



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

July 10, 1996

Mr. Raymond Maxwell
Source Control Division
East Bay Municipal District
Oakland, California 94623

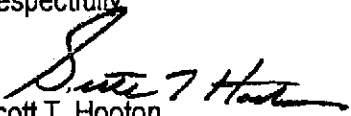
Subject: Sewer Discharge Permit - Semi-Annual Report
BP Oil Branded Service Station No. 11109
4280 Foothill Boulevard
Oakland, California
Wastewater Discharge Permit No. 502-77421

Dear Mr. Newman,

This is to inform you that the remediation system at the branded BP Oil Service Station No. 11109 4280 Foothill Boulevard, Oakland, California, has been shut down during the reporting period of January 1, 1996 to June 30, 1996.

Please call if you have any questions regarding this submittal.

Respectfully,


Scott T. Hooton
Environmental Resources Management
Corrective Action Manager

STH:sb msword\dis11266

cc: Peter Beaver, Alisto Engineering

Mr. Barney Chan, Alameda County Health Care Service Agency

Site File



ALISTO ENGINEERING GROUP

January 15, 1996

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

10-005-03-002

Subject: Sewer Discharge Permit - Semi-Annual Report
BP Oil Company Service Station No. 11109
4280 Foothill Boulevard
Oakland, California
Wastewater Discharge Permit No. 502-77421

Dear Mr. Chan:

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. 11109, 4280 Foothill Boulevard, Oakland, California. This report covers the period from July 1 to December 31, 1995.

The results of sample analysis indicate that petroleum hydrocarbon constituents were not present above the reported detection limits in the effluent samples. The 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 locations are shown on 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."

Mr. Barney Chan
January 15, 1996
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 horizontal line.

Peter Beaver
Engineering Manager

Enclosures.

cc: Robert Newman, East Bay Municipal Utility District
Scott Hooton, BP Oil Company



ALISTO ENGINEERING GROUP

January 15, 1996

Mr. Robert Newman
East Bay Municipal Utility District
Source Control Division
P.O. Box 24055
Oakland, California 94623

RECEIVED
MAY 19 1996
10-005-03-002

Subject: Sewer Discharge Permit - Semi-Annual Report
BP Oil Company Service Station No. 11109
4280 Foothill Boulevard
Oakland, California
Wastewater Discharge Permit No. 502-77421

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Mr. Robert Newman
January 15, 1996
Page 2

Please call if you have questions regarding this report.

Sincerely,

ALISTO ENGINEERING GROUP



Peter Beaver
Engineering Manager

Enclosures

cc: Barney Chan, Alameda County Health Care Services Agency
Scott Hooton, BP Oil Company

TABLE 1 - FLOW DATA FOR GROUNDWATER TREATMENT SYSTEM
 BP OIL COMPANY SERVICE STATION NO. 11109
 4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-005

DATE	FLOW METER READING (Gallons)	EFFLUENT DISCHARGED (Gallons)	AVERAGE FLOW RATE (GPD)	AVERAGE FLOW RATE (GPM)
02/15/94	0	0	---	0.00
02/28/94	1640	1640	126	0.09
03/30/94	3000	1360	45	0.03
04/29/94	12550	9550	318	0.22
05/31/94	16237	3687	115	0.08
07/01/94	19505	3268	105	0.07
07/29/94	30516	11011	393	0.27
09/03/94	50432	19916	553	0.38
10/05/94	72894	22462	702	0.49
10/31/94	96393	23499	904	0.63
11/29/94	130333	33940	1170	0.81
12/29/94	137135	6802	227	0.16
01/30/95	147776	10641	333	0.23
02/22/95	150774	2998	130	0.09
03/30/95	156834	6060	168	0.12
05/16/95	159944	3110	66	0.05
06/29/95	163362	3418	78	0.05
08/01/95	177156	13794	418	0.29
08/29/95	216089	38933	1390	0.97
09/28/95	252466	36377	1213	0.84
10/18/95	274057	21591	1080	0.75
11/14/95	300728	26671	988	0.69
12/27/95	344650	43922	1021	0.71
TOTAL FOR PERIOD		181288	1002	0.70

ABBREVIATIONS:

GPD Gallons per day
 GPM Gallons per minute
 --- Not applicable

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER TREATMENT SYSTEM OPERATION
 BP OIL COMPANY SERVICE STATION NO. 11109
 4280 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-005

Sample ID	Date	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	UNKNOWN (ug/l)	MEK (ug/l)	1,2-DCA	Arsenic (mg/l)	Barium (mg/l)	Molybdenum (mg/l)	Copper (mg/l)	Nickel (mg/l)	Zinc (mg/l)	MTBE (ug/l)	LAB
STA11109-E	02/15/94	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	59	---	0.019	ND<0.01	0.04	ND<0.01	ND<0.01	0.05	---	PACE
E-1	02/18/94	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	ND<5.0	---	---	---	---	---	---	---	---	PACE
E-1	02/25/94	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	---	---	---	---	---	---	---	---	PACE
E-1	03/07/94	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	---	---	---	---	---	---	---	---	PACE
E-1	04/15/94	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	---	---	---	---	---	---	---	---	PACE
E-1	05/12/94	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	---	---	---	---	---	---	---	---	PACE
E-1	06/16/94	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	---	---	---	---	---	---	---	---	PACE
E-1	07/14/94	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	---	---	---	---	---	---	---	---	PACE
E-1	08/23/94	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	---	---	---	---	---	---	---	---	PACE
E-1	09/19/94	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	---	---	---	---	---	---	---	---	PACE
E-1	10/17/94	ND<100	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<2.0	---	---	---	---	---	---	---	---	---	---	GTEL
E-1	11/15/94	ND<10	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.5	---	---	---	---	---	---	---	---	---	---	GTEL
E-1	12/14/94	ND<10	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.5	---	---	---	---	---	---	---	---	---	---	GTEL
E-1	01/19/95	ND<50	5700	3	0.8	ND<0.5	1	---	---	---	---	---	---	---	---	---	---	ATI
E-1	02/06/95	ND<50	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50	---	---	---	---	---	---	---	---	---	---	ATI
E-1	02/22/95	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
QC-1	02/22/95	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
E-1	03/14/95	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
E-1	04/18/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
QC-1	04/18/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
E-1	05/16/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
QC-1	05/16/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
E-1	06/19/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
E-1	07/18/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	---	ATI
E-1	08/17/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	ND<5.0	ATI
QC-1	08/17/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	ND<5.0	ATI
E-1	09/19/95	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	---	---	---	---	ND<5.0	ATI
E-1	10/18/95	ND<50	---	ND<1	ND<2	ND<1	ND<1	---	ND<10	ND<1	---	---	---	---	---	---	---	ATI
QC-1	10/18/95	ND<50	---	ND<1	ND<2	ND<1	ND<1	---	ND<10	ND<1	---	---	---	---	---	---	---	ATI
E-1	11/14/95	ND<50	ND<50	ND<1	ND<2	ND<1	ND<1	---	ND<10	ND<1	---	---	---	---	---	---	---	ATI
QC-1	11/14/95	ND<50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ATI
E-1	12/12/95	ND<50	ND<50	ND<1	ND<2	ND<1	ND<1	---	ND<10	ND<1	---	---	---	---	---	---	---	ATI

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline	ND	Not detected above reported detection limit
TPH-D	Total petroleum hydrocarbons as diesel	---	Not analyzed/available
B	Benzene	I-1	Influent sampling port
T	Toluene	A-1	Intermediate sampling port
E	Ethylbenzene	E-1	Effluent sampling port
X	Total xylenes	QC-1	Field blank
MEK	Methyl ethyl ketone	PACE	Pace, Inc.
MTBE	Methyl tert butyl ether	GTEL	GTEL Environmental Laboratories, Inc.
ug/l	Micrograms per liter	ATI	Analytical Technologies, Inc.
mg/l	Milligrams per liter		



Analytical**Technologies**, Inc.

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

ATI I.D.: 507193

August 01, 1995

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

Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA
Project # : G314386/10-005-03-001

Attention: PETER BEAVER

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

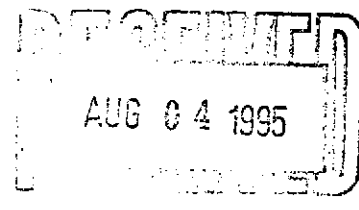
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
July 20, 1995	4	WATER

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 # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Report Date: August 01, 1995
ATI I.D. : 507193

ATI #	Client Description	Matrix	Date Collected
1	STA #11109 INF	WATER	18-JUL-95
2	STA #11109 A	WATER	18-JUL-95
3	STA #11109 EFF	WATER	18-JUL-95
4	STA #11109 FIELD BLANK	WATER	18-JUL-95

---TOTALS---

<u>Matrix</u>	<u># Samples</u>
WATER	4

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 # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D.: 507193

Analysis	Technique/Description
MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)	GC/FLAME IONIZATION DETECTOR
MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)	GC/FLAME ION./PHOTO IONIZATION DETECTOR



GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 507193

Table with columns: Sample #, Client ID, Matrix, Date Sampled, Date Extracted, Date Analyzed, Dil. Factor. Includes rows for FUEL HYDROCARBONS (8.9 MG/L) and SURROGATES (BIS(2-ETHYLHEXYL) PHTHALATE).



GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS) ATI I.D. : 507193
Blank I.D. : 36149 Date Extracted: 22-JUL-95
Client : ALISTO ENGINEERING Date Analyzed : 24-JUL-95
Project # : G314386/10-005-03-001 Dil. Factor : 1.00
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Results
FUEL HYDROCARBONS	MG/L	<0.05
HYDROCARBON RANGE		-
HYDROCARBONS QUANTITATED USING		-
<u>SURROGATES</u>		
BIS(2-ETHYLHEXYL) PHTHALATE	%	95

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 77312
 Client : ALISTO ENGINEERING

ATI I.D. : 507193
 Date Extracted: 22-JUL-95
 Date Analyzed : 24-JUL-95
 Sample Matrix : WATER
 REF I.D. : REAGENT WATER

Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	MG/L	<0.050	1.0	0.65	65	0.74	74	13

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

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

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING ATI I.D. : 507193
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA #11109 INF	WATER	18-JUL-95	N/A	29-JUL-95	50.00
2	STA #11109 A	WATER	18-JUL-95	N/A	30-JUL-95	1.00
3	STA #11109 EFF	WATER	18-JUL-95	N/A	30-JUL-95	1.00

Parameter	Units	1	2	3		
BENZENE	UG/L	1900	1.6	<0.50		
TOLUENE	UG/L	650	1.3	<0.50		
ETHYLBENZENE	UG/L	96	<0.50	<0.50		
XYLENES (TOTAL)	UG/L	950	2.2	<1.0		
FUEL HYDROCARBONS	UG/L	1100	<50	<50		
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12		
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE		
SURROGATES						
TRIFLUOROTOLUENE	%	110	98	98		



GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING ATI I.D. : 507193
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	STA #11109	FIELD BLANK	WATER	18-JUL-95	N/A	30-JUL-95 1.00

Parameter	Units	4
BENZENE	UG/L	1.6
TOLUENE	UG/L	1.2
ETHYLBENZENE	UG/L	<0.50
XYLENES (TOTAL)	UG/L	2.2
FUEL HYDROCARBONS	UG/L	<50
HYDROCARBON RANGE		C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	100



GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank I.D. : 36211
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 507193
 Date Extracted: N/A
 Date Analyzed : 29-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	%	101



GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTEX) ATI I.D. : 507193
Blank I.D. : 36212 Date Extracted: N/A
Client : ALISTO ENGINEERING Date Analyzed : 30-JUL-95
Project # : G314386/10-005-03-001 Dil. Factor : 1.00
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

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	%	99



GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
MSMSD # : 77350
Client : ALISTO ENGINEERING

ATI I.D. : 507193
Date Extracted: N/A
Date Analyzed : 27-JUL-95
Sample Matrix : WATER
REF I.D. : 507164-01

Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. 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	4.9	98	2
TOLUENE	UG/L	<0.50	5.0	5.1	102	5.2	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 - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank Spike #: 57901
Client : ALISTO ENGINEERING
Project #: G314386/10-005-03-001
Project Name : BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 507193
Date Extracted: N/A
Date Analyzed : 29-JUL-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	5.2	5.0	104

% 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 #: 57902
Client : ALISTO ENGINEERING
Project #: G314386/10-005-03-001
Project Name : BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 507193
Date Extracted: N/A
Date Analyzed : 30-JUL-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	5.2	5.0	104

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

ACCESSION #: 507193

INITIALS: 27

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 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	7 (# 199)	
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	NO
	b) are Custody Seals present on the sample ?	YES	<input checked="" type="radio"/> 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.	<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.	2.3 °C	
	Is ice present in cooler?	<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# 507193

CHAIN OF CUSTODY

No. 061527

Page 1 of 1

CONSULTANT'S NAME ALISTO ENGINEERING		ADDRESS 1575 TREAT BLVD SK 201 Walnut Creek, CA 94596		CITY	STATE	ZIP CODE
BP SITE NUMBER 11109	BP CORNER ADDRESS/CITY 4280 Foothill Blvd ONKLAND, CA			CONSULTANT PROJECT NUMBER 10-005-03-001		
CONSULTANT PROJECT MANAGER PLTE BEAVERL		PHONE NUMBER 510 295 1650	FAX NUMBER 510 295 1623		CONSULTANT CONTRACT NUMBER 6314386	
BP CONTACT SCOTT HOUTON		BP ADDRESS RENTON, WA	PHONE NUMBER		FAX NO.	
LAB CONTACT GREG 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

AIRBILL NUMBER
1818921086

SAMPLE DESCRIPTION	COLLECTION DATE 7/15/95	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	HCL	MPC	TRH-G	TRH-D									COMMENTS
				NO.	TYPE (VOL.)														
STA# 11109 INF	0800	0805	GW	3	VOH	01	✓	✓	✓										
				2	U	↓													
STA# 11109 A	0810			3	VOA	02	✓	✓	✓										
STA# 11109 EFF	0815			3	VOA	03	✓	✓	✓										
	0817			2	U	↓													
STA# 11109 Field Blank	0820			3	VOA	04	✓	✓	✓										

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
John K. Bicking	7/15/95	1001	John K. Bicking (AIST)	7/20/95	09:30	
						code # 1199 = 2.30



Analytical **Technologies, Inc.**

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

ATI I.D.: 508186

August 30, 1995

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

Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA
Project # : G314386/10-005-03-001

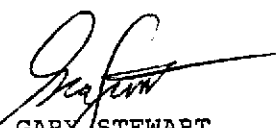
Attention: PETE BEAVER

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

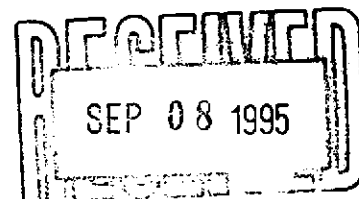
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
August 19, 1995	4	WATER

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 # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

Report Date: August 30, 1995
ATI I.D. : 508186

Table with 4 columns: ATI #, Client Description, Matrix, Date Collected. Rows include STA#11109 INF, STA#11109 A, STA#11109 EFF, and STA#11109 Q-C-1.

---TOTALS---

Summary table with 2 columns: Matrix, # Samples. Row: WATER, 4.

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 # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

ATI I.D.: 508186

Analysis	Technique/Description
MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)	GC/FLAME IONIZATION DETECTOR
MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)	GC/FLAME ION./PHOTO IONIZATION DETECTOR



Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

ATI I.D. : 508186

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF	WATER	17-AUG-95	22-AUG-95	24-AUG-95	1.00
3	STA#11109 EFF	WATER	17-AUG-95	22-AUG-95	24-AUG-95	1.00

Parameter	Units	1	3
FUEL HYDROCARBONS	MG/L	5.1	<0.05
HYDROCARBON RANGE		C7-C14	-
HYDROCARBONS QUANTITATED USING		GASOLINE	-
SURROGATES			
BIS (2-ETHYLHEXYL) PHTHALATE	%	102	100



REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
Blank I.D. : 36521
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

ATI I.D. : 508186
Date Extracted: 22-AUG-95
Date Analyzed : 24-AUG-95
Dil. Factor : 1.00

Parameters	Units	Results
FUEL HYDROCARBONS	MG/L	<0.05
HYDROCARBON RANGE		-
HYDROCARBONS QUANTITATED USING		-
<u>SURROGATES</u>		
BIS (2-ETHYLHEXYL) PHTHALATE	%	98



MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 78055
 Client : ALISTO ENGINEERING

ATI I.D. : 508186
 Date Extracted: 22-AUG-95
 Date Analyzed : 25-AUG-95
 Sample Matrix : WATER
 REF I.D. : REAGENT WATER

Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	MG/L	<0.050	1.0	1.1	110	0.99	99	11

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



Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING ATI I.D. : 508186
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF	WATER	17-AUG-95	N/A	28-AUG-95	10.00
2	STA#11109 A	WATER	17-AUG-95	N/A	27-AUG-95	1.00
3	STA#11109 EFF	WATER	17-AUG-95	N/A	27-AUG-95	1.00

Parameter	Units	1	2	3
METHYL T-BUTYL ETHER	UG/L	190	<5.0	<5.0
BENZENE	UG/L	300	<0.50	<0.50
TOLUENE	UG/L	180	<0.50	<0.50
ETHYLBENZENE	UG/L	33	<0.50	<0.50
XYLENES (TOTAL)	UG/L	510	<1.0	<1.0
FUEL HYDROCARBONS	UG/L	6500	<50	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE

SURROGATES

TRIFLUOROTOLUENE	%	107	101	96
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Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING ATI I.D. : 508186
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	STA#11109 Q-C-1	WATER	17-AUG-95	N/A	27-AUG-95	1.00

Parameter	Units	4
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	%	95



REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 36532
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

ATI I.D. : 508186
Date Extracted: N/A
Date Analyzed : 27-AUG-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	%	86



REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank I.D. : 36533
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

ATI I.D. : 508186
 Date Extracted: N/A
 Date Analyzed : 28-AUG-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	§	92



MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 MSMSD # : 78043
 Client : ALISTO ENGINEERING

ATI I.D. : 508186
 Date Extracted: N/A
 Date Analyzed : 23-AUG-95
 Sample Matrix : WATER
 REF I.D. : 508170-01

Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	UG/L	<0.50	5.0	4.6	92	4.5	90	2
TOLUENE	UG/L	<0.50	5.0	5.0	100	5.0	100	0

