BP OIL

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

August 28, 1995

STID 1108

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

95 AUG 31 AM 11:05

RE: BP OIL FACILITY #11102
100 MacArthur Blvd
Oakland CA

Dear Mr. Hiett:

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED August 2, 1995** for the above referenced facility.

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

Respectfully,

Scott T. Hooton
Environmental Resources Management
Group Leader

STH:aa msword\ERM11102

cc: Ms. Jennifer Eberle, Alameda County Health Care Services Agency
1131 Harbor Bay Parkway Room 250, Oakland CA 94621

Mr. Brady Nagle, Alisto Engineering Group, 1777 Oakland Blvd., Suite 200, Walnut Creek, CA 94596

Site File

CTV-2960-F

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11102
100 MacArthur Boulevard
Oakland, California

Project No. 10-076-04-001

Prepared for:

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

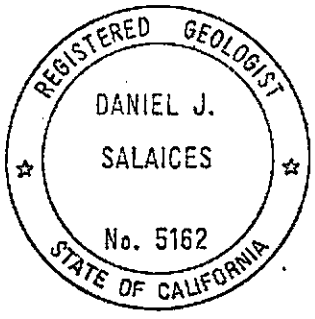
Prepared by:

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

August 2, 1995

William Howell
Project Manager

Dan Salaices
Registered Geologist



GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11102
100 MacArthur Boulevard
Oakland, California

Project No. 10-076-04-001

August 2, 1995

INTRODUCTION

This report presents the results and findings of the June 21, 1995 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11102, 100 MacArthur Boulevard, Oakland, California. A site vicinity map is shown in Figure 1.

FIELD PROCEDURES

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

Before purging and sampling, the groundwater level in each well was measured from a permanent mark on top of the casing to the nearest 0.01 foot using an electronic sounder. The depth to groundwater and top of casing elevation data were used to calculate the groundwater elevation in each well in reference to mean sea level. The survey data and groundwater elevation measurements collected to date are presented in Table 1.

Before sample collection, each well was purged of 3 casing volumes, while recording field readings of pH, temperature, electrical conductivity, and dissolved oxygen. Groundwater samples were collected for laboratory analysis by lowering a bottom-fill, disposable bailer to just below the water level in the well. The samples were transferred from the bailer into laboratory-supplied containers. The water sampling field survey forms are presented in Appendix A.

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples for this and previous quarters are summarized in Table 1. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown in Figure 2. The results of groundwater analysis are shown in Figure 3. The laboratory report and chain of custody record are presented in Appendix B.

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO.11102
100 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-076

