

DUP/MS

Page 4

Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

ATI I.D. : 504044

Parameters	REF I.D.	Units	Sample Result	Dup Result	RPD	Spiked Sample	Spike Conc	% Rec
LEAD	504044-05	MG/L	0.007	0.008	13	1.95	2.00	97

$\% \text{ Recovery} = (\text{Spike Sample Result} - \text{Sample Result}) * 100 / \text{Spike Concentration}$
 $\text{RPD (Relative \% Difference)} = (\text{Sample Result} - \text{Duplicate Result}) * 100 / \text{Average Result}$



METALS - QUALITY CONTROL

BLANK SPIKE

Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

ATI I.D. : 504044

Parameters	Blank Spike ID#	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
LEAD	55669	MG/L	<0.002	1.79	2.00	90

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



GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING ATI I.D. : 504044
 Project # : G418846/10-025-07-001
 Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11133 INF	WATER	03-APR-95	N/A	11-APR-95	1000.00
2	STA#11133 PS	WATER	03-APR-95	N/A	11-APR-95	500.00
3	STA#11133 A	WATER	03-APR-95	N/A	10-APR-95	1.00

Parameter	Units	1	2	3
BENZENE	UG/L	31000	26000	<0.50
TOLUENE	UG/L	68000	42000	0.50
ETHYLBENZENE	UG/L	6600	3500	<0.50
XYLENES (TOTAL)	UG/L	35000	18000	<1.0
FUEL HYDROCARBONS	UG/L	210000	150000	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE

SURROGATES				
TRIFLUOROTOLUENE	%	86	99	95



GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXYE)
 Client : ALISTO ENGINEERING ATI I.D. : 504044
 Project # : G418846/10-025-07-001
 Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	STA#11133 B	WATER	03-APR-95	N/A	10-APR-95	1.00
5	STA#11133 EFF	WATER	03-APR-95	N/A	10-APR-95	1.00

Parameter	Units	4	5
BENZENE	UG/L	<0.50	<0.50
TOLUENE	UG/L	<0.50	<0.50
ETHYLBENZENE	UG/L	<0.50	<0.50
XYLENES (TOTAL)	UG/L	<1.0	<1.0
FUEL HYDROCARBONS	UG/L	<50	<50
HYDROCARBON RANGE		C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE
<u>SURROGATES</u>			
TRIFLUOROTOLUENE	%	93	99



GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 34979
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

ATI I.D. : 504044
Date Extracted: N/A
Date Analyzed : 10-APR-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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	100

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Page 9

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 35004
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE #11133/2220 98TH AVE OAKLAND, CA

ATI I.D. : 504044
Date Extracted: N/A
Date Analyzed : 11-APR-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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	102



GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 MSMSD # : 74707
 Client : ALISTO ENGINEERING

ATI I.D. : 504044
 Date Extracted: N/A
 Date Analyzed : 11-APR-95
 Sample Matrix : WATER
 REF I.D. : 504048-03

Project # : G418846/10-025-07-001
 Project Name: BP SITE #11133/2220 98TH 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	5.1	102	6
TOLUENE	UG/L	<0.50	5.0	4.6	92	4.9	98	6

$\% \text{ Recovery} = (\text{Spike Sample Result} - \text{Sample Result}) * 100 / \text{Spike Concentration}$

$\text{RPD (Relative \% Difference)} = (\text{Spiked Sample Result} - \text{Duplicate Spike Result}) * 100 / \text{Average Result}$

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Page 11

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank Spike #: 55685
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name : BP SITE #11133/2220 98TH AVE OAKLAND, CA

ATI I.D. : 504044
 Date Extracted: N/A
 Date Analyzed : 10-APR-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	5.4	5.0	108
TOLUENE	UG/L	<0.50	5.5	5.0	110

$\% \text{ Recovery} = (\text{Spike Sample Result} - \text{Sample Result}) * 100 / \text{Spike Concentration}$

$\text{RPD (Relative \% Difference)} = (\text{Spiked Sample} - \text{Blank Result}) * 100 / \text{Average Result}$



GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank Spike #: 55729
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name : BP SITE #11133/2220 98TH AVE OAKLAND, CA

ATI I.D. : 504044
Date Extracted: N/A
Date Analyzed : 11-APR-95
Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	5.4	5.0	108
TOLUENE	UG/L	<0.50	5.5	5.0	110

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration

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

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	<input checked="" type="radio"/> NO
2	Number of Coolers Received If more than one cooler received attach Multiple Cooler Documentation Form (MCD) Indicate "see MCD" on Item 11 below	(
3	Are custody seals required for this project ?	YES	<input checked="" type="radio"/> N/A
	a) are Custody Seals present on Cooler(s) ?	YES	<input checked="" type="radio"/> NO
	If yes, are seals intact ?	YES	<input checked="" type="radio"/> N/A
	b) are Custody Seals present on the sample ?	YES	<input checked="" type="radio"/> NO
	If yes, are seals intact ?	YES	<input checked="" type="radio"/> N/A
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.	<input checked="" type="radio"/> YES	<input type="radio"/> NO
5	Is the COC complete per cooler ? Relinquished: <input checked="" type="radio"/> yes /no Requested analysis: <input checked="" type="radio"/> yes /no	<input checked="" type="radio"/> YES	<input type="radio"/> NO
6	Is the COC in agreement with the samples received? # Samples: <input checked="" type="radio"/> yes /no Sample ID's: <input checked="" type="radio"/> yes /no Date sampled: <input checked="" type="radio"/> yes /no Matrix: <input checked="" type="radio"/> yes /no # containers: <input checked="" type="radio"/> yes /no	YES	<input checked="" type="radio"/> NO
7	Are the samples preserved correctly?	<input checked="" type="radio"/> YES	<input type="radio"/> NO
8	Is there enough sample for all the requested analyses?	<input checked="" type="radio"/> YES	<input type="radio"/> NO
9	Are all samples within holding times for the requested analyses?	<input checked="" type="radio"/> YES	<input type="radio"/> NO
10	Record cooler temperature. Contact PM if temperature is not 4°C ± 2°C.	2.0 °C	
	Is ice present in cooler?	<input checked="" type="radio"/> YES	<input type="radio"/> NO
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	<input checked="" type="radio"/> YES	<input type="radio"/> NO
12	Are samples requiring no headspace, headspace free? N/A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
13	Are VOA 1st stickers required?	YES	<input checked="" type="radio"/> NO
14	Are there special comments on the Chain of Custody which require client contact?	YES	<input checked="" type="radio"/> N/A
15	If yes, was ATI Project Manager notified?	YES	<input type="radio"/> NO
Describe "no" items: <u>*G No Date Collection, Collection Time No. of Containers, Type of Containers on C-O-C, they were left all Blank, filled in on C-O-C from Label. 4/6/95</u>			
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			