% 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 #: 58496
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name : BP SITE#111109/4280 FOOTHILL BLVD., OAKLAND, CA

ATI I.D. : 508186
Date Extracted: N/A
Date Analyzed : 27-AUG-95
Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	5.1	5.0	102
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



BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank Spike #: 58497
 Client : ALISTO ENGINEERING
 Project #: G314386/10-005-03-001
 Project Name : BP SITE#11109/4280 FOOTHILL BLVD., OAKLAND, CA

ATI I.D. : 508186
 Date Extracted: N/A
 Date Analyzed : 28-AUG-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

ACCESSION #: 508186

INITIALS: LJ

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	I (#1169)	
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	NO
	b) are Custody Seals present on the sample ?	YES	<input checked="" type="radio"/> 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.	<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: yes <input checked="" type="radio"/> 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	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.	4.7 °C	
	Is ice present in cooler?	<input checked="" type="radio"/> YES	NO
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	YES	<input checked="" type="radio"/> 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: No Sample Date on Samples or COC *UNKNOWN
 ONE VOA VIAL EACH FOR SAMPLE STA# 11109 INF (ATI#01) and STA# 11109 Q-C-1 (ATI#04), FROZEN in TRANSIT, Received with bottoms broken off VOAS & SAMPLE FROZEN. Two VOAVIALS REMAINING FOR EACH

Was client contacted? yes / no
If yes, Date: 8/22 Name of Person contacted: Pattie Jeltan by Gary Stewart
Describe actions taken or client instructions: Date sampled is 8/17/55.
Faxed amended C.O.C. on 8/27/55.

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



ATI # 508186

CHAIN OF CUSTODY

No 061522

Page 1 of 1

CONSULTANT'S NAME: ALISTO ENGINEERING ADDRESS: 1575 TREAT Blvd. # 201 CITY: WALNUT Creek STATE: CA ZIP CODE: 94596

BP SITE NUMBER: 11109 BP CORNER ADDRESS/CITY: 4280 Foothill Blvd. OAKLAND, CA CONSULTANT PROJECT NUMBER: 10-005-03-001

CONSULTANT PROJECT MANAGER: PETER BENDER PHONE NUMBER: 510 295-1650 FAX NUMBER: 510 295-1823 CONSULTANT CONTRACT NUMBER: G314386

BP CONTACT: SCOTT HOUSTON BP ADDRESS: Remton, WA PHONE NUMBER: FAX NO:

LAB CONTACT: BARRY STEWART LABORATORY ADDRESS: San Diego, CA PHONE NUMBER: FAX NO:

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

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER: 6680235671

SAMPLE DESCRIPTION	COLLECTION DATE	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	PH C1 BTEX	TAN ID												COMMENTS
	COLLECTION TIME		NO.	TYPE (VOL.)	LAB SAMPLE #														
STA# 11105 INF	0700	GW	3	VOL	01	✓	✓												
			2	LT	↓	✓	✓												
STA# 11109 A	0710		3	VOL	02	✓													
			2	LT	↓	✓	✓												
STA# 11109 LFF	0720		3	VOL	03	✓													
			2	LT	↓	✓	✓												
STA# 11109 G-C-1	0730		3	VOL	04	✓													

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
John K. Bickling	8/17	1200				Witnessed by P. Gellman and Z. Leonard
			W. A. John / ATI	8-19-09	10	Cooler # 1169 = 4.7°C



Analytical**Technologies, Inc.**

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

ATI I.D.: 509200

October 05, 1995

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

Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA
Project # : G314386/10-005-03-007

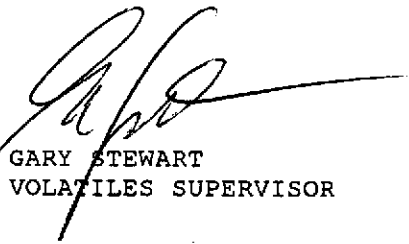
Attention: PETE BEAVER

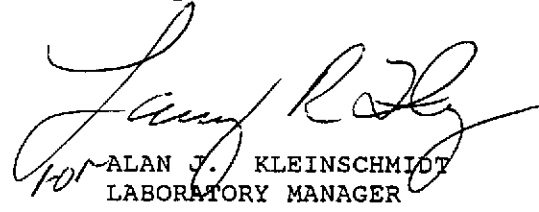
Analytical Technologies, Inc. has received the following sample(s):

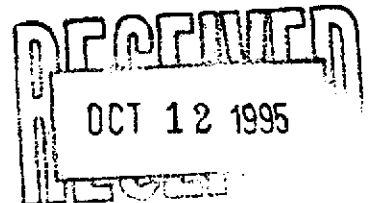
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
September 20, 1995	3	WATER

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



SAMPLE CROSS REFERENCE

Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-007
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Report Date: October 05, 1995
 ATI I.D. : 509200

ATI #	Client Description	Matrix	Date Collected
1	STA# 11109 INF	WATER	19-SEP-95
2	STA# 11109 A	WATER	19-SEP-95
3	STA# 11109 EFF	WATER	19-SEP-95

---TOTALS---

<u>Matrix</u>	<u># Samples</u>
WATER	3

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 # : G314386/10-005-03-007
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D.: 509200

Analysis	Technique/Description
MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)	GC/FLAME IONIZATION DETECTOR
MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)	GC/FLAME ION./PHOTO IONIZATION DETECTOR

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)
 Client : ALISTO ENGINEERING ATI I.D. : 509200
 Project # : G314386/10-005-03-007
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA# 11109 INF	WATER	19-SEP-95	22-SEP-95	25-SEP-95	1.00
3	STA# 11109 EFF	WATER	19-SEP-95	22-SEP-95	26-SEP-95	1.00

Parameter	Units	1	3
FUEL HYDROCARBONS	MG/L	3.6	<0.05
HYDROCARBON RANGE		C7-C14	-
HYDROCARBONS QUANTITATED USING		GASOLINE	-
<u>SURROGATES</u>			
BIS(2-ETHYLHEXYL) PHTHALATE	%	109	113

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
Blank I.D. : 36864
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-007
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 509200
Date Extracted: 22-SEP-95
Date Analyzed : 25-SEP-95
Dil. Factor : 1.00

Parameters	Units	Results
FUEL HYDROCARBONS	MG/L	<0.05
HYDROCARBON RANGE		-
HYDROCARBONS QUANTITATED USING		-
<u>SURROGATES</u>		
BIS(2-ETHYLHEXYL)PHTHALATE	%	106

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Page 5

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 78786
 Client : ALISTO ENGINEERING

ATI I.D. : 509200
 Date Extracted: 22-SEP-95
 Date Analyzed : 25-SEP-95
 Sample Matrix : WATER
 REF I.D. : REAGENT WATER

Project # : G314386/10-005-03-007
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	MG/L	<0.05	1.0	1.1	110	1.1	110	0

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

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

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING ATI I.D. : 509200
 Project # : G314386/10-005-03-007
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA# 11109 INF	WATER	19-SEP-95	N/A	03-OCT-95	10.00
2	STA# 11109 A	WATER	19-SEP-95	N/A	03-OCT-95	1.00
3	STA# 11109 EFF	WATER	19-SEP-95	N/A	03-OCT-95	1.00

Parameter	Units	1 02	2 02	3 02
METHYL T-BUTYL ETHER	UG/L	79	<5.0	<5.0
BENZENE	UG/L	99	<0.50	<0.50
TOLUENE	UG/L	75	<0.50	<0.50
ETHYLBENZENE	UG/L	13	<0.50	<0.50
XYLENES (TOTAL)	UG/L	490	<1.0	<1.0
FUEL HYDROCARBONS	UG/L	4700	<50	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
<u>SURROGATES</u>				
TRIFLUOROTOLUENE	%	145*H	91	88

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE) ATI I.D. : 509200
 Blank I.D. : 36917 Date Extracted: N/A
 Client : ALISTO ENGINEERING Date Analyzed : 03-OCT-95
 Project # : G314386/10-005-03-007 Dil. Factor : 1.00
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. 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	%	90

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)	ATI I.D. : 509200
MSMSD # : 78838	Date Extracted: N/A
Client : ALISTO ENGINEERING	Date Analyzed : 29-SEP-95
	Sample Matrix : WATER
Project # : G314386/10-005-03-007	REF I.D. : 509164-10
Project Name: BP SITE#11109/4280 Foothill Blvd. OAKLAND, CA	

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	UG/L	<0.50	5.0	4.9	98	4.8	96	2
TOLUENE	UG/L	<0.50	5.0	5.2	104	5.3	106	2

% 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)
 Blank Spike #: 59185
 Client : ALISTO ENGINEERING
 Project #: G314386/10-005-03-007
 Project Name : BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 509200
 Date Extracted: N/A
 Date Analyzed : 03-OCT-95
 Sample Matrix : WATER

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

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

ANALYTICAL TECHNOLOGIES, INC.
SAN DIEGO
FLAGS

ORGANICS

FLAG MESSAGE DESCRIPTION

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

ACCESSION #: 509200

INITIALS: LJ

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 GLP 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	7 (# 1065)	
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	NO
	b) are Custody Seals present on the sample ?	YES	<input checked="" type="radio"/> 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.	<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.	2.0 °C	
	Is ice present in cooler?	<input checked="" type="radio"/> YES	NO
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	YES	<input checked="" type="radio"/> 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: (1) ONE VOA VIAL FOR STA# 11109 INF (ATE#01) RECEIVED WITH CAP CRACKED (SAMPLE STILL HEADSPACE FREE). TWO VOA VIALS REMAINING.

