



BP OIL

January 10, 1996

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

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

RE: BP OIL FACILITY #11107
18501 Hesperian Boulevard
San Lorenzo, CA

Dear Mr. So:

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED November 9, 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
Corrective Action Manager

STH:mu mword/ERM11107

cc: [redacted] Alameda County Health Care Services Agency, 1131 Harbour Bay Parkway,
Room 250, Alameda CA 94502-6577

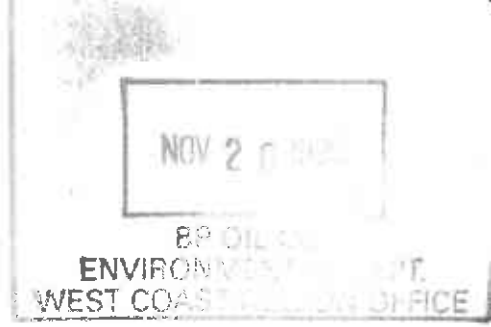
Mr. Brady Nagle, Alisto Engineering Group, 1777 Oakland Blvd., Suite 200, Walnut Creek, CA
94596

Mr. Ron Gehrke, Kwik G Enterprises, Inc., 19231 Lake Chabot Rd., Castro Valley, CA 94546

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

Site File

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ENVIRONMENTAL
PROTECTION
AGENCY



GROUNDWATER MONITORING AND SAMPLING REPORT

**BP Oil Company Service Station No. 11107
18501 Hesperian Boulevard
San Lorenzo, California**

Project No. 10-060-04-002

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**

November 9, 1995

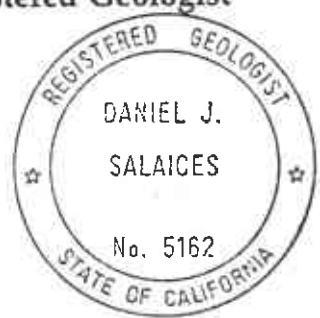
William Howell

**William Howell
Project Manager**

Dan Salaices

**Dan Salaices
Registered Geologist**

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GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11107
18501 Hesperian Boulevard
San Lorenzo, California

Project No. 10-060-04-002

November 9, 1995

INTRODUCTION

This report presents the results of the September 1, 1995 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11107, 18501 Hesperian Boulevard, San Lorenzo, California. A site vicinity map is shown on Figure 1.

FIELD PROCEDURES

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

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

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

SAMPLING AND ANALYTICAL RESULTS

The results of compliance monitoring and laboratory analysis of the groundwater samples collected during this and previous quarters are summarized in Table 1. During this event, additional samples were collected from well MW-1 for analysis of selected metals. The purpose for performing metals analysis was to compare with unfiltered metals analyses that were reported in the Supplemental Site Investigation Report prepared by Alisto dated April 1995. The results of these metal analyses is summarized in Table 2. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown on Figure 2. The results of laboratory analysis are shown on Figure 3. The laboratory report and chain of custody record are presented in Appendix B.