CHAIN OF CUSTODY

No 058692

Page 1 of 1

CONSULTANT'S NAME Alisto Engineering		ADDRESS 1777 OAKLAND Blvd.		CITY H₂O Walnut Creek	STATE CA	ZIP CODE 94596
BP SITE NUMBER 11133	BP CORNER ADDRESS/CITY 2220 98th Ave OAKLAND CA			CONSULTANT PROJECT NUMBER 10-025-07-001		
CONSULTANT PROJECT MANAGER PETE BEAVER		PHONE NUMBER 510-295-1650	FAX NUMBER 510-295-1823		CONSULTANT CONTRACT NUMBER CA 418846	
BP CONTACT SCOTT HOOTON	BP ADDRESS Renton, WA		PHONE NUMBER		FAX NO.	
LAB CONTACT Diana Spence	LABORATORY ADDRESS San Diego, CA		PHONE NUMBER		FAX NO.	
SAMPLED BY (Please Print Name) John Bickley		SAMPLED BY (Signature) <i>John K. Bickley</i>		SHIPMENT DATE 4/5/95		SHIPMENT METHOD

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER

SAMPLE DESCRIPTION	COLLECTION DATE 4/5/95 COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	HCL	HCL	COMMENTS
			NO.	TYPE (VOL.)	LAB SAMPLE #	PH ₉	LEAD	
STA# 11133 INF	↓	Water	3	VSA	01	✓		
STA# 11133 PS			3		02	✓		
STA# 11133 A			3		03	✓		
STA# 11133 B			3		04	✓		
STA# 11133 EFF			4	VSA 100% poly	05	✓	✓	

RELINQUISHED BY / AFFILIATION <i>John K. Bickley</i>	DATE 4/5/95	TIME 0730	ACCEPTED BY / AFFILIATION <i>ci. Tuth</i>	DATE 4/6/95	TIME 10:15	ADDITIONAL COMMENTS 504044 2.00
---	-----------------------	---------------------	--	-----------------------	----------------------	---



Analytical **Technologies, Inc.**

Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 505267

June 05, 1995

ALISTO ENGINEERING
1777 OAKLAND BOULEVARD, SUITE 200
WALNUT CREEK, CA 94596

Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA
Project # : G418846/10-025-07-001


Attention: PETE BEAVER

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

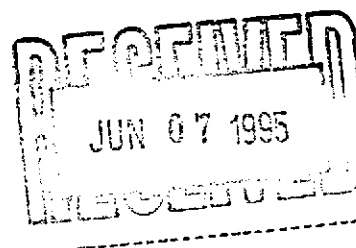
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
May 25, 1995	6	WATER

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





Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Report Date: June 05, 1995
ATI I.D. : 505267

Table with 3 columns: ATI #, Client Description, Matrix, Date Collected. Rows include STA#11133 INF, STA#11133 A, STA#11133 B, STA#11133 EFF, FIELD BLANK, STA#11133 PS.

---TOTALS---

Summary table with 2 columns: Matrix, # Samples. Row: WATER, 6.

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.



Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D.: 505267

Analysis	Technique/Description
EPA 624 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER
EPA 7421 (LEAD)	ATOMIC ABSORPTION/GRAPHITE FURNACE
MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)	GC/FLAME ION./PHOTO IONIZATION DETECTOR



Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D.: 505267

Sample #	Client ID	Matrix	Date Sampled	Date Received
1	STA#11133 INF	WATER	23-MAY-95	25-MAY-95
Parameter	Units		1	
LEAD	MG/L		0.006S	



Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267

Parameters	REF I.D.	Units	Sample Result	Dup Result	RPD	Spiked Sample	Spike Conc	% Rec
LEAD	505257-10	MG/L	<0.002	<0.002	0	0.021	0.020	105

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



METALS - QUALITY CONTROL

BLANK SPIKE

Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267

Parameters	Blank Spike ID#	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
LEAD	56862	MG/L	<0.002	0.020	0.020	100

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



Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11133 INF	WATER	23-MAY-95	N/A	02-JUN-95	1000.00
2	STA#11133 A	WATER	23-MAY-95	N/A	02-JUN-95	2.00
3	STA#11133 B	WATER	23-MAY-95	N/A	02-JUN-95	1.00

Parameter	Units	1	2	3
BENZENE	UG/L	17000	<1.0	<0.50
TOLUENE	UG/L	38000	2.2@E	0.68
ETHYLBENZENE	UG/L	4400	3.4	0.93
XYLENES (TOTAL)	UG/L	26000	22	7.2
FUEL HYDROCARBONS	UG/L	160000	1200	240
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
<u>SURROGATES</u>				
TRIFLUOROTOLUENE	%	99	118	114



Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267

Table with 6 columns: Sample #, Client ID, Matrix, Date Sampled, Date Extracted, Date Analyzed, Dil. Factor. Rows include STA#11133 EFF, FIELD BLANK, and STA#11133 PS.

Table with 5 columns: Parameter, Units, 4, 5, 6. Rows include BENZENE, TOLUENE, ETHYLBENZENE, XYLENES (TOTAL), FUEL HYDROCARBONS, HYDROCARBON RANGE, HYDROCARBONS QUANTITATED USING, SURROGATES, and TRIFLUOROTOLUENE.



REAGENT BLANK

Page 8

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 35593
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267
Date Extracted: N/A
Date Analyzed : 02-JUN-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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	100



REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank I.D. : 35596
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267
 Date Extracted: N/A
 Date Analyzed : 02-JUN-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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	96



REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 35599
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267
Date Extracted: N/A
Date Analyzed : 05-JUN-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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	98



Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 MSMSD # : 76142
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267
 Date Extracted: N/A
 Date Analyzed : 02-JUN-95
 Sample Matrix : WATER
 REF I.D. : 505267-03

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	UG/L	<0.50	5.0	5.0	100	5.0	100	0
TOLUENE	UG/L	0.68	5.0	5.5	96	5.6	98	2

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



BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank Spike #: 56880
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name : BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267
 Date Extracted: N/A
 Date Analyzed : 02-JUN-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	4.8	5.0	96

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



BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank Spike #: 56882
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name : BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267
 Date Extracted: N/A
 Date Analyzed : 02-JUN-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	5.1	5.0	102

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



BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank Spike #: 56898
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name : BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 505267
Date Extracted: N/A
Date Analyzed : 05-JUN-95
Sample Matrix : WATER

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

ATI-San Diego
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	<input type="radio"/> YES <input checked="" type="radio"/> NO
2	Number of Coolers Received If more than one cooler received attach Multiple Cooler Documentation Form (MCD) Indicate "see MCD" on Item 11 below		/
3	Are custody seals required for this project ?	YES	<input type="radio"/> YES <input checked="" type="radio"/> N/A
	a) are Custody Seals present on Cooler(s) ?	YES	<input type="radio"/> YES <input checked="" type="radio"/> NO
	If yes, are seals intact ?	YES	<input checked="" type="radio"/> N/A <input type="radio"/> NO
	b) are Custody Seals present on the sample ?	YES	<input type="radio"/> YES <input checked="" type="radio"/> NO
	If yes, are seals intact ?	YES	<input checked="" type="radio"/> N/A <input type="radio"/> 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.	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
5	Is the COC complete per cooler ? Relinquished: yes/no Requested analysis: yes/no	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
6	Is the COC in agreement with the samples received? # Samples: yes/no Sample ID's: yes/no Date sampled: yes/no Matrix: yes/no # containers: yes/no	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
7	Are the samples preserved correctly?	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
8	Is there enough sample for all the requested analyses?	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
9	Are all samples within holding times for the requested analyses?	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
10	Record cooler temperature. Contact PM if temperature is not 4°C ± 2°C.		2.0 °C
	Is ice present in cooler?	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
12	Are samples requiring no headspace, headspace free? N/A	<input checked="" type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> NO
13	Are VOA 1st stickers required?	<input type="radio"/> YES	<input type="radio"/> YES <input checked="" type="radio"/> NO
14	Are there special comments on the Chain of Custody which require client contact?	<input type="radio"/> YES	<input type="radio"/> YES <input checked="" type="radio"/> N/A
15	If yes, was ATI Project Manager notified?	<input type="radio"/> YES	<input type="radio"/> YES <input type="radio"/> 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