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 #509200

CHAIN OF CUSTODY

No. 067395

Page 1 of 1

CONSULTANT'S NAME Alisto Engineering		ADDRESS 1575 TREAT Blvd. Ste #201 Walnut Creek, CA		CITY Walnut Creek, CA	STATE CA	ZIP CODE 94596
BP SITE NUMBER 11109	BP CORNER ADDRESS/CITY 4280 Foothill Blvd. OAKLAND, CA			CONSULTANT PROJECT NUMBER 10 005-03-001		
CONSULTANT PROJECT MANAGER Pete Beamer		PHONE NUMBER 510 295-1650	FAX NUMBER 510-295-1823		CONSULTANT CONTRACT NUMBER 6314386	
BP CONTACT Scott Hooten	BP ADDRESS Benton, WA		PHONE NUMBER (206) 251-8208		FAX NO.	
LAB CONTACT Cathy Stewart	LABORATORY ADDRESS San Diego, CA		PHONE NUMBER (619) 458-9111		FAX NO.	
SAMPLED BY (Please Print Name) John Bickery		SAMPLED BY (Signature) <i>John K. Bickery</i>		SHIPMENT DATE 7-19-95		SHIPMENT METHOD Fed Ex

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER: 6208023672

SAMPLE DESCRIPTION	COLLECTION DATE 9/19/95	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	PRESERVATIVE TYPE (VOL.)	HCL		HCL		COMMENTS
						ATET	TPH/D	TPH/D	TPH/D	
STA# 11109 INF	1000	GW	5	1/4" 01	✓	✓	✓	✓		
STA# 11109 A	1005		3	1/4" 02	✓	✓	✓	✓		
STA# 11109 EPF	1010		5	1/4" 03	✓	✓	✓	✓		

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>John K. Bickery</i>	9/19/95	12:15	<i>Patricia L. Galt</i>	9/19/95	12:15	
<i>Patricia L. Galt</i>	9/19/95	3:30	<i>John / ATI</i>	9/20/95	09:15	

Cooler # 1065-2.03



Analytical **Technologies, Inc.**

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

ATI I.D.: 510233

November 14, 1995

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

Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND
Project # : G314386/10-005-03-001

Attention: PETER BEAVER

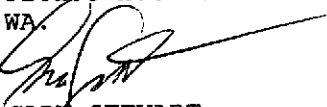
Analytical Technologies, Inc. has received the following sample(s):

<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
October 20, 1995	7	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.

Please note EPA MOD 8015 analyses was performed by Analytical Technologies, Inc. Renton, WA.


GARY STEWART
VOLATILES SUPERVISOR


ALAN J. KLEINSCHMIDT
FOR LABORATORY MANAGER

RECEIVED
NOV 20 1995

SAMPLE CROSS REFERENCE

Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

Report Date: November 14, 1995
 ATI I.D. : 510233

ATI #	Client Description	Matrix	Date Collected
1	INF. 1425	WATER	18-OCT-95
2	EFF. 1405	WATER	18-OCT-95
3	EFF. 1400	WATER	18-OCT-95
4	INF. 1420	WATER	18-OCT-95
5	A 1410	WATER	18-OCT-95
6	A 1415	WATER	18-OCT-95
7	QC-1 1430	WATER	18-OCT-95

---TOTALS---

<u>Matrix</u>	<u># Samples</u>
WATER	7

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 # : G314386/10-005-03-001
Project Name: BP SITE#111109/4280 FOOTHILL BLVD, OAKLAND

ATI I.D.: 510233

Analysis	Technique/Description
EPA 624 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER
MOD EPA 8015-CDOHS (HYDROCARBONS C6-C12)	GC/PURGE & TRAP/FLAME ION. DETECTOR

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Page 3

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

ATI I.D. : 510233

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	INF. 1425	WATER	18-OCT-95	N/A	24-OCT-95	1.00
2	EFF. 1405	WATER	18-OCT-95	N/A	24-OCT-95	1.00
6	A 1415	WATER	18-OCT-95	N/A	24-OCT-95	1.00

Parameter	Units	1	2	6
CHLOROMETHANE	UG/L	<10	<10	<10
VINYL CHLORIDE	UG/L	<5	<5	<5
BROMOMETHANE	UG/L	<10	<10	<10
CHLOROETHANE	UG/L	<5	<5	<5
ACETONE	UG/L	<10	<10	<10
1,1-DICHLOROETHENE	UG/L	<1	<1	<1
METHYLENE CHLORIDE	UG/L	<5	<5	<5
CARBON DISULFIDE	UG/L	<2	<2	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<1	<1	<1
1,1-DICHLOROETHANE	UG/L	<1	<1	<1
CIS-1,2-DICHLOROETHENE	UG/L	<1	<1	<1
CHLOROFORM	UG/L	<1	<1	<1
2-BUTANONE (MEK)	UG/L	<10	<10	<10
1,1,1-TRICHLOROETHANE	UG/L	<1	<1	<1
CARBON TETRACHLORIDE	UG/L	<1	<1	<1
1,2-DICHLOROETHANE	UG/L	1	<1	<1
BENZENE	UG/L	37	<1	<1
TRICHLOROETHENE	UG/L	<1	<1	<1
1,2-DICHLOROPROPANE	UG/L	<1	<1	<1
BROMODICHLOROMETHANE	UG/L	<1	<1	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<10	<10	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<1	<1	<1
TOLUENE	UG/L	20	<2	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<1	<1	<1
2-HEXANONE (MBK)	UG/L	<10	<10	<10
1,1,2-TRICHLOROETHANE	UG/L	<1	<1	<1
TETRACHLOROETHENE	UG/L	<1	<1	<1
DIBROMOCHLOROMETHANE	UG/L	<1	<1	<1
CHLOROBENZENE	UG/L	<1	<1	<1
ETHYLBENZENE	UG/L	<1	<1	<1
XYLENES (TOTAL)	UG/L	360	<1	<1
STYRENE	UG/L	<2	<2	<2
BROMOFORM	UG/L	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<1	<1	<1
DICHLORODIFLUOROMETHANE	UG/L	<10	<10	<10
TRICHLOROFLUOROMETHANE	UG/L	<5	<5	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<5	<5	<5
1,2-DICHLOROBENZENE	UG/L	<5	<5	<5

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING ATI I.D. : 510233
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	INF. 1425	WATER	18-OCT-95	N/A	24-OCT-95	1.00
2	EFF. 1405	WATER	18-OCT-95	N/A	24-OCT-95	1.00
6	A 1415	WATER	18-OCT-95	N/A	24-OCT-95	1.00

Parameter	Units	1	2	6
1,3-DICHLOROBENZENE	UG/L	<5	<5	<5
1,4-DICHLOROBENZENE	UG/L	<5	<5	<5

SURROGATES

1,2-DICHLOROETHANE-D4	%	93	97	97
TOLUENE-D8	%	107	104	105
BFB	%	105	99	99

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#111109/4280 FOOTHILL BLVD, OAKLAND

WATER
 ATI I.D.: 510233

Sample Parameters	Units	Results
1 ALIPHATIC HYDROCARBON C5	UG/L	100
ALIPHATIC HYDROCARBON C5	UG/L	100
METHYL CYCLOPENTANE	UG/L	200
METHYL CYCLOHEXANE	UG/L	200
TRIMETHYL BENZENE ISOMER	UG/L	100
2 NONE DETECTED	N/A	N/A
6 NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Page 6

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

ATI I.D. : 510233

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
7	QC-1 1430	WATER	18-OCT-95	N/A	24-OCT-95	1.00
Parameter	Units	7				
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-DICHLOROETHANE	UG/L	<5				

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

ATI I.D. : 510233

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
7	QC-1 1430	WATER	18-OCT-95	N/A	24-OCT-95	1.00

Parameter	Units	7
1,3-DICHLOROBENZENE	UG/L	<5
1,4-DICHLOROBENZENE	UG/L	<5

SURROGATES

1,2-DICHLOROETHANE-D4	%	99
TOLUENE-D8	%	102
BFB	%	99

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

WATER
ATI I.D.: 510233

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

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Page 9

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank I.D. : 37148
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

ATI I.D. : 510233
 Date Extracted: N/A
 Date Analyzed : 24-OCT-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	<1
BROMOFORM	UG/L	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<2
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	%	98
TOLUENE-D8	%	104
BFB	%	97

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
Blank I.D. : 37148
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

ATI I.D. : 510233

Parameters	Units	Results
NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

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Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 MSMSD # : 79349
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

ATI I.D. : 510233
 Date Extracted: N/A
 Date Analyzed : 23-OCT-95
 Sample Matrix : WATER
 REF I.D. : 510195-01

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
1,1-DICHLOROETHENE	UG/L	<1	50	45	90	51	102	13
BENZENE	UG/L	<1	50	49	98	54	108	10
TRICHLOROETHENE	UG/L	<1	50	51	102	56	112	9
TOLUENE	UG/L	<2	50	52	104	55	110	6
CHLOROBENZENE	UG/L	<1	50	56	112	62	124	10

% 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 #: 59606
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name : BP SITE#11109/4280 FOOTHILL BLVD, OAKLAND

ATI I.D. : 510233
 Date Extracted: N/A
 Date Analyzed : 24-OCT-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
1,1-DICHLOROETHENE	UG/L	<1	43	50	86
BENZENE	UG/L	<1	48	50	96
TRICHLOROETHENE	UG/L	<1	49	50	98
TOLUENE	UG/L	<2	50	50	100
CHLOROBENZENE	UG/L	<1	56	50	112

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



Analytical**Technologies**, Inc.