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11107
 18501 HESPERIAN BOULEVARD, SAN LORENZO, CALIFORNIA

ALISTO PROJECT NO. 10-060

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION (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) | MTBE (ug/l) | TOG (ug/l) | 1,1,1-TCA (ug/l) | PCE (ug/l) | DO (ppm) | LAB |
|----------|------------------------------|-------------------------|-----------------------|----------------------------------|--------------|--------------|----------|----------|----------|----------|-------------|------------|------------------|------------|----------|------|
| MW-1 | 11/04/92 | 41.07 | 20.78 | 20.29 | ND<50 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | ND<5000 | 2.8 | ND | --- | PACE |
| QC-1 (c) | 11/04/92 | --- | --- | --- | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | --- | PACE |
| MW-1 | 02/24/94 | 41.07 | 20.70 | 20.37 | ND<50 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | ND<5000 | 1.5 | 0.9 | --- | PACE |
| MW-1 | 05/12/94 | 41.07 | 18.12 | 22.95 | ND<50 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | ND<5000 | 1.0 | ND<0.5 | 7.0 | PACE |
| MW-1 | 09/09/94 | 41.07 | 21.74 | 19.33 | ND<50 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | ND<5000 | ND<0.5 | ND<0.5 | 2.3 | PACE |
| MW-1 | 11/03/94 | 41.07 | 20.01 | 21.06 | ND<50 | 50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | ND<5000 | ND<0.5 | ND<0.5 | 4.3 | PACE |
| MW-1 | 03/01/95 | 41.07 | 17.44 | 23.63 | ND<50 | ND<500 | ND<0.5 | ND<0.50 | ND<0.50 | ND<1.0 | --- | 420 | 0.54 | 0.3 | 2.3 | ATI |
| MW-1 | 06/06/95 | 41.07 | 17.55 | 23.52 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-1 | 09/01/95 | 41.07 | 18.19 | 22.88 | ND<50 | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<5.0 | 60 | --- | --- | 8.8 | ATI |
| MW-2 | 11/04/92 | 40.56 | 20.16 | 20.40 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | --- | PACE |
| MW-2 | 02/24/94 | 40.56 | 20.12 | 20.44 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | --- | PACE |
| MW-2 | 05/12/94 | 40.56 | 17.49 | 23.07 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | 7.4 | PACE |
| MW-2 | 09/09/94 | 40.56 | 21.12 | 19.44 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | 2.1 | PACE |
| MW-2 | 11/03/94 | 40.56 | 19.96 | 21.20 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | 4.2 | PACE |
| MW-2 | 03/01/95 | 40.56 | 16.83 | 23.73 | ND<50 | --- | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | --- | --- | --- | --- | 2.2 | ATI |
| MW-2 | 06/06/95 | 40.56 | 16.96 | 23.60 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-2 | 09/01/95 | 40.56 | 17.54 | 23.02 | ND<50 | --- | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<5.0 | --- | --- | --- | 7.9 | ATI |
| MW-3 | 11/04/92 | 40.45 | 20.23 | 20.22 | 760 | --- | 3.7 | 15 | 1.9 | 57 | --- | --- | --- | --- | --- | PACE |
| MW-3 | 02/24/94 | 40.45 | 20.24 | 20.21 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | --- | PACE |
| MW-3 | 05/12/94 | 40.45 | 17.61 | 22.84 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | 7.3 | PACE |
| MW-3 | 09/09/94 | 40.45 | 21.22 | 19.23 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | 2.0 | PACE |
| MW-3 | 11/03/94 | 40.45 | 19.48 | 20.97 | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | 3.6 | PACE |