CHAIN OF CUSTODY

No. **055889**Page **1** of **3**

CONSULTANT'S NAME ALISTO ENGINEERING GROUP		ADDRESS 1575 TREAT Blvd. Ste # 201		CITY Walnut Creek	STATE CA	ZIP CODE 94596
BP SITE NUMBER 11133	BP CORNER ADDRESS/CITY 2220 98th AVE OAKLAND, CA			CONSULTANT PROJECT NUMBER 10-025-07-001		
CONSULTANT PROJECT MANAGER PETE BEAVER		PHONE NUMBER 510-295-1650	FAX NUMBER 510-295-1823		CONSULTANT CONTRACT NUMBER G418846	
BP CONTACT SCOTT HOOTON		BP ADDRESS Renton, WA	PHONE NUMBER		FAX NO.	
LAB CONTACT GARY STEWART		LABORATORY ADDRESS San Diego, CA	PHONE NUMBER		FAX NO.	
SAMPLED BY (Please Print Name) JOHN BICKING			SAMPLED BY (Signature) <i>John K. Bickling</i>		SHIPMENT DATE	SHIPMENT METHOD

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER

SAMPLE DESCRIPTION	COLLECTION TIME	COLLECTION DATE	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	ANALYSIS REQUIRED										COMMENTS										
				NO.	TYPE (VOL.)		LAB SAMPLE #	PHENOL	THAL	CHL	AMMONIA	COPPER	LEAD	MANGANESE	NICKEL	PERMANGANATE		SILICA	TOTAL SOLIDS	ZINC							
STA# 11133 INF	1630	5/23/95	GW	3	VOL	01	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
STA# 11133 A	1640			3	LT	02	✓																				
STA# 11133 B	1650			3		03	✓																				
STA# 11133 EFF	1700			3		04	✓																				
FIELD BLANK	1710			3		05	✓																				
STA# 11133 PS	1635			3		06	✓																				

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

ADDITIONAL COMMENTS

John K. Bickling

5/24 1000

[Signature]

5/25/95 10:00

505267

a. Test

5/25/95 10:00 2.0°C



July 05, 1995

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

Project Name: BP SITE#11133/98TH AVE. OAKLAND, CA
Project # : G418846/10-025-07-001


Attention: PETE BEAVER


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

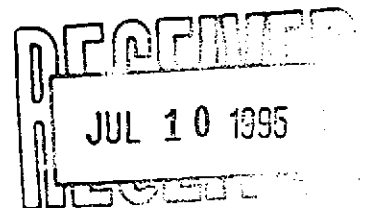
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
June 22, 1995	6	WATER

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





Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/98TH AVE. OAKLAND, CA

Report Date: July 05, 1995
ATI I.D. : 506268

Table with 4 columns: ATI #, Client Description, Matrix, Date Collected. Contains 6 rows of sample data.

---TOTALS---

Summary table with 2 columns: Matrix, # Samples. Shows WATER with 6 samples.

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.



Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/98TH AVE. OAKLAND, CA

ATI I.D.: 506268

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



Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/98TH AVE. OAKLAND, CA

ATI I.D. : 506268

Table with 6 columns: Sample #, Client ID, Matrix, Date Sampled, Date Extracted, Date Analyzed, Dil. Factor. Rows 1-3 show sample details for STA# 11133.

Table with 5 columns: Parameter, Units, 1, 2, 3. Lists concentrations for BENZENE, TOLUENE, ETHYLBENZENE, XYLENES (TOTAL), FUEL HYDROCARBONS, and SURROGATES.



Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/98TH AVE. OAKLAND, CA

ATI I.D. : 506268

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	STA# 11133 B	WATER	20-JUN-95	N/A	01-JUL-95	1.00
5	STA# 11133 EFF	WATER	20-JUN-95	N/A	01-JUL-95	1.00
6	STA# 11133 FIELD BLANK	WATER	20-JUN-95	N/A	01-JUL-95	500.00

Parameter	Units	4	5	6		
BENZENE	UG/L	<0.50	<0.50	21000		
TOLUENE	UG/L	<0.50	<0.50	45000		
ETHYLBENZENE	UG/L	<0.50	<0.50	5300		
XYLENES (TOTAL)	UG/L	<1.0	1.1	30000		
FUEL HYDROCARBONS	UG/L	<50	<50	200000		
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12		
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE		
<u>SURROGATES</u>						
TRIFLUOROTOLUENE	%	92	97	99		



REAGENT BLANK

Page 5

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 35916
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/98TH AVE. OAKLAND, CA

ATI I.D. : 506268
Date Extracted: N/A
Date Analyzed : 01-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
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	97



MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 MSMSD # : 76835
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/98TH AVE. OAKLAND, CA

ATI I.D. : 506268
 Date Extracted: N/A
 Date Analyzed : 01-JUL-95
 Sample Matrix : WATER
 REF I.D. : 506268-03

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



BLANK SPIKE

Page 7

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank Spike #: 57427
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name : BP SITE#111133/98TH AVE. OAKLAND, CA

ATI I.D. : 506268
Date Extracted: N/A
Date Analyzed : 01-JUL-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 #: 506268

INITIALS: LY

ATI-San Diego
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	NO
2	Number of Coolers Received If more than one cooler received attach Multiple Cooler Documentation Form (MCD) Indicate "see MCD" on Item 11 below	1 (#471)	
3	Are custody seals required for this project ?	YES	N/A
	a) are Custody Seals present on Cooler(s) ?	YES	NO
	If yes, are seals intact ?	YES	NO
	b) are Custody Seals present on the sample ?	YES	NO
	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.	YES	NO
5	Is the COC' complete per cooler ? Relinquished: <u>yes</u> /no Requested analysis: <u>yes</u> /no	YES	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	YES	NO
7	Are the samples preserved correctly?	YES	NO
8	Is there enough sample for all the requested analyses?	YES	NO
9	Are all samples within holding times for the requested analyses?	YES	NO
10	Record cooler temperature. Contact PM if temperature is not 4°C ± 2°C.	3.9 °c	
	Is ice present in cooler?	YES	NO
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	YES	NO
12	Are samples requiring no headspace, headspace free? N/A	YES	NO
13	Are VOA 1st stickers required?	YES	NO
14	Are there special comments on the Chain of Custody which require client contact?	YES	N/A
15	If yes, was ATI Project Manager notified?	YES	NO

Describe "no" items: VOA VIALS FOR #06 Labeled Field Blank + called
Field Blank on COC, ¹³⁶⁻²²⁻⁴⁵ all three vials contain sediment.