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	TOG (ug/l)	1,1-DCA (ug/l)	1,2-DCA (ug/l)	VOC (ug/l)	DO (ppm)	LAB
MW-1	11/04/89	90.20	13.21	76.99	ND<500	ND<50	3.4	0.6	ND<0.3	ND<0.3	ND<5000	—	0.9	—	—	SAL
MW-1	11/11/89	90.20	13.32	76.88	—	—	—	—	—	—	—	—	—	—	—	—
MW-1	04/03/90	90.20	12.46	77.74	820	—	64	1.9	23	34	—	—	—	—	—	ANA
MW-1	07/30/90	90.20	12.92	77.28	190	ND<50	11	ND<5.0	ND<5.0	ND<5.0	ND<5000	—	ND	—	—	ANA
MW-1	11/20/90	90.20	14.08	76.12	50	79	2.4	ND<0.3	ND<0.3	ND<0.3	ND<5000	—	4.0	—	—	SAL
MW-1	03/01/91	90.20	13.61	76.59	ND<100	ND<1000	0.9	ND<0.3	ND<0.3	0.3	14000	—	ND	—	—	SAL
MW-1	08/19/91	90.20	15.74	74.46	370	ND<50	35	0.73	6.4	5.6	ND<5000	—	1.4	—	—	SEQ
MW-1	11/13/91	90.20	14.08	76.12	60	ND<50	0.68	ND<0.3	ND<0.3	ND<0.3	ND<5000	—	1.0	—	—	SEQ
MW-1	02/24/92	90.20	12.52	77.68	140	100	3.9	0.66	1.2	3.8	ND<5000	—	1.7	—	—	SEQ
MW-1	05/19/92	90.20	11.80	78.40	4200	910	440	21	250	37	ND<5000	—	ND	—	—	SEQ
MW-1	08/17/92	90.20	12.01	78.19	4000	560	350	14	150	17	ND<5000	—	ND	—	—	SEQ
MW-1	07/22/92	90.20	12.42	77.78	4000	—	ND<5.0	18	210	61	—	—	—	—	—	ANA
MW-1	08/14/92	90.20	12.75	77.45	2400	1700	330	20	150	47	ND<5000	—	ND<2.5	—	—	SEQ
MW-1	11/11/92	90.20	13.69	76.51	280	92	30	3.4	7.6	6.8	ND<5000	—	ND<2.5	—	—	ANA
MW-1	06/07/93	90.20	10.93	79.27	3400	440	98	11	21	7.6	—	6.2	0.9	—	—	PACE
QC-1 (c)	06/07/93	—	—	—	3700	—	120	12	28	9.5	—	—	—	—	—	PACE
MW-1	12/02/93	90.20	12.72	77.48	1100	120	8.3	3.6	0.6	1.5	ND<5000	2.6	1.8	—	—	PACE
MW-1	06/22/94	90.20	11.81	78.39	2100	ND<50	32	3.8	2.2	17	ND<5000	2.3	3.3	—	3.2	PACE
QC-1 (c)	06/22/94	—	—	—	2100	—	30	3.2	2.0	15	—	—	—	—	—	PACE
MW-1	01/10/95	90.20	10.97	79.23	ND<500	420	120	ND<5	ND<5	ND<10	—	ND<1	1	—	3.9	ATI
QC-1 (c)	01/10/95	—	—	—	ND<500	—	120	ND<5	5	ND<10	—	—	—	—	—	ATI
MW-1	06/21/95	90.20	9.38	80.82	4700	1300	16	ND<5.0	ND<5.0	ND<10	2900	2.0	0.38	0.60 (d)	6.7	ATI
QC-1 (c)	06/21/95	—	—	—	3600	—	ND<13	ND<5.0	ND<5.0	ND<10	—	—	—	—	—	ATI
MW-2	11/04/89	87.91	15.84	72.07	ND<500	—	6.5	ND<0.3	ND<0.3	ND<0.3	—	—	—	—	—	SAL
MW-2	11/11/89	87.91	14.75	73.16	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	04/03/90	87.91	15.25	72.66	ND<500	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	ANA
MW-2	07/30/90	87.91	15.59	72.32	61	—	6.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	ANA
MW-2	11/20/90	87.91	17.81	70.10	ND<50	—	0.3	ND<0.3	ND<0.3	ND<0.3	—	—	—	—	—	SAL
MW-2	03/01/91	87.91	17.11	70.80	ND<100	—	0.4	ND<0.3	ND<0.3	ND<0.3	—	—	4.0	—	—	SAL
MW-2	08/19/91	87.91	17.97	69.94	ND<30	—	ND<0.3	ND<0.3	ND<0.3	ND<0.3	—	—	—	—	—	SEQ
MW-2	11/13/91	87.91	16.76	71.15	38	—	0.32	ND<0.3	ND<0.3	ND<0.3	—	—	—	—	—	SEQ
MW-2	02/24/92	87.91	15.07	72.84	ND<50	—	ND<0.5	ND<0.5	ND<0.5	0.58	—	—	16	—	—	SEQ
MW-2	05/19/92	87.91	14.70	73.21	ND<50	—	0.55	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	SEQ
MW-2	07/22/92	87.91	15.60	72.31	90	—	1.3	0.6	0.9	1.9	—	—	—	—	—	ANA
MW-2	08/14/92	87.91	15.88	72.03	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	11/11/92	87.91	16.19	71.72	52	—	2.6	ND<0.5	ND<0.5	0.9	—	—	—	—	—	ANA
QC-1 (c)	11/11/92	—	—	—	65	—	3.2	ND<0.5	ND<0.5	1.0	—	—	—	—	—	ANA
MW-2	06/07/93	87.91	14.42	73.49	1200	—	14	2.8	1.9	1.7	—	—	—	—	—	PACE
MW-2	12/02/93	87.91	14.94	72.97	790	—	3.4	0.5	10	ND<0.5	—	—	—	—	—	PACE
QC-1 (c)	12/02/93	—	—	—	2100	—	32	3.8	2.2	17.00	—	2.3	—	—	—	PACE
MW-2	06/22/94	87.91	14.25	73.66	110	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	3.9	PACE
MW-2	01/10/95	87.91	13.64	74.27	ND<50	—	ND<0.5	ND<0.5	0.6	1	—	—	—	—	4.3	ATI
MW-2	06/21/95	87.91	11.66	76.25	4700	—	ND<10	ND<10	ND<10	ND<20	—	—	—	—	7.8	ATI

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO.11102
100 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-076

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	TOG (ug/l)	1,1-DCA (ug/l)	1,2-DCA (ug/l)	VOC (ug/l)	DO (ppm)	LAB
MW-3	11/04/89	87.02	15.40	71.62	ND<500	—	ND<0.3	ND<0.3	ND<0.3	ND<0.3	—	—	—	—	—	SAL
MW-3	11/11/89	87.02	14.10	72.92	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	04/03/90	87.02	13.90	73.12	ND<100	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	ANA
MW-3	07/30/90	87.02	13.77	73.25	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000	—	—	—	—	ANA
MW-3	11/20/90	87.02	14.67	72.35	ND<50	—	0.3	0.8	0.4	1.5	—	—	—	—	—	SAL
MW-3	03/01/91	87.02	15.22	71.80	ND<100	—	0.4	ND<0.3	ND<0.3	ND<0.3	—	—	ND	—	—	SAL
MW-3	08/19/91	87.02	13.15	73.87	ND<30	—	ND<0.3	ND<0.3	ND<0.3	ND<0.3	—	—	—	—	—	SEQ
MW-3	11/13/91	87.02	15.66	71.36	ND<30	—	ND<0.3	ND<0.3	ND<0.3	ND<0.3	—	—	—	—	—	SEQ
MW-3	02/24/92	87.02	15.01	72.01	ND<50	—	0.65	1.4	0.68	4.4	—	—	ND	—	—	SEQ
MW-3	05/19/92	87.02	15.52	71.50	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	SEQ
MW-3	07/22/92	87.02	15.63	71.39	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000	—	ND<0.50	—	—	ANA
MW-3	08/14/92	87.02	13.57	73.45	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	11/11/92	87.02	14.13	72.89	ND<50	—	ND<0.5	0.7	ND<0.5	1.3	—	—	—	—	—	ANA
MW-3	06/07/93	87.02	12.13	74.89	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	PACE
MW-3	12/02/93	87.02	13.29	73.73	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	PACE
MW-3	06/22/94	87.02	12.78	74.24	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	2.9	PACE
MW-3	01/10/95	87.02	12.01	75.01	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<1	—	—	1	—	3.8	ATI
MW-3	06/21/95	87.02	11.57	75.45	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—	—	7.4	ATI
QC-2 (c)	11/11/92	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	ANA
QC-2 (c)	06/07/93	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	PACE
QC-2 (c)	12/02/93	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	PACE
QC-2 (c)	06/22/94	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	PACE
QC-2 (c)	01/10/95	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<1	—	—	—	—	—	ATI
QC-2 (c)	06/21/95	—	—	—	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—	—	—	ATI