| MW-3 | 03/01/95 | 40.45 | 17.08 | 23.37 | ND<50 | --- | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | --- | --- | --- | --- | 1.9 | ATI |
| MW-3 | 06/06/95 | 40.45 | 17.21 | 23.24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-3 | 09/01/95 | 40.45 | 17.69 | 22.76 | 200 | --- | 2.7 | 33 | 7.2 | 43 | ND<5.0 | --- | --- | --- | 7.8 | ATI |
| MW-4 | 11/04/92 | 39.24 | 19.18 | 20.06 | 900 | --- | 150 | 4.1 | 0.8 | 53 | --- | --- | --- | --- | --- | PACE |
| MW-4 | 02/24/94 | 39.24 | 19.22 | 20.02 | 240 | --- | 110 | 3.8 | 1.8 | 11 | --- | --- | --- | --- | --- | PACE |
| QC-1 (c) | 02/24/94 | --- | --- | --- | 310 | --- | 95 | 5.3 | 2.2 | 17 | --- | --- | --- | --- | --- | PACE |
| MW-4 | 05/12/94 | 39.24 | 16.62 | 22.62 | ND<50 | --- | 2.2 | 1.0 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | 7.3 | PACE |
| QC-1 (c) | 05/12/94 | --- | --- | --- | 430 | --- | 2.6 | 1.3 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | --- | PACE |
| MW-4 | 09/09/94 | 39.24 | 20.27 | 18.97 | 240 | --- | 9.1 | 1.3 | 0.6 | 2.5 | --- | --- | --- | --- | 2.2 | PACE |
| QC-1 (c) | 09/09/94 | --- | --- | --- | 57 | --- | 1.7 | ND<0.5 | ND<0.5 | 0.5 | --- | --- | --- | --- | --- | PACE |
| MW-4 | 11/03/94 | 39.24 | 18.46 | 20.78 | 250 | --- | 3.1 | 2.8 | 1.0 | 3.3 | --- | --- | --- | --- | 3.2 | PACE |
| QC-1 (c) | 11/03/94 | --- | --- | --- | 110 | --- | 2.4 | ND<0.5 | ND<0.5 | ND<0.5 | --- | --- | --- | --- | --- | PACE |
| MW-4 | 03/01/95 | 39.24 | 16.15 | 23.09 | 8900 | --- | 1800 | 26 | 450 | 400 | --- | --- | --- | --- | 2.0 | ATI |
| QC-1 (c) | 03/01/95 | --- | --- | --- | 7600 | --- | 1700 | 25 | 410 | 370 | --- | --- | --- | --- | --- | ATI |
| MW-4 | 06/06/95 | 39.24 | 16.28 | 22.96 | 3100 | --- | 530 | 25 | 170 | 85 | --- | --- | --- | --- | --- | ATI |
| QC-1 (c) | 06/06/95 | --- | --- | --- | 3000 | --- | 530 | 27 | 170 | 92 | --- | --- | --- | --- | --- | ATI |
| MW-4 (d) | 09/01/95 | 39.24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-5 | 03/01/95 | 39.07 | 16.00 | 23.07 | 9400 | --- | 150 | ND<5.0 | 45 | 390 | --- | --- | --- | --- | 1.2 | ATI |
| MW-5 | 06/06/95 | 39.07 | 16.16 | 22.91 | 1100 | --- | 42 | ND<2.5 | 15 | 4.0 | --- | --- | --- | --- | --- | ATI |
| MW-5 | 09/01/95 | 39.07 | 16.63 | 22.44 | 1200 | --- | 64 | ND<2.5 | 14 | 3.1 | --- | --- | --- | --- | 7.4 | ATI |
| QC-1 (c) | 09/01/95 | --- | --- | --- | 1200 | --- | --- | ND<2.5 | 14 | 3.1 | --- | --- | --- | --- | --- | ATI |
| MW-6 | 03/01/95 | 38.46 | 15.66 | 22.80 | 270 | --- | 11 | ND<0.50 | ND<0.50 | ND<1.0 | --- | --- | --- | --- | 1.6 | ATI |
| MW-6 | 06/06/95 | 38.46 | 15.82 | 22.64 | 220 | --- | 2.3 | ND<0.50 | ND<0.50 | ND<1.0 | --- | --- | --- | --- | --- | ATI |
| MW-6 | 09/01/95 | 38.46 | 16.25 | 22.21 | --- | --- | ND<2.5 | ND<2.5 | ND<2.5 | ND<5.0 | --- | --- | --- | --- | 7.5 | ATI |
| MW-7 | 03/01/95 | 39.50 | 16.21 | 23.29 | 1400 | --- | 14 | ND<1.0 | 14 | 27 | --- | --- | --- | --- | 1.8 | ATI |
| MW-7 | 06/06/95 | 39.50 | 16.34 | 23.16 | 540 | --- | 5.5 | ND<0.50 | 15 | 1.1 | --- | --- | --- | --- | --- | ATI |
| MW-7 | 09/01/95 | 39.50 | 16.74 | 22.76 | --- | --- | --- | ND<0.50 | --- | --- | --- | --- | --- | --- | 7.5 | ATI |