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 # 506268

CHAIN OF CUSTODY

No.061517

Page 1 of 1

CONSULTANT'S NAME: Alisto Engineering Group ADDRESS: 1575 TREAT Blvd. Ste 201 Walnut Creek Ca 94596 CITY: Walnut Creek STATE: Ca ZIP CODE: 94596

BP SITE NUMBER: 11133 BP CORNER ADDRESS/CITY: 98th Ave OAKLAND, Ca CONSULTANT PROJECT NUMBER: 10-025-07-001

CONSULTANT PROJECT MANAGER: Pete Bennett PHONE NUMBER: 510 295-1650 FAX NUMBER: 510 295 1623 CONSULTANT CONTRACT NUMBER: G418846

BP CONTACT: Scott Hooton BP ADDRESS: Reston, Va PHONE NUMBER: FAX NO:

LAB CONTACT: Gregg Stewart LABORATORY ADDRESS: San Diego, Ca PHONE NUMBER: FAX NO:

SAMPLED BY (Please Print Name): John K. Buley SAMPLED BY (Signature): [Signature] SHIPMENT DATE: SHIPMENT METHOD: Bell Air

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks ANALYSIS REQUIRED AIRBILL NUMBER: 774148

SAMPLE DESCRIPTION	COLLECTION DATE 6/20/95	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE HCL	LAB SAMPLE #	COMMENTS
			NO.	TYPE (VOL.)			
STATION 11133 INF	0800	GW	3	VOA	01		
STATION 11133 PS	0805		3		02		
STATION 11133 A	0810		3		03		
STATION 11133 B	0815		3		04		
STATION 11133 EFF	0820		3		05		
STATION 11133 FIELD PLANK	0825		3		06		

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<u>John K. Buley</u>	<u>6/20/95</u>	<u>1100</u>	<u>[Signature]</u>	<u>6-22-95</u>	<u>08:30</u>	<u>Cooler # 471 = 3.9c</u>



Analytical Technologies, Inc.

Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 50829

September 13, 1995

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

Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA
Project # : G418846/10-025-07-001

Attention: PETE BEAVER


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

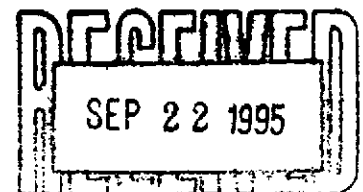
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
August 30, 1995	5	WATER

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 # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Report Date: September 13, 1995
 ATI I.D. : 508292

ATI #	Client Description	Matrix	Date Collected
1	STA #11133 INF	WATER	29-AUG-95
2	STA #11133 A	WATER	29-AUG-95
3	STA #11133 B	WATER	29-AUG-95
4	STA #11133 PS	WATER	29-AUG-95
5	STA #11133 EFF	WATER	29-AUG-95

---TOTALS---

<u>Matrix</u>	<u># Samples</u>
WATER	5

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 # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D.: 508292

Analysis	Technique/Description
EPA 624 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER
MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTEX)	GC/FLAME ION./PHOTO IONIZATION DETECTOR

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA #11133 INF	WATER	29-AUG-95	N/A	12-SEP-95	500.00
2	STA #11133 A	WATER	29-AUG-95	N/A	12-SEP-95	1.00
3	STA #11133 B	WATER	29-AUG-95	N/A	11-SEP-95	50.00

Parameter	Units	1	2	3		
METHYL T-BUTYL ETHER	UG/L	7600	5.2@E	260@E		
BENZENE	UG/L	31000	7.1	54		
TOLUENE	UG/L	45000	68	420		
ETHYLBENZENE	UG/L	4000	5.3	600		
XYLENES (TOTAL)	UG/L	21000	92	3500		
FUEL HYDROCARBONS	UG/L	160000	340	37000		
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12		
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE		
<u>SURROGATES</u>						
TRIFLUOROTOLUENE	%	99	102	90		

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTEX)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	STA #11133 PS	WATER	29-AUG-95	N/A	11-SEP-95	50.00
5	STA #11133 EFF	WATER	29-AUG-95	N/A	12-SEP-95	1.00

Parameter	Units	4	5
METHYL T-BUTYL ETHER	UG/L	<250	<5.0
BENZENE	UG/L	150	<0.50
TOLUENE	UG/L	1000	<0.50
ETHYLBENZENE	UG/L	500	0.61
XYLENES (TOTAL)	UG/L	3300	1.9
FUEL HYDROCARBONS	UG/L	25000	200
HYDROCARBON RANGE		C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE
<u>SURROGATES</u>			
TRIFLUOROTOLUENE	%	88	126

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank I.D. : 36673
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 11-SEP-95
 Dil. Factor : 1.00

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	%	97

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank I.D. : 36704
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 12-SEP-95
 Dil. Factor : 1.00

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	3	97

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Page 7

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 MSMSD # : 78465
 Client : ALISTO ENGINEERING

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 12-SEP-95
 Sample Matrix : WATER
 REF I.D. : 508297-01

Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	UG/L	<0.50	5.0	5.0	100	5.4	108	8
TOLUENE	UG/L	<0.50	5.0	5.1	102	5.7	114	11

% 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/BTEX)
 Blank Spike #: 58774
 Client : ALISTO ENGINEERING
 Project #: G418846/10-025-07-001
 Project Name : BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 11-SEP-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	4.9	5.0	98
TOLUENE	UG/L	<0.50	5.0	5.0	100

% 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)
 Blank Spike #: 58815
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name : BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 12-SEP-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	5.2	5.0	104
TOLUENE	UG/L	<0.50	5.3	5.0	106

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

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Page 10

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA #11133 INF	WATER	29-AUG-95	N/A	07-SEP-95	500.00
5	STA #11133 EFF	WATER	29-AUG-95	N/A	06-SEP-95	1.00

Parameter	Units	1	5
CHLOROMETHANE	UG/L	<5000	<10
VINYL CHLORIDE	UG/L	<2500	<5
BROMOMETHANE	UG/L	<5000	<10
CHLOROETHANE	UG/L	<2500	<5
ACETONE	UG/L	<5000	<10
1,1-DICHLOROETHENE	UG/L	<500	<1
METHYLENE CHLORIDE	UG/L	<2500	<5
CARBON DISULFIDE	UG/L	<1000	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<500	<1
1,1-DICHLOROETHANE	UG/L	<500	<1
CIS-1,2-DICHLOROETHENE	UG/L	<500	<1
CHLOROFORM	UG/L	<500	<1
2-BUTANONE (MEK)	UG/L	<5000	<10
1,1,1-TRICHLOROETHANE	UG/L	<500	<1
CARBON TETRACHLORIDE	UG/L	<500	<1
1,2-DICHLOROETHANE	UG/L	<500	<1
BENZENE	UG/L	34000	<1
TRICHLOROETHENE	UG/L	<500	<1
1,2-DICHLOROPROPANE	UG/L	<500	<1
BROMODICHLOROMETHANE	UG/L	<500	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<5000	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<500	<1
TOLUENE	UG/L	54000	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<500	<1
2-HEXANONE (MBK)	UG/L	<5000	<10
1,1,2-TRICHLOROETHANE	UG/L	<500	<1
TETRACHLOROETHENE	UG/L	<500	<1
DIBROMOCHLOROMETHANE	UG/L	<500	<1
CHLOROBENZENE	UG/L	<500	<1
ETHYLBENZENE	UG/L	4700	<1
XYLENES (TOTAL)	UG/L	24000	<1
STYRENE	UG/L	<1000	<2
BROMOFORM	UG/L	<2500	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<500	<1
DICHLORODIFLUOROMETHANE	UG/L	<5000	<10
TRICHLOROFLUOROMETHANE	UG/L	<2500	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<2500	<5
1,2-DICHLOROBENZENE	UG/L	<2500	<5