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
TOG	Total oil and grease
1,1-DCA	1,1-Dichloroethane
1,2-DCA	1,2-Dichloroethane
VOC	Volatile organic compounds
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
ND	Not detected above reported detection limit
—	Not analyzed/measured/applicable
SAL	Superior Analytical Laboratory
ANA	Anametrix, Inc.
SEQ	Sequoia Analytical Laboratory
PACE	Pace, Inc.
ATI	Analytical Technologies Inc.

NOTES:

(a) Top of casing elevations surveyed to the nearest 0.01 foot above mean sea level.

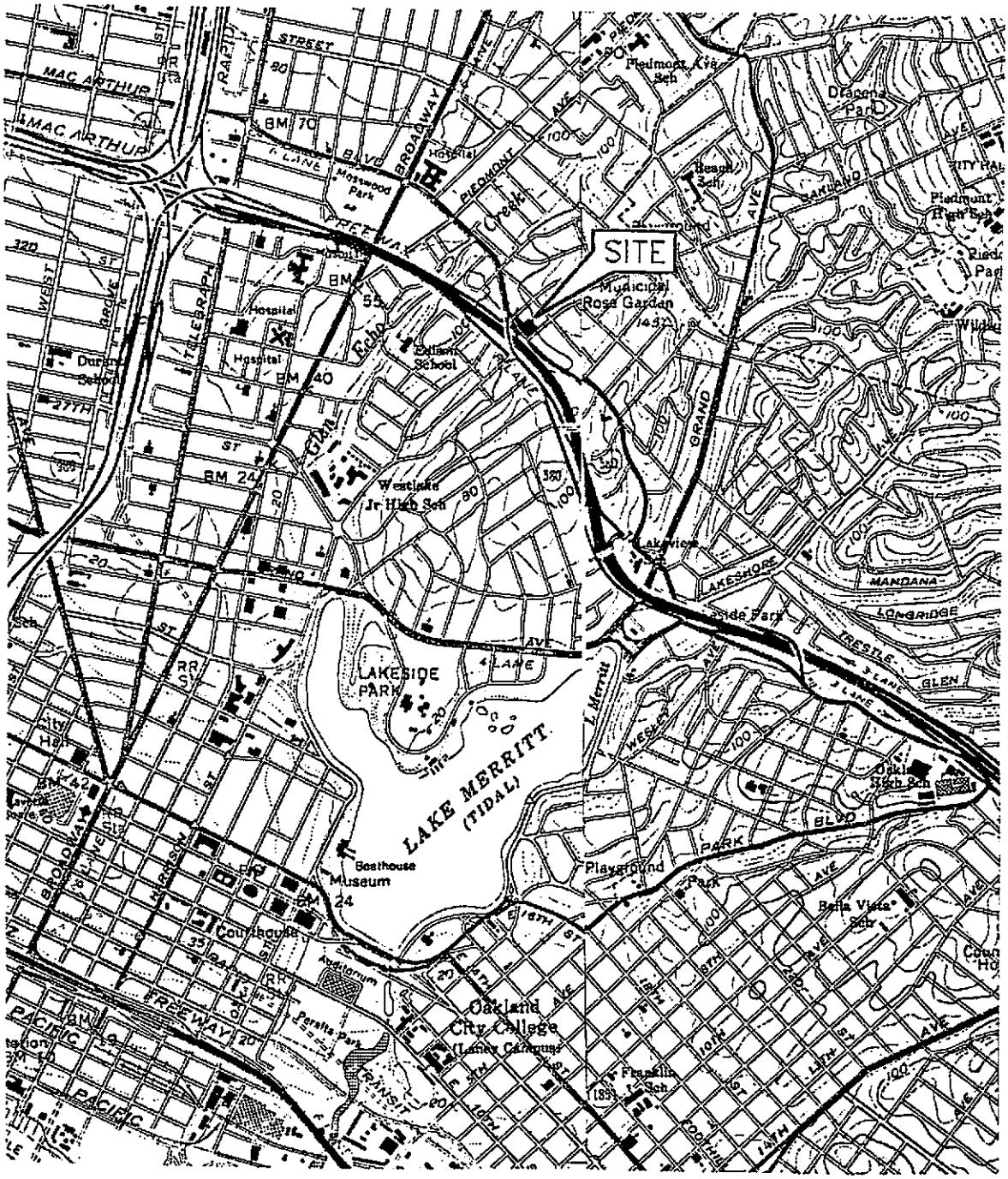
(b) Groundwater elevations in feet above mean sea level.

(c) Blind duplicate.

(d) Tetrachloroethene.

(e) Travel blank.

E:\0\10-076-4-1



SOURCE:
USGS MAP, OAKLAND EAST & WEST QUADRANGLES, CALIFORNIA. 7.5 MINUTE SERIES. 1959. PHOTOREVISED 1980.