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11107
 18501 HESPERIAN BOULEVARD, SAN LORENZO, CALIFORNIA

ALISTO PROJECT NO. 10-060

| 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) | MTBE (ug/l) | TOG (ug/l) | 1,1,1-TCA (ug/l) | PCE (ug/l) | DO (ppm) | LAB |
|----------|------------------------------|-----------------------------|-----------------------|----------------------------------|--------------|--------------|----------|----------|----------|----------|-------------|------------|------------------|------------|----------|------|
| QC-2 (e) | 11/04/92 | -- | -- | -- | ND<50 | -- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | -- | -- | -- | -- | -- | PACE |
| QC-2 (e) | 11/04/92 | -- | -- | -- | ND<50 | -- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | -- | -- | -- | -- | -- | PACE |
| QC-2 (e) | 03/01/95 | -- | -- | -- | ND<50 | -- | ND<0.5 | ND<0.5 | ND<0.5 | ND<1.0 | -- | -- | -- | -- | -- | PACE |
| QC-2 (e) | 05/12/94 | -- | -- | -- | ND<50 | -- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | -- | -- | -- | -- | -- | PACE |
| QC-2 (e) | 09/09/94 | -- | -- | -- | ND<50 | -- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | -- | -- | -- | -- | -- | PACE |
| QC-2 (e) | 11/03/94 | -- | -- | -- | ND<50 | -- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | -- | -- | -- | -- | -- | PACE |
| QC-2 (e) | 06/06/95 | -- | -- | -- | ND<50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | -- | -- | -- | -- | ATI |
| QC-2 (e) | 09/01/95 | -- | -- | -- | 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
 MTBE Methyl T-Butyl Ether
 TOG Total oil and grease
 1,1,1-TCA 1,1,1-Trichloroethane
 PCE Tetrachloroethene
 DO Dissolved oxygen
 ug/l Micrograms per liter
 ppm Parts per million
 ND Not detected above reported detection limit
 -- Not measured/analyzed/applicable
 PACE Pace, Inc.
 ATI Analytical Technologies, Inc.

NOTES:

- (a) Top of casing elevations surveyed relative to an established benchmark with an elevation of 39.95 feet above mean sea level.
- (b) Groundwater elevations in feet above mean sea level.
- (c) Blind duplicate.
- (d) Well inaccessible due to parked car.
- (e) Travel blank.

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING FOR SELECTED METALS
 BP OIL COMPANY SERVICE STATION NO. 11107
 18501 HESPERIAN BOULEVARD, SAN LORENZO, CALIFORNIA

ALISTO PROJECT NO. 10-060

| WELL ID | DATE OF SAMPLING | CADMIUM (mg/l) | CHROMIUM (mg/l) | NICKEL (mg/l) | LEAD (mg/l) | ZINC (mg/l) | LAB |
|-----------------|------------------|----------------|-----------------|---------------|-------------|-------------|-----|
| MW-1 (1) | 03/01/95 | 0.0011 | 0.03 | 0.04 | 0.011 | 0.07 | ATI |
| MW-1 (1) | 09/01/95 | ND<0.0005 | 0.02 | 0.03 | 0.004 | ND<0.05 | ATI |
| <i>mcl(ppb)</i> | | <i>10</i> | <i>50</i> | <i>100</i> | <i>50</i> | | |

ABBREVIATIONS:

mg/l Milligrams per liter
 ND Not detected at or above reported detection limit
 ATI Analytical Technologies, Inc.

NOTES:

(1) Samples were not field or laboratory filtered.

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO ENGINEERING GROUP GROUNDWATER MONITORING

Client: BP
 Alisto Project No: 10-060-05-001
 Service Station No: 11107 04-002

Date: 9/1/95
 Field Personnel: DC
 Site Address: 18501 Hesperian Blvd
San Lorenzo CA

FIELD ACTIVITY:

- Groundwater Monitoring
- Groundwater Sampling
- Well Development

QUALITY CONTROL SAMPLES:

- MU-5 QC-1 Sample Duplicate (Well ID)
- QC-2 Trip Blank
- QC-3 Rinsate Blank

| Well ID | Well Diam | Order Measured/Sampled | Total Depth | Depth to Water | Depth to Product | Product Thickness | Comments |
|---------|-----------|------------------------|-------------|----------------|------------------|-------------------|----------|
| MW-1 | 2" | 1 | 30.70 | 18.19 | Q | P | |
| MW-2 | ↓ | 2 | 25.00 | 17.54 | ↓ | ↓ | |
| MW-3 | | 3 | 25.20 | 17.69 | | | |
| MW-6 | | 4 | 25.00 | 16.25 | | | |
| MW-7 | | 5 | 26.00 | 16.74 | | | |
| MW-5 | | 6 | 26.00 | 16.63 | | | |
| MW-4 | | ✓ | — | — | | | — |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Notes:

* MW-4 - car is parked on well, Station manager said car could not be moved because rear tire is flat.

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING

Groundwater Sampling

Date: 9/1/95

Project No. 10-00-04-002

GROUP

Day: Fr

Station No. 11107

1575 TREAT BOULEVARD, SUITE 201

Weather: Overcast

Address 18501 Hesperian Blvd, San Ramon CA

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

SAMPLER: DC

| Well ID | Depth to Water | Diam | Cap/Lock | Product Depth | Thickness | Gal. | Time | Temp °F | pH | E.C. | D.O. | Analysis |
|--|----------------|-----------|----------------|---------------|-----------|-------------|-------------|-------------|-------------|-------------|--------------|---|
| <u>mw-1</u> | <u>18.19</u> | <u>2"</u> | <u>OK</u> | <u>Ø</u> | <u>Ø</u> | <u>2</u> | <u>1133</u> | <u>65.2</u> | <u>7.49</u> | <u>0.42</u> | <u>7.9</u> | <input checked="" type="checkbox"/> EPA 601 <u>HR</u> |
| Total Depth - Water Level= <u>30.70 - 18.19 = 12.51</u> x Well Vol. Factor= <u>1.16</u> = <u>2.00</u> x 3 = <u>6.00</u> | | | | | | <u>4</u> | <u>1138</u> | <u>65.6</u> | <u>7.35</u> | <u>0.43</u> | | <input checked="" type="checkbox"/> TPH-G/BTEX <u>HR</u> 2 me tabs analysis |
| Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <u>1</u> <input type="checkbox"/> OSys Port | | | | | | <u>6</u> | <u>1143</u> | <u>65.7</u> | <u>7.28</u> | <u>0.43</u> | <u>7.8</u> | <input checked="" type="checkbox"/> TPH Diesel <u>HR</u> |
| Comments: <u>See comments pg 2</u> | | | | | | | | | | | | <input checked="" type="checkbox"/> TOG 5520 <u>H2SO4</u> |
| | | | | | | | | | | | Time Sampled | <u>1150 15-1</u> |
| <u>mw-2</u> | <u>17.54</u> | <u>2"</u> | <u>refused</u> | <u>Ø</u> | <u>Ø</u> | <u>1.5</u> | <u>1114</u> | <u>66.4</u> | <u>7.19</u> | <u>0.71</u> | <u>7.3</u> | <input type="checkbox"/> EPA 601 |
| Total Depth - Water Level= <u>25.00 - 17.54 = 7.46</u> x Well Vol. Factor= <u>1.16</u> = <u>1.19</u> x 3 = <u>3.58</u> | | | | | | <u>3</u> | <u>1117</u> | <u>67.1</u> | <u>7.12</u> | <u>0.72</u> | | <input checked="" type="checkbox"/> TPH-G/BTEX <u>HR</u> |
| Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <u>1</u> <input type="checkbox"/> OSys Port | | | | | | <u>3.75</u> | <u>1119</u> | <u>67.0</u> | <u>6.96</u> | <u>0.71</u> | <u>7.9</u> | <input type="checkbox"/> TPH Diesel |
| Comments: | | | | | | | | | | | | <input type="checkbox"/> TOG 5520 |
| | | | | | | | | | | | Time Sampled | <u>1125 15-2</u> |
| <u>mw-3</u> | <u>17.69</u> | <u>2"</u> | <u>OK</u> | <u>Ø</u> | <u>Ø</u> | <u>1.5</u> | <u>1157</u> | <u>67.0</u> | <u>7.21</u> | <u>0.73</u> | <u>7.2</u> | <input type="checkbox"/> EPA 601 |
| Total Depth - Water Level= <u>25.00 - 17.69 = 7.31</u> x Well Vol. Factor= <u>1.16</u> = <u>1.20</u> x 3 = <u>3.60</u> | | | | | | <u>3</u> | <u>1210</u> | <u>67.5</u> | <u>6.77</u> | <u>0.72</u> | | <input checked="" type="checkbox"/> TPH-G/BTEX <u>HR</u> |
| Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <u>1</u> <input type="checkbox"/> OSys Port | | | | | | <u>3.75</u> | <u>1216</u> | <u>67.5</u> | <u>6.77</u> | <u>0.72</u> | <u>7.8</u> | <input type="checkbox"/> TPH Diesel |
| Comments: | | | | | | | | | | | | <input type="checkbox"/> TOG 5520 |
| | | | | | | | | | | | Time Sampled | <u>1220 15-3</u> |
| <u>mw-4</u> | <u>16.25</u> | <u>2"</u> | <u>OK</u> | <u>Ø</u> | <u>Ø</u> | <u>1.5</u> | <u>1247</u> | <u>66.6</u> | <u>7.12</u> | <u>0.72</u> | <u>7.8</u> | <input type="checkbox"/> EPA 601 |
| Total Depth - Water Level= <u>25.00 - 16.25 = 8.75</u> x Well Vol. Factor= <u>1.16</u> = <u>1.4</u> x 3 = <u>4.20</u> | | | | | | <u>3</u> | <u>1254</u> | <u>66.9</u> | <u>7.01</u> | <u>0.71</u> | | <input checked="" type="checkbox"/> TPH-G/BTEX <u>HR</u> |
| Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <u>1</u> <input type="checkbox"/> OSys Port | | | | | | <u>4.25</u> | <u>1258</u> | <u>67.1</u> | <u>6.91</u> | <u>0.71</u> | <u>7.5</u> | <input type="checkbox"/> TPH Diesel |
| Comments: | | | | | | | | | | | | <input type="checkbox"/> TOG 5520 |
| | | | | | | | | | | | Time Sampled | <u>1302 15-4</u> |
| <u>mw-7</u> | <u>16.74</u> | <u>2"</u> | <u>OK</u> | <u>Ø</u> | <u>Ø</u> | <u>1.5</u> | <u>1224</u> | <u>67.1</u> | <u>6.94</u> | <u>0.71</u> | <u>7.9</u> | <input type="checkbox"/> EPA 601 |
| Total Depth - Water Level= <u>26.00 - 16.74 = 9.26</u> x Well Vol. Factor= <u>1.16</u> = <u>1.48</u> x 3 = <u>4.45</u> | | | | | | <u>3</u> | <u>1229</u> | <u>67.4</u> | <u>6.74</u> | <u>0.69</u> | | <input checked="" type="checkbox"/> TPH-G/BTEX <u>HR</u> |
| Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <u>1</u> <input type="checkbox"/> OSys Port | | | | | | <u>4.5</u> | <u>1233</u> | <u>67.4</u> | <u>6.69</u> | <u>0.68</u> | <u>7.5</u> | <input type="checkbox"/> TPH Diesel |
| Comments: | | | | | | | | | | | | <input type="checkbox"/> TOG 5520 |
| | | | | | | | | | | | Time Sampled | <u>1237 15-5</u> |