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)

Client : ALISTO ENGINEERING

ATI I.D. : 508292

Project # : G418846/10-025-07-001

Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Sample Client ID #	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1 STA #11133 INF	WATER	29-AUG-95	N/A	07-SEP-95	500.00
5 STA #11133 EFF	WATER	29-AUG-95	N/A	06-SEP-95	1.00

Parameter	Units	1	5
1,3-DICHLOROBENZENE	UG/L	<2500	<5
1,4-DICHLOROBENZENE	UG/L	<2500	<5
<u>SURROGATES</u>			
1,2-DICHLOROETHANE-D4	%	97	101
TOLUENE-D8	%	105	104
BFB	%	104	103

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

WATER
 ATI I.D.: 508292

Sample Parameters	Units	Results
1 ALIPHATIC HYDROCARBON C5	UG/L	6000
DIMETHYL CYCLOPROPANE ISOMER	UG/L	4000
ETHYLMETHYL BENZENE ISOMER	UG/L	3000
5 UNKNOWN HYDROCARBON	UG/L	9
ALIPHATIC HYDROCARBON C8	UG/L	40
ALIPHATIC HYDROCARBON C8	UG/L	10
ALIPHATIC HYDROCARBON C8	UG/L	30
ALIPHATIC HYDROCARBON C10	UG/L	20

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Page 13

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank I.D. : 36631
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 06-SEP-95
 Dil. Factor : 1.00

Parameters	Units	Results
CHLOROMETHANE	UG/L	<10
VINYL CHLORIDE	UG/L	<5
BROMOMETHANE	UG/L	<10
CHLOROETHANE	UG/L	<5
ACETONE	UG/L	<10
1,1-DICHLOROETHENE	UG/L	<1
METHYLENE CHLORIDE	UG/L	<5
CARBON DISULFIDE	UG/L	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<1
1,1-DICHLOROETHANE	UG/L	<1
CIS-1,2-DICHLOROETHENE	UG/L	<1
CHLOROFORM	UG/L	<1
2-BUTANONE (MEK)	UG/L	<10
1,1,1-TRICHLOROETHANE	UG/L	<1
CARBON TETRACHLORIDE	UG/L	<1
1,2-DICHLOROETHANE	UG/L	<1
BENZENE	UG/L	<1
TRICHLOROETHENE	UG/L	<1
1,2-DICHLOROPROPANE	UG/L	<1
BROMODICHLOROMETHANE	UG/L	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<1
TOLUENE	UG/L	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<1
2-HEXANONE (MBK)	UG/L	<10
1,1,2-TRICHLOROETHANE	UG/L	<1
TETRACHLOROETHENE	UG/L	<1
DIBROMOCHLOROMETHANE	UG/L	<1
CHLOROENZENE	UG/L	<1
ETHYLBENZENE	UG/L	<1
XYLENES (TOTAL)	UG/L	<1
STYRENE	UG/L	<2
BROMOFORM	UG/L	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<1
DICHLORODIFLUOROMETHANE	UG/L	<10
TRICHLOROFLUOROMETHANE	UG/L	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<5
1,2-DICHLOROBENZENE	UG/L	<5
1,3-DICHLOROBENZENE	UG/L	<5
1,4-DICHLOROBENZENE	UG/L	<5
SURROGATES		
1,2-DICHLOROETHANE-D4	%	95
TOLUENE-D8	%	104
BFB	%	103

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Page 14

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

Blank I.D. : 36631

ATI I.D. : 508292

Client : ALISTO ENGINEERING

Project # : G418846/10-025-07-001

Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Parameters	Units	Results
NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank I.D. : 36676
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 06-SEP-95
 Dil. Factor : 1.00

Parameters	Units	Results
CHLOROMETHANE	UG/L	<10
VINYL CHLORIDE	UG/L	<5
BROMOMETHANE	UG/L	<10
CHLOROETHANE	UG/L	<5
ACETONE	UG/L	<10
1,1-DICHLOROETHENE	UG/L	<1
METHYLENE CHLORIDE	UG/L	<5
CARBON DISULFIDE	UG/L	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<1
1,1-DICHLOROETHANE	UG/L	<1
CIS-1,2-DICHLOROETHENE	UG/L	<1
CHLOROFORM	UG/L	<1
2-BUTANONE (MEK)	UG/L	<10
1,1,1-TRICHLOROETHANE	UG/L	<1
CARBON TETRACHLORIDE	UG/L	<1
1,2-DICHLOROETHANE	UG/L	<1
BENZENE	UG/L	<1
TRICHLOROETHENE	UG/L	<1
1,2-DICHLOROPROPANE	UG/L	<1
BROMODICHLOROMETHANE	UG/L	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<1
TOLUENE	UG/L	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<1
2-HEXANONE (MBK)	UG/L	<10
1,1,2-TRICHLOROETHANE	UG/L	<1
TETRACHLOROETHENE	UG/L	<1
DIBROMOCHLOROMETHANE	UG/L	<1
CHLOROBENZENE	UG/L	<1
ETHYLBENZENE	UG/L	<1
XYLENES (TOTAL)	UG/L	<1
STYRENE	UG/L	<2
BROMOFORM	UG/L	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<1
DICHLORODIFLUOROMETHANE	UG/L	<10
TRICHLOROFLUOROMETHANE	UG/L	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<5
1,2-DICHLOROBENZENE	UG/L	<5
1,3-DICHLOROBENZENE	UG/L	<5
1,4-DICHLOROBENZENE	UG/L	<5
SURROGATES		
1,2-DICHLOROETHANE-D4	§	96
TOLUENE-D8	§	102
BFB	§	103

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Page 16

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

Blank I.D. : 36676

ATI I.D. : 508292

Client : ALISTO ENGINEERING

Project # : G418846/10-025-07-001

Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Parameters	Units	Results
NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Page 1

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 MSMSD # : 78244
 Client : ALISTO ENGINEERING

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 01-SEP-95
 Sample Matrix : WATER
 REF I.D. : 508261-01

Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
1,1-DICHLOROETHENE	UG/L	<1	50	56	112	57	114	2
BENZENE	UG/L	<1	50	53	106	56	112	6
TRICHLOROETHENE	UG/L	<1	50	56	112	59	118	5
TOLUENE	UG/L	<2	50	54	108	60	120	11
CHLOROBENZENE	UG/L	<1	50	58	116	61	122	5

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

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank Spike #: 58677
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name : BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 508292
 Date Extracted: N/A
 Date Analyzed : 06-SEP-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
1,1-DICHLOROETHENE	UG/L	<1	52	50	104
BENZENE	UG/L	<1	55	50	110
TRICHLOROETHENE	UG/L	<1	60	50	120
TOLUENE	UG/L	<2	55	50	110
CHLOROBENZENE	UG/L	<1	60	50	120