N

0 1000' 2000'

FIGURE 1

SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11102
100 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. 10-076

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

100703—.DWG 7-16-93 KH 1=1

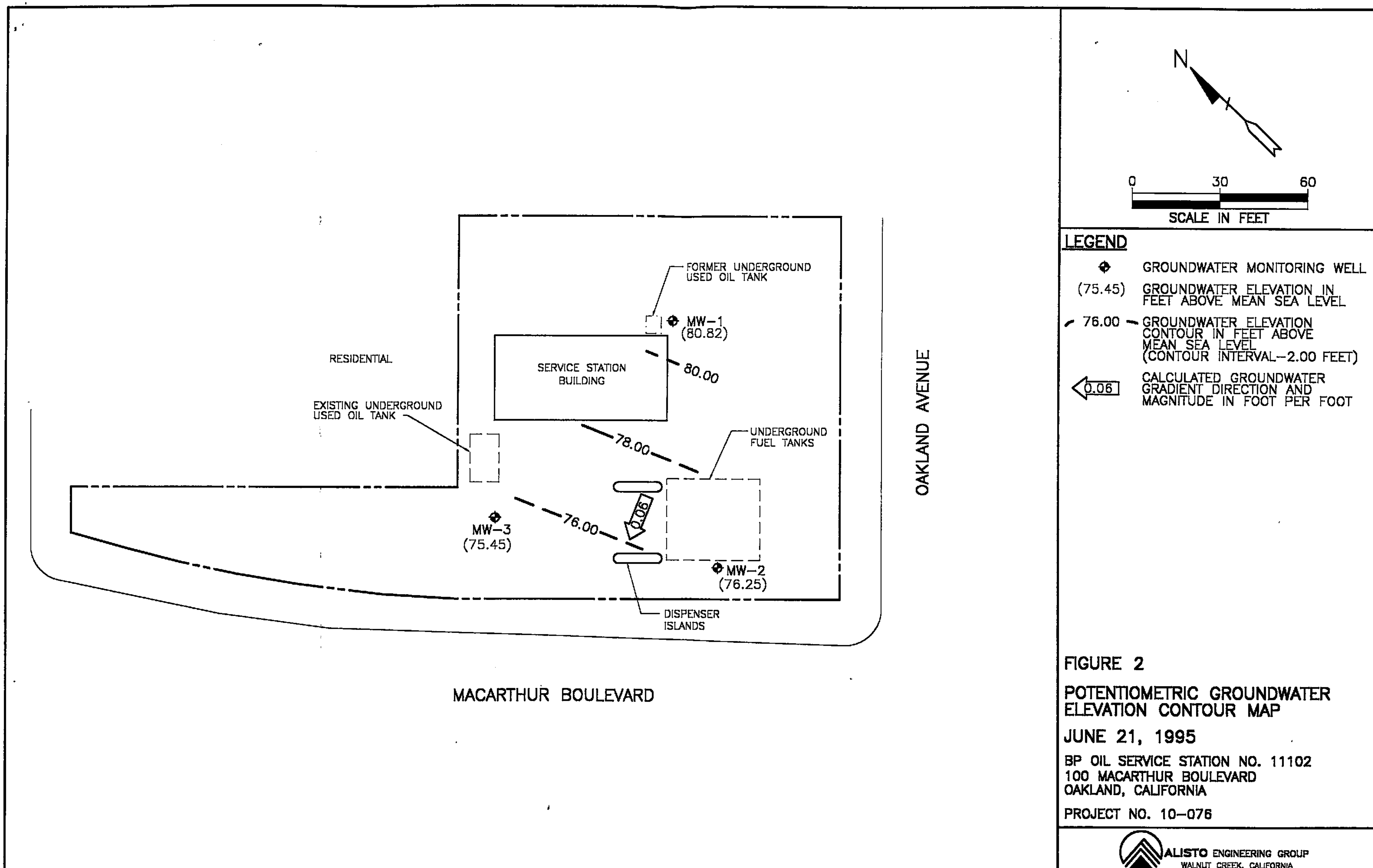

N
0
30
60
SCALE IN FEET
LEGEND
GROUNDWATER MONITORING WELL
(75.45) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
76.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–2.00 FEET)
0.06 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT
FORMER UNDERGROUND USED OIL TANK
MW–1
(80.82)
RESIDENTIAL
SERVICE STATION BUILDING
80.00
EXISTING UNDERGROUND USED OIL TANK
78.00
UNDERGROUND FUEL TANKS
OAKLAND AVENUE
MW–3
(75.45)
76.00
0.06
MW–2
(76.25)
DISPENSER ISLANDS
MACARTHUR BOULEVARD