560 Naches Avenue, S.W., Suite 101, Renton, WA 98055 (206) 228-8335

John M. Buerger, Laboratory Manager

ATI I.D. # 510127

November 10, 1995

Analytical Technologies, Inc.
5550 Morehouse Drive
San Diego CA 92121

Attention : Gary Stewart

Project Number : 510233

Project Name : BP# 11109

Dear Mr. Stewart:

On October 26, 1995, Analytical Technologies, Inc. (ATI), received four samples for analysis. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The results, sample cross reference, and quality control data are enclosed.

Sincerely,

Victoria L. Bayly
Project Manager

VLB/hal/elf

Enclosure



SAMPLE CROSS REFERENCE SHEET

CLIENT : ANALYTICAL TECHNOLOGIES, INC.
PROJECT # : 510233
PROJECT NAME : BP# 11109

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
510127-1	EFF. 1400	10/18/95	WATER
510127-2	INF. 1420	10/18/95	WATER
510127-3	A 1410	10/18/95	WATER
510127-4	QC-1 1430	10/18/95	WATER

----- TOTALS -----

MATRIX	# SAMPLES
WATER	4

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of the report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

ANALYTICAL SCHEDULE

CLIENT : ANALYTICAL TECHNOLOGIES, INC.
PROJECT # : 510233
PROJECT NAME : BP# 11109

ANALYSIS	TECHNIQUE	REFERENCE	LAB
FUEL HYDROCARBONS	GC/FID	EPA 8015 MODIFIED- R CDOHS	

R = ATI - Renton
SD = ATI - San Diego
PHX = ATI - Phoenix
PTL = ATI - Portland
ANC = ATI - Anchorage
PNR = ATI - Pensacola
FC = ATI - Fort Collins
SUB = Subcontract

ATI I.D. # 510127

FUEL HYDROCARBONS ANALYSIS
DATA SUMMARY

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	DATE SAMPLED	: N/A
PROJECT #	: 510233	DATE RECEIVED	: N/A
PROJECT NAME	: BP# 11109	DATE EXTRACTED	: N/A
CLIENT I.D.	: METHOD BLANK	DATE ANALYZED	: 10/27/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS	DILUTION FACTOR	: 1

COMPOUNDS

RESULTS

FUEL HYDROCARBONS
HYDROCARBON RANGE
HYDROCARBON QUANTITATION USING

<50
BENZENE TO DODECANE
GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

TRIFLUOROTOLUENE

94

50 - 150



FUEL HYDROCARBONS ANALYSIS
DATA SUMMARY

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	DATE SAMPLED	: N/A
PROJECT #	: 510233	DATE RECEIVED	: N/A
PROJECT NAME	: BP# 11109	DATE EXTRACTED	: N/A
CLIENT I.D.	: METHOD BLANK	DATE ANALYZED	: 10/28/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS	DILUTION FACTOR	: 1

COMPOUNDS

RESULTS

FUEL HYDROCARBONS
HYDROCARBON RANGE
HYDROCARBON QUANTITATION USING

<50
BENZENE TO DODECANE
GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

TRIFLUOROTOLUENE

96

50 - 150

ATI I.D. # 510127

FUEL HYDROCARBONS ANALYSIS
DATA SUMMARY

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	DATE SAMPLED	: N/A
PROJECT #	: 510233	DATE RECEIVED	: N/A
PROJECT NAME	: BP# 11109	DATE EXTRACTED	: N/A
CLIENT I.D.	: METHOD BLANK	DATE ANALYZED	: 10/30/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS	DILUTION FACTOR	: 1

COMPOUNDS

RESULTS

FUEL HYDROCARBONS
HYDROCARBON RANGE
HYDROCARBON QUANTITATION USING

<50
BENZENE TO DODECANE
GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

TRIFLUOROTOLUENE

96

50 - 150

ATI I.D. # 510127-1

FUEL HYDROCARBONS ANALYSIS
DATA SUMMARY

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	DATE SAMPLED	: 10/18/95
PROJECT #	: 510233	DATE RECEIVED	: 10/26/95
PROJECT NAME	: BP# 11109	DATE EXTRACTED	: N/A
CLIENT I.D.	: EFF. 1400	DATE ANALYZED	: 10/28/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS	DILUTION FACTOR	: 1

COMPOUNDS

RESULTS

FUEL HYDROCARBONS
HYDROCARBON RANGE
HYDROCARBON QUANTITATION USING

<50
BENZENE TO DODECANE
GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

TRIFLUOROTOLUENE

91

50 - 150

ATI I.D. # 510127-2

FUEL HYDROCARBONS ANALYSIS
DATA SUMMARY

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	DATE SAMPLED	: 10/18/95
PROJECT #	: 510233	DATE RECEIVED	: 10/26/95
PROJECT NAME	: BP# 11109	DATE EXTRACTED	: N/A
CLIENT I.D.	: INF. 1420	DATE ANALYZED	: 10/30/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS	DILUTION FACTOR	: 1

COMPOUNDSRESULTS

FUEL HYDROCARBONS
HYDROCARBON RANGE
HYDROCARBON QUANTITATION USING

3900
BENZENE TO DODECANE
GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

TRIFLUOROTOLUENE

107

50 - 150



FUEL HYDROCARBONS ANALYSIS
DATA SUMMARY

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	DATE SAMPLED	: 10/18/95
PROJECT #	: 510233	DATE RECEIVED	: 10/26/95
PROJECT NAME	: BP# 11109	DATE EXTRACTED	: N/A
CLIENT I.D.	: A 1410	DATE ANALYZED	: 10/28/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS	DILUTION FACTOR	: 1

COMPOUNDS

RESULTS

FUEL HYDROCARBONS
HYDROCARBON RANGE
HYDROCARBON QUANTITATION USING

<50
BENZENE TO DODECANE
GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

TRIFLUOROTOLUENE

93

50 - 150

FUEL HYDROCARBONS ANALYSIS
DATA SUMMARY

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	DATE SAMPLED	: 10/18/95
PROJECT #	: 510233	DATE RECEIVED	: 10/26/95
PROJECT NAME	: BP# 11109	DATE EXTRACTED	: N/A
CLIENT I.D.	: QC-1 1430	DATE ANALYZED	: 10/29/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS	DILUTION FACTOR	: 1

COMPOUNDS

RESULTS

FUEL HYDROCARBONS
HYDROCARBON RANGE
HYDROCARBON QUANTITATION USING

<50
BENZENE TO DODECANE
GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

TRIFLUOROTOLUENE

93

50 - 150

ATI I.D. # 510127

 FUEL HYDROCARBONS ANALYSIS
 QUALITY CONTROL DATA

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	SAMPLE I.D. #	: BLANK
PROJECT #	: 510233	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11109	DATE ANALYZED	: 10/27/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED - CDOHS		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
GASOLINE	<50.0	1000	939	94	N/A	N/A	N/A
CONTROL LIMITS				% REC.			RPD
GASOLINE				78 - 116			20
SURROGATE RECOVERIES		SPIKE		DUP. SPIKE		LIMITS	
TRIFLUOROTOLUENE		90		N/A		50 - 150	

ATI I.D. # 510127

 FUEL HYDROCARBONS ANALYSIS
 QUALITY CONTROL DATA

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	SAMPLE I.D. #	: BLANK
PROJECT #	: 510233	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11109	DATE ANALYZED	: 10/28/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
GASOLINE	<50.0	1000	1010	101	N/A	N/A	N/A
CONTROL LIMITS				% REC.			RPD
GASOLINE				78 - 116			20
SURROGATE RECOVERIES		SPIKE		DUP. SPIKE		LIMITS	
TRIFLUOROTOLUENE		96		N/A		50 - 150	

ATI I.D. # 510127

 FUEL HYDROCARBONS ANALYSIS
 QUALITY CONTROL DATA

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	SAMPLE I.D. #	: BLANK
PROJECT #	: 510233	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11109	DATE ANALYZED	: 10/30/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED-CDOHS		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
GASOLINE	<50.0	1000	970	97	N/A	N/A	N/A
CONTROL LIMITS				% REC.			RPD
GASOLINE				78 - 116			20
SURROGATE RECOVERIES		SPIKE		DUP. SPIKE		LIMITS	
TRIFLUOROTOLUENE		94		N/A		50 - 150	



ATI I.D. # 510127

FUEL HYDROCARBONS ANALYSIS
QUALITY CONTROL DATA

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	SAMPLE I.D. #	: 510125-1
PROJECT #	: 510233	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11109	DATE ANALYZED	: 10/28/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED - CDOHS		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
GASOLINE	<50.0	<50.0	NC	N/A	N/A	N/A	N/A	N/A	N/A
CONTROL LIMITS						% REC.			RPD
GASOLINE						N/A			20
SURROGATE RECOVERIES				SAMPLE		SAMPLE DUP.		LIMITS	
TRIFLUOROTOLUENE				90		90			50 - 150

NC = Not calculable.