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

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	NO
2	Number of Coolers Received If more than one cooler received attach Multiple Cooler Documentation Form (MCD) Indicate "see MCD" on Item 11 below	1 (#2073)	
3	Are custody seals required for this project ?	YES	N/A
	a) are Custody Seals present on Cooler(s) ?	YES	NO
	If yes, are seals intact ?	YES	NO
	b) are Custody Seals present on the sample ?	YES	NO
	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.	YES	NO
5	Is the COC* complete per cooler ? Relinquished: yes/no Requested analysis: yes/no	YES	NO
6	Is the COC* in agreement with the samples received? # Samples: yes/no Sample ID's: yes/no Date sampled: yes/no Matrix: yes/no # containers: yes/no	YES	NO
7	Are the samples preserved correctly?	YES	NO
8	Is there enough sample for all the requested analyses?	YES	NO
9	Are all samples within holding times for the requested analyses?	YES	NO
10	Record cooler temperature. Contact PM if temperature is not 4°C ± 2°C.	2.9°C	
	Is ice present in cooler?	YES	NO
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	YES	NO
12	Are samples requiring no headspace, headspace free? N/A	YES	NO
13	Are VOA 1st stickers required?	YES	NO
14	Are there special comments on the Chain of Custody which require client contact?	YES	N/A
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 # 508292

CHAIN OF CUSTODY

No. 075886

Page 1 of 1

CONSULTANT'S NAME ANALYTICAL ENGINEERING GROUP		ADDRESS 1575 TREAT BLVD. STE #201 WALNUT CREEK CA 94596		CITY	STATE	ZIP CODE
BP SITE NUMBER 11133	BP CORNER ADDRESS/CITY 2220 98th AVE OAKLAND CA			CONSULTANT PROJECT NUMBER 10-025-07-001		
CONSULTANT PROJECT MANAGER PETE BEAVER		PHONE NUMBER 510 295-1650	FAX NUMBER 510 295 1823		CONSULTANT CONTRACT NUMBER GA18846	
BP CONTACT SCOTT HOOTEN		BP ADDRESS RENTON, WA	PHONE NUMBER 206 251-0689		FAX NO. -	
LAB CONTACT GARY STEWART		LABORATORY ADDRESS SAN DIEGO, CA	PHONE NUMBER 619 458 9141		FAX NO. -	
SAMPLED BY (Please Print Name) JOHN BICKING		SAMPLED BY (Signature) <i>John K. Bicking</i>		SHIPMENT DATE 8/29/95		SHIPMENT METHOD Fed Ex

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED AIRBILL NUMBER
6680235811

SAMPLE DESCRIPTION	COLLECTION DATE/TIME	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	HCL	HCL											COMMENTS
	COLLECTION DATE/TIME		NO.	TYPE (VOL.)	LAB SAMPLE #	P.H.G. STBY	624											
STA# 11133 INF	8/29/95 1130	GW	6		01	✓	✓											
STA# 11133 A			3		02	✓												
STA# 11133 B			3		03	✓												
STA# 11133 PS			3		04	✓												
STA# 11133 E/F			6		05	✓	✓											

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>John K. Bicking</i>	8/29/95	1225	<i>Patricia Yelton</i> (gpc Hor)	8/29	12:5	
<i>Patricia Yelton</i>	8/29/95	1530	<i>John Bicking</i> (ATE)	8/29/95	09:10	



Analytical **Technologies, Inc.**

Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 509199

September 28, 1995

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

Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA
Project # : G418846/10-025-07-001


Attention: PETE BEAVER

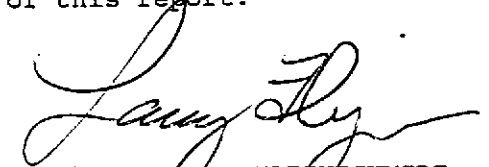
Analytical Technologies, Inc. has received the following sample(s):

<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
September 20, 1995	6	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


for ALAN J. KLEINSCHMIDT
LABORATORY MANAGER

RECEIVED
OCT 02 1995

SAMPLE CROSS REFERENCE

Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Report Date: September 28, 1995
 ATI I.D. : 509199

ATI #	Client Description	Matrix	Date Collected
1	STA# 11133 INF	WATER	19-SEP-95
2	STA# 11133 PS	WATER	19-SEP-95
3	STA# 11133 A	WATER	19-SEP-95
4	STA# 11133 B	WATER	19-SEP-95
5	STA# 11133 EFF	WATER	19-SEP-95
6	STA# 11133 Q-C-1	WATER	19-SEP-95

---TOTALS---

<u>Matrix</u>	<u># Samples</u>
WATER	6

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 # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D.: 509199

Analysis	Technique/Description
EPA 624 (GC/MS FOR VOLATILE ORGANICS) MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)	GC/MASS SPECTROMETER GC/FLAME IONIZATION DETECTOR

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA# 11133 INF	WATER	19-SEP-95	22-SEP-95	26-SEP-95	25.00
2	STA# 11133 PS	WATER	19-SEP-95	22-SEP-95	26-SEP-95	20.00
3	STA# 11133 A	WATER	19-SEP-95	22-SEP-95	22-SEP-95	1.00

Parameter	Units	1	2	3
FUEL HYDROCARBONS	MG/L	230	55	<0.50
HYDROCARBON RANGE		C7-C14	C7-C14	-
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	-
<u>SURROGATES</u>				
BIS(2-ETHYLHEXYL) PHTHALATE	%	N/A*K	N/A*K	130

GAS CHROMATOGRAPHY RESULTS

Page

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	STA# 11133 B	WATER	19-SEP-95	22-SEP-95	26-SEP-95	1.00
5	STA# 11133 EFF	WATER	19-SEP-95	22-SEP-95	22-SEP-95	1.00
6	STA# 11133 Q-C-1	WATER	19-SEP-95	22-SEP-95	22-SEP-95	1.00

Parameter	Units	4	5	6
FUEL HYDROCARBONS	MG/L	0.55	<0.50	<0.50
HYDROCARBON RANGE		C7-C14	-	-
HYDROCARBONS QUANTITATED USING		GASOLINE	-	-

<u>SURROGATES</u>				
BIS(2-ETHYLHEXYL) PHTHALATE	%	129	129	128

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 Blank I.D. : 36843
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199
 Date Extracted: 22-SEP-95
 Date Analyzed : 23-SEP-95
 Dil. Factor : 1.00

Parameters	Units	Results
FUEL HYDROCARBONS	MG/L	<0.50
HYDROCARBON RANGE		-
HYDROCARBONS QUANTITATED USING		-
<u>SURROGATES</u>		
BIS(2-ETHYLHEXYL) PHTHALATE	%	129

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Page 6

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 78780
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199
 Date Extracted: 22-SEP-95
 Date Analyzed : 22-SEP-95
 Sample Matrix : WATER
 REF I.D. : 509222-01

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	MG/L	<0.50	10	13	130	13	130	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)
 Blank Spike #: 59061
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name : BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199
 Date Extracted: 22-SEP-95
 Date Analyzed : 22-SEP-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
FUEL HYDROCARBONS	MG/L	<0.50	13	10	130