FIGURE 2

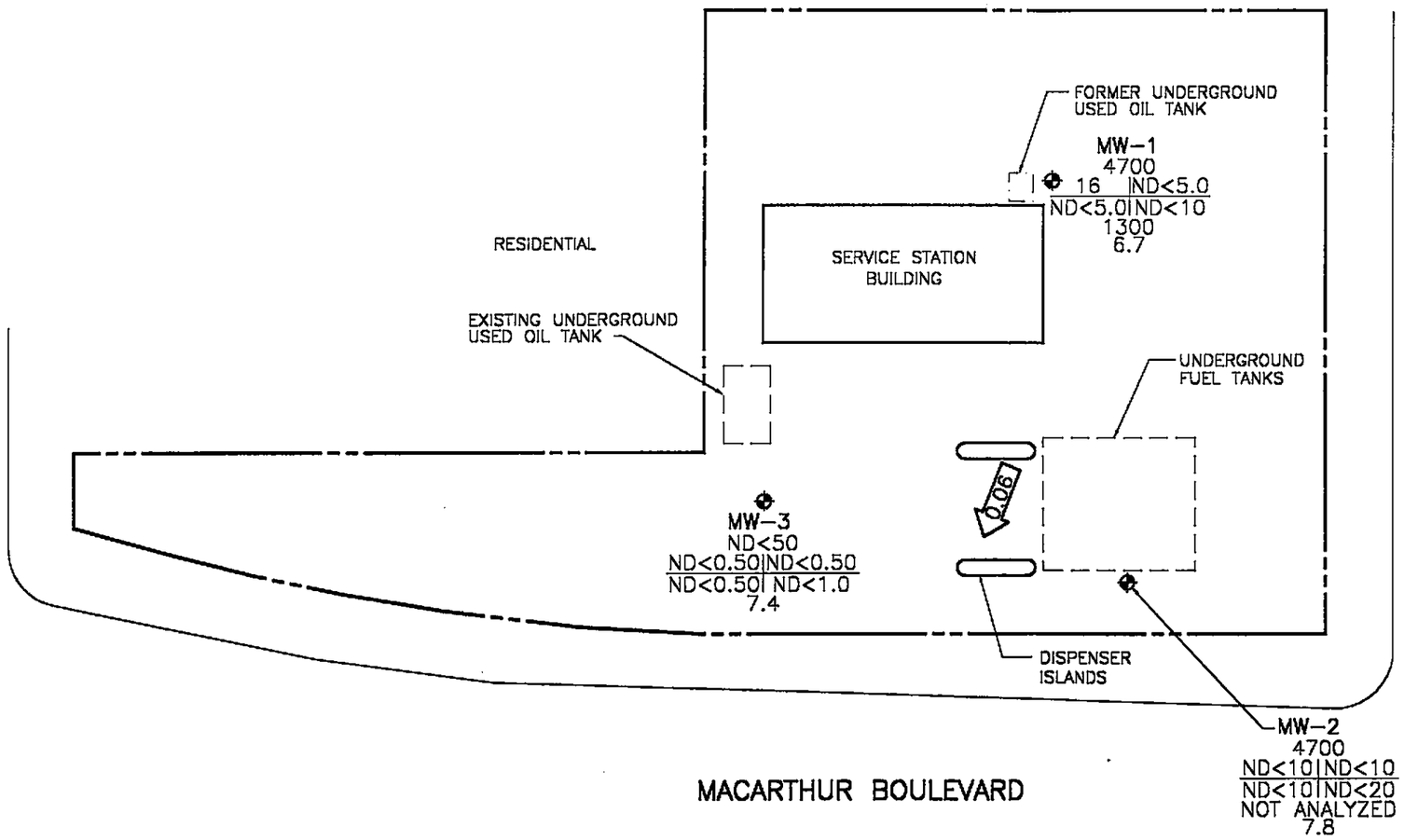
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

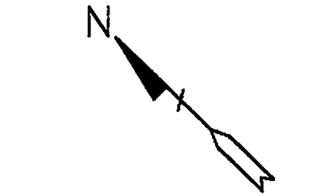
JUNE 21, 1995

BP OIL SERVICE STATION NO. 11102
100 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. 10-076

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA





LEGEND

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

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

JUNE 21, 1995

BP OIL SERVICE STATION NO. 11102
100 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. 10-076

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO ENGINEERING GROUP

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

Field Report / Sampling Data Sheet

Project No. 10-076-04-001 Date: 6/21/05
Address 100 Mac Arthur Blvd Day: M T W TH F
Contract No. G341892(co) City: Oakland
Station No. BP 11102 Sampler: DC

WELL ID	SAMPLE ID	DEPTH TO WATER	TIME	COMMENTS:
MW-1	S-3	9.38'		
MW-2	S-2	11.66		
MW-3	S-1	11.57		

FIELD INSTRUMENT CALIBRATION DATA

Ph METER Hydac 4.00 ✓ 7.00 ✓ 10.00 __ TEMPERATURE COMPENSATED (Y) N TIME 1540 WEATHER Sunny

D.O. METER Ion ZERO d.O. SOLUTION ✓ BAROMETRIC PRESSURE 760 TEMP 77°F

CONDUCTIVITY METER Hydac 10,000 __ TURBIDITY METER __ 5.0 NTU __ OTHER __

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-3	11.57	4"	OK	Ø	Y (N)	8	1551	74.6	6.65	1.13	7.7
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			16	1557	72.9	6.61	1.22	
23.60 - 11.57 = 12.03 x .65 = 7.81 x 3 = 23.43						23.5	1604	72.3	6.57	1.23	7.4

Purge Method: (X) Surface Pump O Disp.Tube O Winch O Disp. Baller(s) __ O Sys Port

Comments:

O EPA 601 __
(X) TPH-G/BTEX HC
O TPH Diesel __
O TOG 5520 __

TIME/SAMPLE ID: 1605 / S-1

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-2	11.66	4"	OK	Ø	Y (N)	8	1612	73.3	6.47	1.20	7.4
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			16	1618	71.9	6.46	1.09	
24.80 - 11.66 = 13.14 x .65 = 8.54 x 3 = 25.62						25	1624	71.8	6.47	1.09	7.8

Purge Method: (X) Surface Pump O Disp.Tube O Winch O Disp. Baller(s) __ O Sys Port

Comments:

O EPA 601 __
(X) TPH-G/BTEX HC
O TPH Diesel __
O TOG 5520 __

TIME/SAMPLE ID: 1625 / S-2

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-1	9.38	4"	OK	Ø	Y (N)	9	1637	76.9	7.12	1.00	6.6
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			18	1645	74.8	6.82	0.98	
23.20 - 9.38 = 13.82 x .65 = 8.98 x 3 = 26.94						27	1654	74.2	6.70	1.01	6.7

Purge Method: (X) Surface Pump O Disp.Tube O Winch O Disp. Baller(s) __ O Sys Port

Comments: QC-1 from this well (S-4)

(X) EPA 601 HC
(X) TPH-G/BTEX HC
(X) TPH Diesel HC
(X) TOG 5520 HC

TIME/SAMPLE ID: 1700 / S-3

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

ATI I.D.: 506289

July 13, 1995

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

Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA
Project # : G341892(CO)/10-076-04-001

Attention: BILL HOWELL

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

Date Received	Quantity	Matrix
June 23, 1995	5	WATER

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

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

GARY STEWART
VOLATILES SUPERVISOR

for ALAN J. KLEINSCHMIDT
LABORATORY MANAGER

Analytical Technologies, Inc.

SAMPLE CROSS REFERENCE

Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Report Date: July 13, 1995
ATI I.D. : 506289

ATI #	Client Description	Matrix	Date Collected
1	S-1	WATER	21-JUN-95
2	S-2	WATER	21-JUN-95
3	S-3	WATER	21-JUN-95
4	S-4	WATER	21-JUN-95
5	S-5	WATER	21-JUN-95

---TOTALS---

Matrix	# Samples
WATER	5

ATI STANDARD DISPOSAL PRACTICE

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

Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001 ATI I.D.: 506289
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Analysis	Technique/Description
EPA 413.2 (OIL & GREASE)	INFRARED SPECTROMETER
EPA 601 (HALOGENATED VOLATILE ORGANICS)	GC/ELECTROLYTIC CONDUCTIVITY DETECTOR
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

GENERAL CHEMISTRY RESULTS

Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001 ATI I.D.: 506289
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Sample #	Client ID	Matrix	Date Sampled	Date Received
3	S-3	WATER	21-JUN-95	23-JUN-95

Parameter	Units	3
OIL AND GREASE	MG/L	2.9

GENERAL CHEMISTRY - QUALITY CONTROL

DUP/MS

Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001 ATI I.D. : 506289
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Parameters	REF I.D.	Units	Sample Result	Dup Result	RPD	Spiked Sample	Spike Conc	% Rec
OIL AND GREASE	506236-01	MG/L	8.1	9.1	12	12.7	5.0	92

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

GENERAL CHEMISTRY - QUALITY CONTROL

BLANK SPIKE

Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001 ATI I.D. : 506289
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Parameters	Blank Spike ID#	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
OIL AND GREASE	57285	MG/L	<0.05	5.0	5.0	100

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

Test : EPA 601 (HALOGENATED VOLATILE ORGANICS)
Client : ALISTO ENGINEERING ATI I.D. : 506289
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
3	S-3	WATER	21-JUN-95	N/A	29-JUN-95	1.00

Parameter	Units	3
BROMODICHLOROMETHANE	UG/L	<0.20
BROMOFORM	UG/L	<1.0
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.20
CHLOROBENZENE	UG/L	<0.50
CHLOROETHANE	UG/L	<1.0
CHLOROFORM	UG/L	<0.20
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.20
1,2-DICHLOROBENZENE	UG/L	<0.50
1,3-DICHLOROBENZENE	UG/L	<0.50
1,4-DICHLOROBENZENE	UG/L	<0.50
DICHLORODIFLUOROMETHANE	UG/L	<1.0
1,1-DICHLOROETHANE	UG/L	2.0
1,2-DICHLOROETHANE	UG/L	0.38
1,1-DICHLOROETHENE	UG/L	<0.20
CIS-1,2-DICHLOROETHENE	UG/L	<0.20
TRANS-1,2-DICHLOROETHENE	UG/L	<0.20
1,2-DICHLOROPROPANE	UG/L	<0.20
CIS-1,3-DICHLOROPROPENE	UG/L	<0.20
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.20
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.50
TETRACHLOROETHENE	UG/L	0.60
1,1,1-TRICHLOROETHANE	UG/L	<0.20
1,1,2-TRICHLOROETHANE	UG/L	<0.20
TRICHLOROETHENE	UG/L	<0.20
TRICHLOROFLUOROMETHANE	UG/L	<2.0
VINYL CHLORIDE	UG/L	<0.20
SURROGATES		
BROMOFLUOROBENZENE (ELCD)	%	87
BROMOFLUOROBENZENE (PID)	%	111

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 601 (HALOGENATED VOLATILE ORGANICS)
Blank I.D. : 35986
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 29-JUN-95
Dil. Factor : 1.00

Parameters	Units	Results
BROMODICHLOROMETHANE	UG/L	<0.20
BROMOFORM	UG/L	<1.0
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.20
CHLOROBENZENE	UG/L	<0.50
CHLOROETHANE	UG/L	<1.0
CHLOROFORM	UG/L	<0.20
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.20
1,2-DICHLOROBENZENE	UG/L	<0.50
1,3-DICHLOROBENZENE	UG/L	<0.50
1,4-DICHLOROBENZENE	UG/L	<0.50
DICHLORODIFLUOROMETHANE	UG/L	<1.0
1,1-DICHLOROETHANE	UG/L	<0.20
1,2-DICHLOROETHANE	UG/L	<0.20
1,1-DICHLOROETHENE	UG/L	<0.20
CIS-1,2-DICHLOROETHENE	UG/L	<0.20
TRANS-1,2-DICHLOROETHENE	UG/L	<0.20
1,2-DICHLOROPROPANE	UG/L	<0.20
CIS-1,3-DICHLOROPROPENE	UG/L	<0.20
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.20
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.50
TETRACHLOROETHENE	UG/L	<0.20
1,1,1-TRICHLOROETHANE	UG/L	<0.20
1,1,2-TRICHLOROETHANE	UG/L	<0.20
TRICHLOROETHENE	UG/L	<0.20
TRICHLOROFLUOROMETHANE	UG/L	<2.0
VINYL CHLORIDE	UG/L	<0.20
SURROGATES		
BROMOFLUOROBENZENE (ELCD)	%	83
BROMOFLUOROBENZENE (PID)	%	108