FUEL HYDROCARBONS ANALYSIS
QUALITY CONTROL DATA

CLIENT	: ANALYTICAL TECHNOLOGIES, INC.	SAMPLE I.D. #	: 510121-1
PROJECT #	: 510233	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11109	DATE ANALYZED	: 10/27/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
EPA METHOD	: 8015 MODIFIED - CDOHS		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
GASOLINE	<50.0	<50.0	NC	1000	895	90	948	95	6
CONTROL LIMITS						% REC.			RPD
GASOLINE						80 - 113			20
SURROGATE RECOVERIES				SPIKE		DUP. SPIKE		LIMITS	
TRIFLUOROTOLUENE				88		91			50 - 150

NC = Not calculable.

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 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	<u>1</u>	
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 type="radio"/> N/A
		YES	<input type="radio"/> NO
		YES	NO
		YES	<input 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 EM if temperature is not 4°C ± 2°C. Is ice present in cooler?	<u>2.9 °C</u>	
		<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 type="radio"/> NO
14	Are there special comments on the Chain of Custody which require client contact?	YES	<input 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 # 510233

CHAIN OF CUSTODY

No.066931

Page 1 of 1

CONSULTANT'S NAME Alisto Engineering Group		ADDRESS 1575 Trent Blvd.		CITY Walnut Creek	STATE Ca.	ZIP CODE 94596
BP SITE NUMBER 11109	BP CORNER ADDRESS/CITY 4280 Foothill Blvd. Oakland			CONSULTANT PROJECT NUMBER 10-005-03-001		
CONSULTANT PROJECT MANAGER Peter Beaver		PHONE NUMBER (510) 295-1650		FAX NUMBER (510) 295-1823		CONSULTANT CONTRACT NUMBER 6314386
BP CONTACT Scott Hooten		BP ADDRESS Renton, Wa.		PHONE NUMBER		FAX NO.
LAB CONTACT ATI		LABORATORY ADDRESS San Diego, Ca.		PHONE NUMBER (619) 458-9111		FAX NO.
SAMPLED BY (Please Print Name) Clay DeBiaggio		SAMPLED BY (Signature) <i>Clay DeBiaggio</i>		SHIPMENT DATE 10-19-95		SHIPMENT METHOD Fed Ex

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER

60681230231

SAMPLE DESCRIPTION	COLLECTION DATE	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE		TPH- GAS	624													COMMENTS	
	COLLECTION TIME		NO.	TYPE (VOL.)	LAB SAMPLE #																	
Inf. 1425	10/18/95	H2O	3	Vol	01		X															
Eff. 1405	↓	↓	↓	↓	02		X															
Eff. 1400	↓	↓	↓	↓	03		X															
Inf. 1420	↓	↓	↓	↓	04		X															
A 1410	↓	↓	↓	↓	05		X															
A 1415	↓	↓	↓	↓	06		X															
QC-1 1430	↓	↓	↓	↓	07		X	X														

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>Clay DeBiaggio</i>	10/19/95	0830	Patricia Lp Lton	10/19/95	1200	
Patricia Lp Lton	10/19/95	1500	<i>Patricia Lp Lton / ATI</i>	10/20/95	09:15	

2190



Analytical **Technologies, Inc.**

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

ATI I.D.: 511267

December 01, 1995

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

Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA
Project # : G314386/10-005-03-001

Attention: PETE BEAVER

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

<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
November 16, 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
FOR LABORATORY MANAGER

RECEIVED
DEC 13 1995

SAMPLE CROSS REFERENCE

Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Report Date: December 01, 1995
 ATI I.D. : 511267

ATI #	Client Description	Matrix	Date Collected
1	STA#11109 INF 0830	WATER	14-NOV-95
2	STA#11109 INF 0835	WATER	14-NOV-95
3	STA#11109 A	WATER	14-NOV-95
4	STA#11109 EFF 0840	WATER	14-NOV-95
5	STA#11109 EFF 0845	WATER	14-NOV-95
6	STA#11109 Q-C-1	WATER	14-NOV-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 # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D.: 511267

Analysis	Technique/Description
EPA 624 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER
MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)	GC/FLAME IONIZATION DETECTOR
MOD EPA 8015-CDOHS (HYDROCARBONS C6-C12)	GC/PURGE & TRAP/FLAME ION. DETECTOR

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)
 Client : ALISTO ENGINEERING ATI I.D. : 511267
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
2	STA#11109 INF 0835	WATER	14-NOV-95	27-NOV-95	28-NOV-95	1.00
5	STA#11109 EFF 0845	WATER	14-NOV-95	27-NOV-95	28-NOV-95	1.00

Parameter	Units	2 μ K	5 μ K
FUEL HYDROCARBONS	MG/L	4.0	<0.05
HYDROCARBON RANGE		C7-C15	-
HYDROCARBONS QUANTITATED USING		GASOLINE	-
<u>SURROGATES</u>			
BIS(2-ETHYLHEXYL) PHTHALATE	%	93	102

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 Blank I.D. : 37454
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#111109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 511267
 Date Extracted: 27-NOV-95
 Date Analyzed : 27-NOV-95
 Dil. Factor : 1.00

Parameters	Units	Results
FUEL HYDROCARBONS	MG/L	<0.05
HYDROCARBON RANGE		-
HYDROCARBONS QUANTITATED USING		-
<u>SURROGATES</u>		
BIS (2-ETHYLHEXYL) PHTHALATE	%	105

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 80256
 Client : ALISTO ENGINEERING

ATI I.D. : 511267
 Date Extracted: 27-NOV-95
 Date Analyzed : 27-NOV-95
 Sample Matrix : WATER
 REF I.D. : REAGENT WATER

Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	MG/L	<0.05	1.0	1.0	100	1.0	100	0

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

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (HYDROCARBONS C6-C12)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 511267

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF 0830	WATER	14-NOV-95	N/A	27-NOV-95	5.00
3	STA#11109 A	WATER	14-NOV-95	N/A	27-NOV-95	1.00
4	STA#11109 EFF 0840	WATER	14-NOV-95	N/A	27-NOV-95	1.00

Parameter	Units	1 OK	3 OK	4
FUEL HYDROCARBONS	UG/L	4300	<50	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE

<u>SURROGATES</u>				
TRIFLUOROTOLUENE	%	152*H	92	88

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (HYDROCARBONS C6-C12)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 511267

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
6	STA#11109 Q-C-1	WATER	14-NOV-95	N/A	28-NOV-95	1.00

Parameter	Units	6
FUEL HYDROCARBONS	UG/L	<50
HYDROCARBON RANGE		C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	96

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 Blank I.D. : 37459
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 Foothill Blvd. OAKLAND, CA

ATI I.D. : 511267
 Date Extracted: N/A
 Date Analyzed : 27-NOV-95
 Dil. Factor : 1.00

Parameters	Units	Results
FUEL HYDROCARBONS	UG/L	<50
HYDROCARBON RANGE		C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	%	95

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 80262
 Client : ALISTO ENGINEERING

ATI I.D. : 511267
 Date Extracted: N/A
 Date Analyzed : 28-NOV-95
 Sample Matrix : WATER
 REF I.D. : 511266-04

Project # : G314386/10-005-03-001
 Project Name: BP SITE#111109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	UG/L	<50	100	97	97	100	100	3

% 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 #: 60227
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name : BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 511267
 Date Extracted: N/A
 Date Analyzed : 27-NOV-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
FUEL HYDROCARBONS	UG/L	<50	98	100	98

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

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

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Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING ATI I.D. : 511267
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF 0830	WATER	14-NOV-95	N/A	27-NOV-95	1.00
3	STA#11109 A	WATER	14-NOV-95	N/A	28-NOV-95	1.00
4	STA#11109 EFF 0840	WATER	14-NOV-95	N/A	27-NOV-95	1.00

Parameter	Units	1 <i>OK</i>	3 <i>OK</i>	4 <i>OK</i>
CHLOROMETHANE	UG/L	<10	<10	<10
VINYL CHLORIDE	UG/L	<5	<5	<5
BROMOMETHANE	UG/L	<10	<10	<10
CHLOROETHANE	UG/L	<5	<5	<5
ACETONE	UG/L	<10	<10	<10
1,1-DICHLOROETHENE	UG/L	<1	<1	<1
METHYLENE CHLORIDE	UG/L	<5	<5	<5
CARBON DISULFIDE	UG/L	<2	<2	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<1	<1	<1
1,1-DICHLOROETHANE	UG/L	<1	<1	<1
CIS-1,2-DICHLOROETHENE	UG/L	<1	<1	<1
CHLOROFORM	UG/L	<1	<1	<1
2-BUTANONE (MEK)	UG/L	<10	<10	<10
1,1,1-TRICHLOROETHANE	UG/L	<1	<1	<1
CARBON TETRACHLORIDE	UG/L	<1	<1	<1
1,2-DICHLOROETHANE	UG/L	<1	<1	<1
BENZENE	UG/L	26	<1	<1
TRICHLOROETHENE	UG/L	<1	<1	<1
1,2-DICHLOROPROPANE	UG/L	<1	<1	<1
BROMODICHLOROMETHANE	UG/L	<1	<1	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<10	<10	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<1	<1	<1
TOLUENE	UG/L	8	<2	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<1	<1	<1
2-HEXANONE (MBK)	UG/L	<10	<10	<10
1,1,2-TRICHLOROETHANE	UG/L	<1	<1	<1
TETRACHLOROETHENE	UG/L	<1	<1	<1
DIBROMOCHLOROMETHANE	UG/L	<1	<1	<1
CHLOROENZENE	UG/L	<1	<1	<1
ETHYLBENZENE	UG/L	<1	<1	<1
XYLENES (TOTAL)	UG/L	250	<1	<1
STYRENE	UG/L	<2	<2	<2
BROMOFORM	UG/L	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<1	<1	<1
DICHLORODIFLUOROMETHANE	UG/L	<10	<10	<10
TRICHLOROFLUOROMETHANE	UG/L	<5	<5	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<5	<5	<5
1,2-DICHLOROENZENE	UG/L	<5	<5	<5