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

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA# 11133 INF	WATER	19-SEP-95	N/A	21-SEP-95	200.00
3	STA# 11133 A	WATER	19-SEP-95	N/A	21-SEP-95	1.00
4	STA# 11133 B	WATER	19-SEP-95	N/A	21-SEP-95	1.00

Parameter	Units	1	3	4
CHLOROMETHANE	UG/L	<2000	<10	<10
VINYL CHLORIDE	UG/L	<1000	<5	<5
BROMOMETHANE	UG/L	<2000	<10	<10
CHLOROETHANE	UG/L	<1000	<5	<5
ACETONE	UG/L	<2000	<10	<10
1,1-DICHLOROETHENE	UG/L	<200	<1	<1
METHYLENE CHLORIDE	UG/L	<1000	<5	<5
CARBON DISULFIDE	UG/L	<400	<2	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<200	<1	<1
1,1-DICHLOROETHANE	UG/L	<200	<1	<1
CIS-1,2-DICHLOROETHENE	UG/L	<200	<1	<1
CHLOROFORM	UG/L	<200	<1	<1
2-BUTANONE (MEK)	UG/L	<2000	<10	<10
1,1,1-TRICHLOROETHANE	UG/L	<200	<1	<1
CARBON TETRACHLORIDE	UG/L	<200	<1	<1
1,2-DICHLOROETHANE	UG/L	440	<1	<1
BENZENE	UG/L	28000	<1	<1
TRICHLOROETHENE	UG/L	<200	<1	<1
1,2-DICHLOROPROPANE	UG/L	<200	<1	<1
BROMODICHLOROMETHANE	UG/L	<200	<1	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<2000	<10	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<200	<1	<1
TOLUENE	UG/L	40000	<2	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<200	<1	<1
2-HEXANONE (MBK)	UG/L	<2000	<10	<10
1,1,2-TRICHLOROETHANE	UG/L	<200	<1	<1
TETRACHLOROETHENE	UG/L	<200	<1	<1
DIBROMOCHLOROMETHANE	UG/L	<200	<1	<1
CHLOROBENZENE	UG/L	<200	<1	<1
ETHYLBENZENE	UG/L	3800	<1	<1
XYLENES (TOTAL)	UG/L	21000	<1	9
STYRENE	UG/L	<400	<2	<2
BROMOFORM	UG/L	<1000	<5	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<200	<1	<1
DICHLORODIFLUOROMETHANE	UG/L	<2000	<10	<10
TRICHLOROFLUOROMETHANE	UG/L	<1000	<5	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<1000	<5	<5
1,2-DICHLOROETHANE	UG/L	<1000	<5	<5

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)

Client : ALISTO ENGINEERING

ATI I.D. : 509199

Project # : G418846/10-025-07-001

Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA# 11133 INF	WATER	19-SEP-95	N/A	21-SEP-95	200.00
3	STA# 11133 A	WATER	19-SEP-95	N/A	21-SEP-95	1.00
4	STA# 11133 B	WATER	19-SEP-95	N/A	21-SEP-95	1.00

Parameter	Units	1	3	4
1,3-DICHLOROBENZENE	UG/L	<1000	<5	<5
1,4-DICHLOROBENZENE	UG/L	<1000	<5	<5

SURROGATES

1,2-DICHLOROETHANE-D4	%	96	94	97
TOLUENE-D8	%	102	103	100
BFB	%	94	96	92

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

WATER
 ATI I.D.: 509199

Sample Parameters	Units	Results
1 ALIPHATIC HYDROCARBON C5	UG/L	3000
ALIPHATIC HYDROCARBON C5	UG/L	1000
ALIPHATIC HYDROCARBON C5	UG/L	2000
ETHYLMETHYL BENZENE ISOMER	UG/L	3000
TRIMETHYL BENZENE ISOMER	UG/L	2000
3 NONE DETECTED	N/A	N/A
4 ALIPHATIC HYDROCARBON C8	UG/L	30
ALIPHATIC HYDROCARBON C8	UG/L	30
ALIPHATIC HYDROCARBON C9	UG/L	20
ETHYLMETHYL BENZENE ISOMER	UG/L	20
TRIMETHYL BENZENE ISOMER	UG/L	40

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Page 11

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
5	STA# 11133 EFF	WATER	19-SEP-95	N/A	21-SEP-95	1.00

Parameter	Units	5
CHLOROMETHANE	UG/L	<10
VINYL CHLORIDE	UG/L	<5
BROMOMETHANE	UG/L	<10
CHLOROETHANE	UG/L	<5
ACETONE	UG/L	<10
1,1-DICHLOROETHENE	UG/L	<1
METHYLENE CHLORIDE	UG/L	<5
CARBON DISULFIDE	UG/L	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<1
1,1-DICHLOROETHANE	UG/L	<1
CIS-1,2-DICHLOROETHENE	UG/L	<1
CHLOROFORM	UG/L	<1
2-BUTANONE (MEK)	UG/L	<10
1,1,1-TRICHLOROETHANE	UG/L	<1
CARBON TETRACHLORIDE	UG/L	<1
1,2-DICHLOROETHANE	UG/L	<1
BENZENE	UG/L	<1
TRICHLOROETHENE	UG/L	<1
1,2-DICHLOROPROPANE	UG/L	<1
BROMODICHLOROMETHANE	UG/L	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<1
TOLUENE	UG/L	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<1
2-HEXANONE (MBK)	UG/L	<10
1,1,2-TRICHLOROETHANE	UG/L	<1
TETRACHLOROETHENE	UG/L	<1
DIBROMOCHLOROMETHANE	UG/L	<1
CHLOROBENZENE	UG/L	<1
ETHYLBENZENE	UG/L	<1
XYLENES (TOTAL)	UG/L	<1
STYRENE	UG/L	<2
BROMOFORM	UG/L	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<1
DICHLORODIFLUOROMETHANE	UG/L	<10
TRICHLOROFLUOROMETHANE	UG/L	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<5
1,2-DICHLOROBENZENE	UG/L	<5

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
5	STA# 11133 EFF	WATER	19-SEP-95	N/A	21-SEP-95	1.00

Parameter	Units	5
1,3-DICHLOROBENZENE	UG/L	<5
1,4-DICHLOROBENZENE	UG/L	<5
<u>SURROGATES</u>		
1,2-DICHLOROETHANE-D4	%	96
TOLUENE-D8	%	103
BFB	%	96

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

WATER
ATI I.D.: 509199

Sample Parameters	Units	Results
5 NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Page 14

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank I.D. : 36837
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199
 Date Extracted: N/A
 Date Analyzed : 21-SEP-95
 Dil. Factor : 1.00