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Test : EPA 601 (HALOGENATED VOLATILE ORGANICS)
MSMSD # : 76828
Client : ALISTO ENGINEERING

Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 27-JUN-95
Sample Matrix : WATER
REF I.D. : 506251-01

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
CHLOROBENZENE	UG/L	<0.50	4.0	3.7	93	3.7	93	0
CHLOROFORM	UG/L	<0.20	2.0	2.0	100	2.0	100	0
1,1-DICHLOROETHENE	UG/L	<0.20	2.0	1.9	95	1.9	95	0
TETRACHLOROETHENE	UG/L	<0.20	2.0	1.9	95	1.9	95	0
TRICHLOROETHENE	UG/L	<0.20	2.0	1.8	90	1.8	90	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 : EPA 601 (HALOGENATED VOLATILE ORGANICS)
Blank Spike #: 57523
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name : BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 29-JUN-95
Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
CHLOROBENZENE	UG/L	<0.50	4.3	4.0	108
CHLOROFORM	UG/L	<0.20	1.8	2.0	90
1,1-DICHLOROETHENE	UG/L	<0.20	2.3	2.0	115
TETRACHLOROETHENE	UG/L	<0.20	2.0	2.0	100
TRICHLOROETHENE	UG/L	<0.20	2.0	2.0	100

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

Analytical**Technologies**, Inc. GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
Client : ALISTO ENGINEERING ATI I.D. : 506289
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
3	S-3	WATER	21-JUN-95	26-JUN-95	26-JUN-95	1.00

Parameter	Units	3
FUEL HYDROCARBONS	MG/L	0.45
HYDROCARBON RANGE		C7-C14
HYDROCARBONS QUANTITATED USING		GASOLINE
FUEL HYDROCARBONS (SECOND RANGE)	MG/L	1.3
HYDROCARBON RANGE (2ND)		C15-C24
HYDROCARBONS QUANTITATED USING (2ND)		DIESEL
SURROGATES		
BIS(2-ETHYLHEXYL)PHTHALATE	%	87

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
Blank I.D. : 35861
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: 26-JUN-95
Date Analyzed : 26-JUN-95
Dil. Factor : 1.00

Parameters	Units	Results
FUEL HYDROCARBONS	MG/L	<0.050
HYDROCARBON RANGE		-
HYDROCARBONS QUANTITATED USING		-
SURROGATES		
BIS(2-ETHYLHEXYL)PHTHALATE	%	96

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
MSMSD # : 76723
Client : ALISTO ENGINEERING

Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: 26-JUN-95
Date Analyzed : 27-JUN-95
Sample Matrix : WATER
REF I.D. : REAGENT WATER

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
FUEL HYDROCARBONS	MG/L	<0.050	1.0	0.97	97	0.95	95	2

% 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. : 506289
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
1	S-1	WATER	21-JUN-95	N/A	04-JUL-95	1.00
2	S-2	WATER	21-JUN-95	N/A	05-JUL-95	20.00
3	S-3	WATER	21-JUN-95	N/A	04-JUL-95	10.00

Parameter	Units	1	2	3
BENZENE	UG/L	<0.50	<10	16@E
TOLUENE	UG/L	<0.50	<10	<5.0
ETHYLBENZENE	UG/L	<0.50	<10	<5.0
XYLENES (TOTAL)	UG/L	<1.0	<20	<10
FUEL HYDROCARBONS	UG/L	<50	4700	4700
HYDROCARBON RANGE		C6-C12	C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	GASOLINE
SURROGATES				
TRIFLUOROTOLUENE	%	97	93	86

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
Client : ALISTO ENGINEERING ATI I.D. : 506289
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

Sample #	Client ID	Matrix	Date Sampled	Date Extracted	Date Analyzed	Dil. Factor
4	S-4	WATER	21-JUN-95	N/A	05-JUL-95	10.00
5	S-5	WATER	21-JUN-95	N/A	04-JUL-95	1.00

Parameter	Units	4	5
BENZENE	UG/L	13@E	<0.50
TOLUENE	UG/L	<5.0	<0.50
ETHYLBENZENE	UG/L	<5.0	<0.50
XYLENES (TOTAL)	UG/L	<10	<1.0
FUEL HYDROCARBONS	UG/L	3600	<50
HYDROCARBON RANGE		C6-C12	C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE
SURROGATES			
TRIFLUOROTOLUENE	%	99	94

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 35945
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 04-JUL-95
Dil. Factor : 1.00

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

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 35946
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 05-JUL-95
Dil. Factor : 1.00

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

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank I.D. : 35950
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 05-JUL-95
Dil. Factor : 1.00