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

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Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING ATI I.D. : 511267
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF 0830	WATER	14-NOV-95	N/A	27-NOV-95	1.00
3	STA#11109 A	WATER	14-NOV-95	N/A	28-NOV-95	1.00
4	STA#11109 EFF 0840	WATER	14-NOV-95	N/A	27-NOV-95	1.00

Parameter	Units	1	3	4		
1,3-DICHLOROBENZENE	UG/L	<5	<5	<5		
1,4-DICHLOROBENZENE	UG/L	<5	<5	<5		
<u>SURROGATES</u>						
1,2-DICHLOROETHANE-D4	%	108	94	92		
TOLUENE-D8	%	100	99	97		
BFB	%	99	96	98		

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

WATER
 ATI I.D.: 511267

Sample	Parameters	Units	Results
1	CYCLIC HYDROCARBON	UG/L	90
	CYCLIC HYDROCARBON	UG/L	100
	TRIMETHYL BENZENE ISOMER	UG/L	100
	TRIMETHYL BENZENE ISOMER	UG/L	90
	ALIPHATIC HYDROCARBON C5	UG/L	50
3	NONE DETECTED	N/A	N/A
4	NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)	ATI I.D. : 511267
Blank I.D. : 37464	Date Extracted: N/A
Client : ALISTO ENGINEERING	Date Analyzed : 26-NOV-95
Project # : G314386/10-005-03-001	Dil. Factor : 1.00
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA	

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	%	89
TOLUENE-D8	%	97
BFB	%	92

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
Blank I.D. : 37464 ATI I.D. : 511267
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. 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)	ATI I.D. : 511267
Blank I.D. : 37465	Date Extracted: N/A
Client : ALISTO ENGINEERING	Date Analyzed : 27-NOV-95
Project # : G314386/10-005-03-001	Dil. Factor : 1.00
Project Name: BP SITE#111109/4280 FOOTHILL BLVD. OAKLAND, CA	

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	%	93
TOLUENE-D8	%	97
BFB	%	98

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

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

Blank I.D. : 37465

ATI I.D. : 511267

Client : ALISTO ENGINEERING

Project # : G314386/10-005-03-001

Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Results
NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

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Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 MSMSD # : 80268
 Client : ALISTO ENGINEERING

ATI I.D. : 511267
 Date Extracted: N/A
 Date Analyzed : 28-NOV-95
 Sample Matrix : WATER
 REF I.D. : 511266-04

Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
1,1-DICHLOROETHENE	UG/L	<1	50	53	106	48	96	10
BENZENE	UG/L	<1	50	49	98	49	98	0
TRICHLOROETHENE	UG/L	<1	50	47	94	47	94	0
TOLUENE	UG/L	<2	50	51	102	49	98	4
CHLOROBENZENE	UG/L	<1	50	54	108	53	106	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) ATI I.D. : 511267
 Blank Spike #: 60236 Date Extracted: N/A
 Client : ALISTO ENGINEERING Date Analyzed : 26-NOV-95
 Project # : G314386/10-005-03-001 Sample Matrix : WATER
 Project Name : BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
1,1-DICHLOROETHENE	UG/L	<1	53	50	106
BENZENE	UG/L	<1	49	50	98
TRICHLOROETHENE	UG/L	<1	49	50	98
TOLUENE	UG/L	<2	51	50	102
CHLOROBENZENE	UG/L	<1	55	50	110

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

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank Spike #: 60240
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name : BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 511267
 Date Extracted: N/A
 Date Analyzed : 28-NOV-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
1,1-DICHLOROETHENE	UG/L	<1	53	50	106
BENZENE	UG/L	<1	50	50	100
TRICHLOROETHENE	UG/L	<1	48	50	96
TOLUENE	UG/L	<2	51	50	102
CHLOROBENZENE	UG/L	<1	54	50	108

% 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	7	
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?	2.3c	<input checked="" type="radio"/> YES
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 # 511267

CHAIN OF CUSTODY

No. 071259

Page 1 of 1

CONSULTANT'S NAME <i>Alisto Engineering Group</i>		ADDRESS <i>1575 TREAT Blvd. Ste 201 Walnut Creek CA</i>		CITY <i>Walnut Creek CA</i>	STATE <i>CA</i>	ZIP CODE <i>94596</i>
BP SITE NUMBER <i>11109</i>	BP CORNER ADDRESS/CITY <i>4280 FOOTHILL Blvd. OAKLAND, CA</i>			CONSULTANT PROJECT NUMBER <i>10-005-03-001</i>		
CONSULTANT PROJECT MANAGER <i>PETE BEAVER</i>		PHONE NUMBER <i>510-295-1650</i>	FAX NUMBER <i>510-295-1823</i>		CONSULTANT CONTRACT NUMBER <i>G1314386</i>	
BP CONTACT <i>SCOTT HOOTON</i>		BP ADDRESS <i>Renton, WA</i>		PHONE NUMBER		FAX NO.
LAB CONTACT <i>CRAY STEWART</i>		LABORATORY ADDRESS <i>SAN DIEGO, CA</i>		PHONE NUMBER		FAX NO.
SAMPLED BY (Please Print Name) <i>JOHN BICKING</i>		SAMPLED BY (Signature) <i>John K. Bicking</i>		SHIPMENT DATE <i>11-15-95</i>		SHIPMENT METHOD <i>Fed Ex</i>

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER
66802-6592

SAMPLE DESCRIPTION	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	HCL	HCL	HCL	COMMENTS
	11/14/95		NO.	TYPE (VOL.)	LAB SAMPLE #	TPH-G	624	TPH-D	
STA# 11109 INF	0830	GW	6	VIA	01	✓	✓	✓	
	0835		2	LI	02			✓	
STA# 11109 A	0835		6	VIA	03	✓	✓	✓	
STA# 11109 EFF	0840		6	VIA	04	✓	✓	✓	
	0845		2	LI	05			✓	
STA# 11109 Q-C1	0846		3	VIA	06	✓			

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>John K. Bicking</i>	<i>11/14/95</i>	<i>1405</i>	<i>P. Lytton</i>	<i>11/15/95</i>	<i>1500</i>	
<i>P. Lytton</i>	<i>11/15/95</i>	<i>1500</i>	<i>John K. Bicking / ATI</i>	<i>11/16/95</i>	<i>09:15</i>	

COOLER #11050 = 2.30



ATI I.D.: 512150

December 28, 1995

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

Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA
Project # : G314386/10-005-03-001

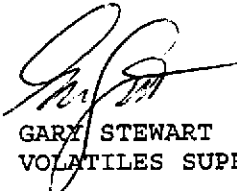
Attention: PETE BEAVER

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

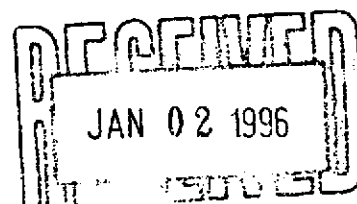
<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
December 13, 1995	3	WATER

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 # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Report Date: December 28, 1995
 ATI I.D. : 512150

ATI #	Client Description	Matrix	Date Collected
1	STA#11109 INF	WATER	12-DEC-95
2	STA#11109 A	WATER	12-DEC-95
3	STA#11109 EFF	WATER	12-DEC-95

---TOTALS---

<u>Matrix</u>	<u># Samples</u>
WATER	3

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

Page 2

Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D.: 512150

Analysis	Technique/Description
EPA 624 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER
MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)	GC/FLAME IONIZATION DETECTOR
MOD EPA 8015-CDOHS (HYDROCARBONS C6-C12)	GC/PURGE & TRAP/FLAME ION. DETECTOR

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)
 Client : ALISTO ENGINEERING ATI I.D. : 512150
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF	WATER	12-DEC-95	18-DEC-95	22-DEC-95	1.00
3	STA#11109 EFF	WATER	12-DEC-95	18-DEC-95	22-DEC-95	1.00

Parameter	Units	1	3
FUEL HYDROCARBONS	MG/L	5.6	<0.05
HYDROCARBON RANGE		C7-C24+	-
HYDROCARBONS QUANTITATED USING		GASOLINE	-

<u>SURROGATES</u>			
BIS (2-ETHYLHEXYL) PHTHALATE	%	107	107

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 Blank I.D. : 37692
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 512150
 Date Extracted: 18-DEC-95
 Date Analyzed : 20-DEC-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	%	105

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Page 5

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 80905
 Client : ALISTO ENGINEERING

ATI I.D. : 512150
 Date Extracted: 18-DEC-95
 Date Analyzed : 20-DEC-95
 Sample Matrix : WATER
 REF I.D. : REAGENT WATER

Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	MG/L	<0.05	1.0	1.0	100	1.1	110	10