Parameters	Units	Results
CHLOROMETHANE	UG/L	<10
VINYL CHLORIDE	UG/L	<5
BROMOMETHANE	UG/L	<10
CHLOROETHANE	UG/L	<5
ACETONE	UG/L	<10
1,1-DICHLOROETHENE	UG/L	<1
METHYLENE CHLORIDE	UG/L	<5
CARBON DISULFIDE	UG/L	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<1
1,1-DICHLOROETHANE	UG/L	<1
CIS-1,2-DICHLOROETHENE	UG/L	<1
CHLOROFORM	UG/L	<1
2-BUTANONE (MEK)	UG/L	<10
1,1,1-TRICHLOROETHANE	UG/L	<1
CARBON TETRACHLORIDE	UG/L	<1
1,2-DICHLOROETHANE	UG/L	<1
BENZENE	UG/L	<1
TRICHLOROETHENE	UG/L	<1
1,2-DICHLOROPROPANE	UG/L	<1
BROMODICHLOROMETHANE	UG/L	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<1
TOLUENE	UG/L	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<1
2-HEXANONE (MBK)	UG/L	<10
1,1,2-TRICHLOROETHANE	UG/L	<1
TETRACHLOROETHENE	UG/L	<1
DIBROMOCHLOROMETHANE	UG/L	<1
CHLOROBENZENE	UG/L	<1
ETHYLBENZENE	UG/L	<1
XYLENES (TOTAL)	UG/L	<1
STYRENE	UG/L	<2
BROMOFORM	UG/L	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<1
DICHLORODIFLUOROMETHANE	UG/L	<10
TRICHLOROFLUOROMETHANE	UG/L	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<5
1,2-DICHLOROBENZENE	UG/L	<5
1,3-DICHLOROBENZENE	UG/L	<5
1,4-DICHLOROBENZENE	UG/L	<5
<u>SURROGATES</u>		
1,2-DICHLOROETHANE-D4	%	95
TOLUENE-D8	%	100
BFB	%	96

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Page 15

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
Blank I.D. : 36837
Client : ALISTO ENGINEERING
Project # : G418846/10-025-07-001
Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199

Parameters	Units	Results
NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Page 16

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 MSMSD # : 78725
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name: BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199
 Date Extracted: N/A
 Date Analyzed : 25-SEP-95
 Sample Matrix : WATER
 REF I.D. : 509158-02

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
1,1-DICHLOROETHENE	UG/L	<1	50	43	86	39	78	10
BENZENE	UG/L	<1	50	47	94	45	90	4
TRICHLOROETHENE	UG/L	<1	50	47	94	46	92	2
TOLUENE	UG/L	<2	50	49	98	48	96	2
CHLOROBENZENE	UG/L	<1	50	53	106	52	104	2

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

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank Spike #: 59029
 Client : ALISTO ENGINEERING
 Project # : G418846/10-025-07-001
 Project Name : BP SITE#11133/2220 98TH AVE. OAKLAND, CA

ATI I.D. : 509199
 Date Extracted: N/A
 Date Analyzed : 21-SEP-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
1,1-DICHLOROETHENE	UG/L	<1	41	50	82
BENZENE	UG/L	<1	46	50	92
TRICHLOROETHENE	UG/L	<1	46	50	92
TOLUENE	UG/L	<2	47	50	94
CHLOROBENZENE	UG/L	<1	52	50	104

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

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	<input checked="" type="radio"/> NO
2	Number of Coolers Received If more than one cooler received attach Multiple Cooler Documentation Form (MCD) Indicate "see MCD" on Item 11 below	1 (#2059)	
3	Are custody seals required for this project ? a) are Custody Seals present on Cooler(s) ? If yes, are seals intact ? b) are Custody Seals present on the sample ? If yes, are seals intact ?	YES	<input checked="" type="radio"/> N/A
		YES	<input checked="" type="radio"/> NO
		YES	NO
		YES	<input checked="" type="radio"/> NO
		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.	<input checked="" type="radio"/> YES	NO
5	Is the COC complete per cooler ? Relinquished: <input checked="" type="radio"/> yes /no Requested analysis: <input checked="" type="radio"/> yes /no	<input checked="" type="radio"/> YES	NO
6	Is the COC in agreement with the samples received? # Samples: <input checked="" type="radio"/> yes /no Sample ID's: <input checked="" type="radio"/> yes /no Date sampled: <input checked="" type="radio"/> yes /no Matrix: <input checked="" type="radio"/> yes /no # containers: <input checked="" type="radio"/> yes /no	<input checked="" type="radio"/> YES	NO
7	Are the samples preserved correctly?	<input checked="" type="radio"/> YES	NO
8	Is there enough sample for all the requested analyses?	<input checked="" type="radio"/> YES	NO
9	Are all samples within holding times for the requested analyses?	<input checked="" type="radio"/> YES	NO
10	Record cooler temperature. Contact PM if temperature is not 4°C ± 2°C. Is ice present in cooler?	2.0 °C <input checked="" type="radio"/> YES NO	
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	<input checked="" type="radio"/> YES	NO
12	Are samples requiring no headspace, headspace free? N/A	<input checked="" type="radio"/> YES	NO
13	Are VOA 1st stickers required?	YES	<input checked="" type="radio"/> NO
14	Are there special comments on the Chain of Custody which require client contact?	YES	<input checked="" type="radio"/> N/A
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 # 509199

CHAIN OF CUSTODY

No. 075883

Page 1 of 1

CONSULTANT'S NAME: Austo Engineering ADDRESS: 1575 TREAT Blvd. Ste 201 Walnut Creek CA 94576 CITY: Walnut Creek STATE: CA ZIP CODE: 94576

BP SITE NUMBER: 11133 BP CORNER ADDRESS/CITY: 2220 98th AVE. OAKLAND CA CONSULTANT PROJECT NUMBER: 10-025-07-001

CONSULTANT PROJECT MANAGER: PETE BEAVER PHONE NUMBER: 510 295-1650 FAX NUMBER: 510 295-1823 CONSULTANT CONTRACT NUMBER: G418846

BP CONTACT: SCOTT HOOTEN BP ADDRESS: Renton, WA PHONE NUMBER: _____ FAX NO.: _____

LAB CONTACT: MARY STEWART LABORATORY ADDRESS: San Diego, CA PHONE NUMBER: _____ FAX NO.: _____

SAMPLED BY (Please Print Name): JOHN BICKING SAMPLED BY (Signature): John K. Bicking SHIPMENT DATE: _____ SHIPMENT METHOD: Fed Ex

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks ANALYSIS REQUIRED: 0 AIRBILL NUMBER: 16680236710

SAMPLE DESCRIPTION	COLLECTION	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	IKL	IKL											COMMENTS
	9/19/95		NO.	TYPE (VOL.)	LAB SAMPLE #	624	TPH 9											
STA# 11133 INP	0830	cont	6	VOL	01	✓	✓											
STA# 11133 PS	0835	↓	3	↓	02	✓	✓											
STA# 11133 A	0840	↓	6	↓	03	✓	✓											
STA# 11133 B	0845	↓	6	↓	04	✓	✓											
STA# 11133 ETF	0850	↓	6	↓	05	✓	✓											
STA# 11133 Q-C-1	0855	↓	3	↓	06	✓	✓											

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<u>John K. Bicking</u>	<u>9/19/95</u>	<u>1201</u>	<u>Patricia Yelton</u>	<u>9/19/95</u>	<u>1300</u>	
<u>Patricia Yelton</u>	<u>9/19/95</u>	<u>1400</u>	<u>John Bicking / ATU</u>	<u>9/20/95</u>	<u>09:15</u>	

COOLER # 2059 = 2.0°C