Parameters	Units	Results
BENZENE	UG/L	<0.50
TOLUENE	UG/L	<0.50
ETHYLBENZENE	UG/L	<0.50
XYLENES (TOTAL)	UG/L	<1.0
FUEL HYDROCARBONS	UG/L	<50
HYDROCARBON RANGE		C6-C12
HYDROCARBONS QUANTITATED USING		GASOLINE
SURROGATES		
TRIFLUOROTOLUENE	%	100

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
MSMSD # : 76859
Client : ALISTO ENGINEERING

Project # : G341892(CO)/10-076-04-001
Project Name: BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 04-JUL-95
Sample Matrix : WATER
REF I.D. : REAGENT WATER

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	UG/L	<0.50	5.0	4.6	92	4.8	96	4
TOLUENE	UG/L	<0.50	5.0	4.8	96	5.0	100	4

% 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 #: 57454
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name : BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 04-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	5.3	5.0	106

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

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank Spike #: 57455
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name : BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 05-JUL-95
Sample Matrix : WATER

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	UG/L	<0.50	5.0	5.0	100
TOLUENE	UG/L	<0.50	5.1	5.0	102

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

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
Blank Spike #: 57459
Client : ALISTO ENGINEERING
Project # : G341892(CO)/10-076-04-001
Project Name : BP SITE#11102/100 MAC ARTHUR BLVD., OAKLAND,CA

ATI I.D. : 506289
Date Extracted: N/A
Date Analyzed : 05-JUL-95
Sample Matrix : WATER

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

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

ANALYTICAL TECHNOLOGIES, INC.
SAN DIEGO
FLAGS

ORGANICS

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

ACCESSION #: 506289 INITIALS: CT

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

1	Does this project require special handling according to NFESC Levels C, D, AFCEE or CLP protocols? If yes, complete a) and b) a) pH sample aliquoted: yes /no /na b) Either 1) Record Bottle Lot #'s: Or 2) Attach Sample Kit Request Form(s)	YES	(NO)
2	Number of Coolers Received If more than one cooler received attach Multiple Cooler Documentation Form (MCD) Indicate "see MCD" on Item 11 below	1	
3	Are custody seals required for this project ?	YES	(N/A)
	a) are Custody Seals present on Cooler(s) ?	YES	(NO)
	If yes, are seals intact ?	YES	NO
	b) are Custody Seals present on the sample ?	YES	(NO)
	If yes, are seals intact ?	YES	NO
4	Is there a Chain-Of-Custody (COC)' per cooler ? if not, if a problem is found indicate which samples/test were in the affected cooler on the MCD.	(YES)	NO
5	Is the COC' complete per cooler ? Relinquished: (yes)/no Requested analysis: (yes)/no	(YES)	NO
6	Is the COC' in agreement with the samples received? # Samples: (yes)/no Sample ID's: (yes)/no Date sampled: (yes)/no Matrix: (yes)/no # containers: (yes)/no	(YES)	NO
7	Are the samples preserved correctly?	(YES)	NO
8	Is there enough sample for all the requested analyses?	(YES)	NO
9	Are all samples within holding times for the requested analyses?	(YES)	NO
10	Record cooler temperature. Contact PM if temperature is not 4°C ± 2°C.	4.1 °C	
	Is ice present in cooler?	(YES)	NO
11	Were all sample containers received intact (ie. not broken, leaking, etc.)?	(YES)	NO
12	Are samples requiring no headspace, headspace free? N/A	(YES)	NO
13	Are VOA 1st stickers required?	YES	(NO)
14	Are there special comments on the Chain of Custody which require client contact?	YES	(N/A)
15	If yes, was ATI Project Manager notified?	YES	NO

Describe "no" items: _____

Was client contacted? yes / no

If yes, Date: _____ Name of Person contacted:

Describe actions taken or client instructions: _____

ATI #506289

CHAIN OF CUSTODY

No 055814

Page 1 of 1

CONSULTANT'S NAME	ADDRESS	CITY	STATE	ZIP CODE
Aristo Engineering	1575 Treat Blvd	Walnut Creek	CA	94598

BP SITE NUMBER	BP CORNER ADDRESS/CITY	CONSULTANT PROJECT NUMBER
11102	1700 MacArthur Blvd, Oakland CA	10-076-04-001

CONSULTANT PROJECT MANAGER	PHONE NUMBER	FAX NUMBER	CONSULTANT CONTRACT NUMBER
Bill Howell	(510) 295 1650	(510) 295 1823	6341892 (CO)

BP CONTACT	BP ADDRESS	PHONE NUMBER	FAX NO.
ATI, Inc	Benton, WA		

LAB CONTACT	LABORATORY ADDRESS	PHONE NUMBER	FAX NO.
Scott Hooton	San Diego, CA		

SAMPLED BY (Please Print Name)	SAMPLED BY (Signature)	SHIPMENT DATE	SHIPMENT METHOD
Dave Cusack	[signature]		Fed-ex

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

ANALYSIS REQUIRED

AIRBILL NUMBER 1818920891

SAMPLE DESCRIPTION	COLLECTION DATE / COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	TYPE (VOL.)	PRESERVATIVE / LAB SAMPLE #	HCl TPH Gas BTX	HCl HVOC	HCl TOG 5520	HCl TPH Diesel							COMMENTS
S-1 1605	6/21/95	H2O	2	VOA	01	X										
S-2 1625	↓	↓	↓	↓	02	↓										
S-3 1700			6	VOA	03		X	X	X							
S-4 —			2	VOA	04											
S-5 —	↓	↓	↓	↓	05	↓										

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] Aristo					
			[signature] (ATI)	6-23-95	08:43

ADDITIONAL COMMENTS

4.1°C

CLV-18722

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