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

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

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (HYDROCARBONS C6-C12)
 Client : ALISTO ENGINEERING ATI I.D. : 512150
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF	WATER	12-DEC-95	N/A	19-DEC-95	10.00
2	STA#11109 A	WATER	12-DEC-95	N/A	19-DEC-95	1.00
3	STA#11109 EFF	WATER	12-DEC-95	N/A	19-DEC-95	1.00

Parameter	Units	1	2	3
FUEL HYDROCARBONS	UG/L	4500	<50	<50
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
<u>SURROGATES</u>				
TRIFLUOROTOLUENE	%	132*H	98	94

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS) ATI I.D. : 512150
 Blank I.D. : 37674 Date Extracted: N/A
 Client : ALISTO ENGINEERING Date Analyzed : 19-DEC-95
 Project # : G314386/10-005-03-001 Dil. Factor : 1.00
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Results
FUEL HYDROCARBONS	UG/L	<50
HYDROCARBON RANGE		C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE
<u>SURROGATES</u>		
TRIFLUOROTOLUENE	µ	99

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

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Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 80788
 Client : ALISTO ENGINEERING

ATI I.D. : 512150
 Date Extracted: N/A
 Date Analyzed : 14-DEC-95
 Sample Matrix : WATER
 REF I.D. : 512135-01

Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	UG/L	<50	100	97	97	97	97	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 #: 60655
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name : BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 512150
 Date Extracted: N/A
 Date Analyzed : 19-DEC-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
FUEL HYDROCARBONS	UG/L	<50	96	100	96

% 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 ATI I.D. : 512150
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF	WATER	12-DEC-95	N/A	19-DEC-95	1.00
2	STA#11109 A	WATER	12-DEC-95	N/A	19-DEC-95	1.00
3	STA#11109 EFF	WATER	12-DEC-95	N/A	19-DEC-95	1.00

Parameter	Units	1	2	3
CHLOROMETHANE	UG/L	<10	<10	<10
VINYL CHLORIDE	UG/L	<5	<5	<5
BROMOMETHANE	UG/L	<10	<10	<10
CHLOROETHANE	UG/L	<5	<5	<5
ACETONE	UG/L	<10	<10	<10
1,1-DICHLOROETHENE	UG/L	<1	<1	<1
METHYLENE CHLORIDE	UG/L	<5	<5	<5
CARBON DISULFIDE	UG/L	<2	<2	<2
TRANS-1,2-DICHLOROETHENE	UG/L	<1	<1	<1
1,1-DICHLOROETHANE	UG/L	<1	<1	<1
CIS-1,2-DICHLOROETHENE	UG/L	<1	<1	<1
CHLOROFORM	UG/L	<1	<1	<1
2-BUTANONE (MEK)	UG/L	<10	<10	<10
1,1,1-TRICHLOROETHANE	UG/L	<1	<1	<1
CARBON TETRACHLORIDE	UG/L	<1	<1	<1
1,2-DICHLOROETHANE	UG/L	<1	<1	<1
BENZENE	UG/L	47	<1	<1
TRICHLOROETHENE	UG/L	<1	<1	<1
1,2-DICHLOROPROPANE	UG/L	<1	<1	<1
BROMODICHLOROMETHANE	UG/L	<1	<1	<1
4-METHYL-2-PENTANONE (MIBK)	UG/L	<10	<10	<10
CIS-1,3-DICHLOROPROPENE	UG/L	<1	<1	<1
TOLUENE	UG/L	4	<2	<2
TRANS-1,3-DICHLOROPROPENE	UG/L	<1	<1	<1
2-HEXANONE (MBK)	UG/L	<10	<10	<10
1,1,2-TRICHLOROETHANE	UG/L	<1	<1	<1
TETRACHLOROETHENE	UG/L	<1	<1	<1
DIBROMOCHLOROMETHANE	UG/L	<1	<1	<1
CHLOROBENZENE	UG/L	<1	<1	<1
ETHYLBENZENE	UG/L	<1	<1	<1
XYLENES (TOTAL)	UG/L	260	<1	<1
STYRENE	UG/L	<2	<2	<2
BROMOFORM	UG/L	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	UG/L	<1	<1	<1
DICHLORODIFLUOROMETHANE	UG/L	<10	<10	<10
TRICHLOROFLUOROMETHANE	UG/L	<5	<5	<5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	<5	<5	<5
1,2-DICHLOROBENZENE	UG/L	<5	<5	<5

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 512150

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	STA#11109 INF	WATER	12-DEC-95	N/A	19-DEC-95	1.00
2	STA#11109 A	WATER	12-DEC-95	N/A	19-DEC-95	1.00
3	STA#11109 EFF	WATER	12-DEC-95	N/A	19-DEC-95	1.00

Parameter	Units	1	2	3
1,3-DICHLOROBENZENE	UG/L	<5	<5	<5
1,4-DICHLOROBENZENE	UG/L	<5	<5	<5

SURROGATES

1,2-DICHLOROETHANE-D4	%	90	101	98
TOLUENE-D8	%	97	94	94
BFB	%	97	96	93

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method : EPA 624 (GC/MS FOR VOLATILE ORGANICS)
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

WATER
 ATI I.D.: 512150

Sample Parameters	Units	Results
1 METHYL CYCLOPENTANE	UG/L	100
METHYL CYCLOHEXANE	UG/L	200
UNKNOWN HYDROCARBON	UG/L	100
TRIMETHYL BENZENE ISOMER	UG/L	200
ALIPHATIC HYDROCARBON C5	UG/L	70
2 NONE DETECTED	N/A	N/A
3 NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Page 13

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank I.D. : 37655
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 512150
 Date Extracted: N/A
 Date Analyzed : 19-DEC-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	%	100
TOLUENE-D8	%	93
BFB	%	96

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. : 37655
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 512150

Parameters	Units	Results
NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Page 15

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank I.D. : 37656
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 512150
 Date Extracted: N/A
 Date Analyzed : 19-DEC-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	‡	96
TOLUENE-D8	‡	94
BFB	‡	95

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. : 37656 ATI I.D. : 512150
Client : ALISTO ENGINEERING
Project # : G314386/10-005-03-001
Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Results
NONE DETECTED	N/A	N/A

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Page 17

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 MSMSD # : 80810
 Client : ALISTO ENGINEERING

ATI I.D. : 512150
 Date Extracted: N/A
 Date Analyzed : 20-DEC-95
 Sample Matrix : WATER
 REF I.D. : 512150-02

Project # : G314386/10-005-03-001
 Project Name: BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
1,1-DICHLOROETHENE	UG/L	<1	50	40	80	45	90	10
BENZENE	UG/L	<1	50	44	88	47	94	7
TRICHLOROETHENE	UG/L	<1	50	49	98	51	102	4
TOLUENE	UG/L	<2	50	47	94	50	100	6
CHLOROBENZENE	UG/L	<1	50	54	108	58	116	7

% 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

Page 18

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
 Blank Spike #: 60623
 Client : ALISTO ENGINEERING
 Project # : G314386/10-005-03-001
 Project Name : BP SITE#11109/4280 FOOTHILL BLVD. OAKLAND, CA

ATI I.D. : 512150
 Date Extracted: N/A
 Date Analyzed : 19-DEC-95
 Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
1,1-DICHLOROETHENE	UG/L	<1	47	50	94
BENZENE	UG/L	<1	47	50	94
TRICHLOROETHENE	UG/L	<1	54	50	108
TOLUENE	UG/L	<2	48	50	96
CHLOROBENZENE	UG/L	<1	55	50	110

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

ANALYTICAL TECHNOLOGIES, INC.
SAN DIEGO
FLAGS

ORGANICS

FLAG MESSAGE DESCRIPTION

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

ACCESSION #: 512150

INITIALS: LO

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 GLP protocols? If yes, complete a) and b) a) pH sample aliquoted: yes / no / na b) Either 1) Record Bottle Lot #'s: O= 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
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.		2.0 °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

N/A
N/A

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-CALIB ID
512150

CHAIN OF CUSTODY

No. 066947

Page 1 of 1

CONSULTANT'S NAME Alisto Engineering Group		ADDRESS 1575 TREAT Blvd. Ste 201 Walnut Creek CA		CITY Walnut Creek CA	STATE CA	ZIP CODE 94596
BP SITE NUMBER 11109	BP CORNER ADDRESS/CITY 4280 Foothill Blvd. OAKLAND CA			CONSULTANT PROJECT NUMBER 10-005-03-001		
CONSULTANT PROJECT MANAGER PEPE BERNAL		PHONE NUMBER 510 295-1650	FAX NUMBER 510 295-1823		CONSULTANT CONTRACT NUMBER 6314386	
BP CONTACT SCOTT HOOTON	BP ADDRESS Renton, WA		PHONE NUMBER		FAX NO.	
LAB CONTACT COPY STEWART	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		SHIPMENT METHOD

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER

SAMPLE DESCRIPTION	COLLECTION	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	HCL	HCL	HCL	COMMENTS
	TIME		NO.	TYPE (VOL.)	LAB SAMPLE #	TPH-67	624	TPH-10	
STAFF 11109 INF	0900	GW	8		01	✓	✓	✓	
STAFF 11109 A	0910		6		02	✓	✓		
STAFF 11109 EFF	0920		8		03	✓	✓	✓	

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>John K. Bickley</i>	2/12/95	1000	<i>Tracy Quinn</i>	12/13/95	9:30AM	
						Temp. 2.0°C