Hydr
Calibration

$\frac{1}{2} \times 77 = 4 \frac{1}{2}$

≈ 1047

DO meter
Icm

Zero DO soln \leq @ 1100

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING
GROUP

Groundwater Sampling

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

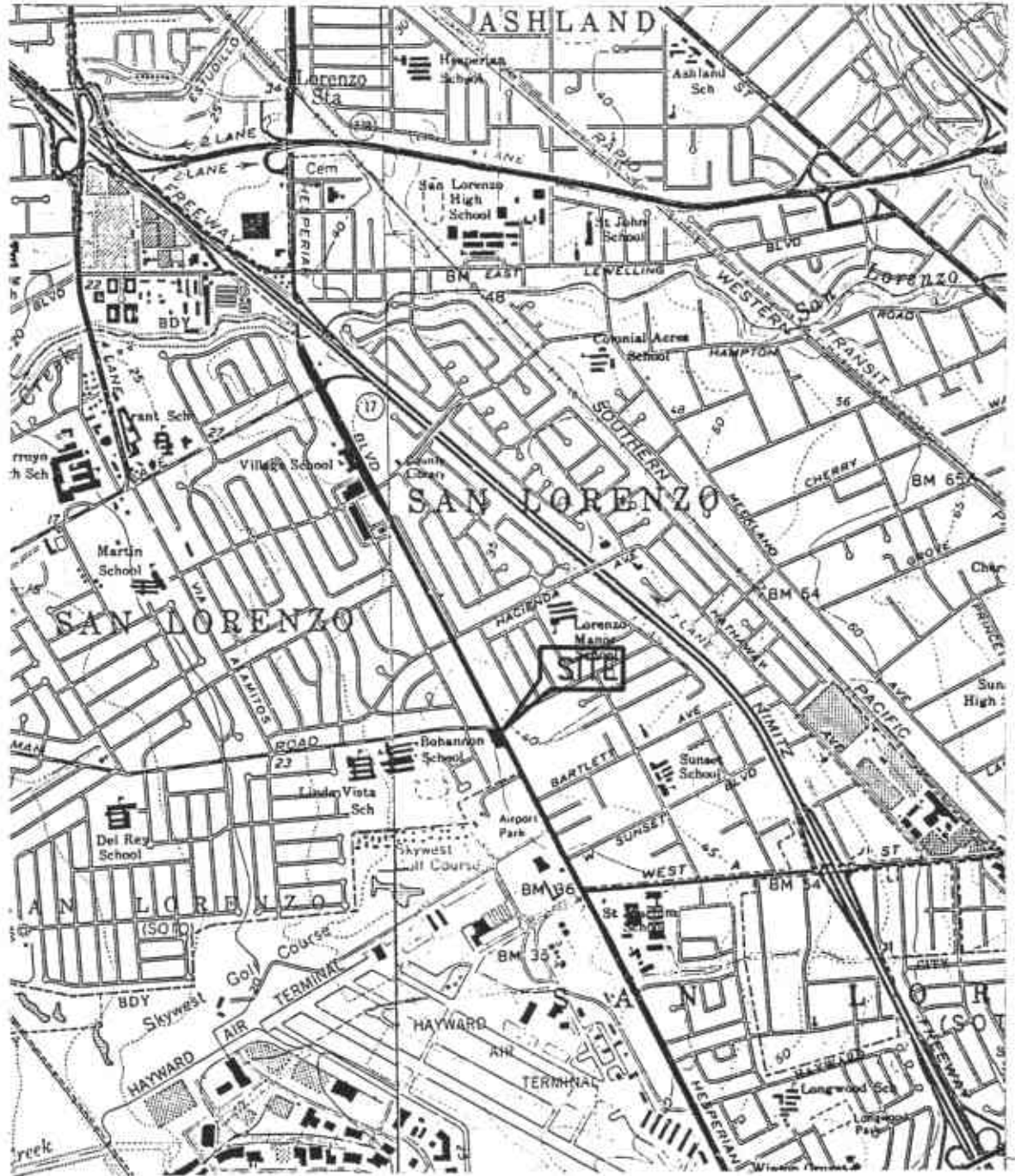
Date: 9/11/95 Project No. 10-060-04-002
Day: Fri Station No. 11107
Weather: Overcast Address 18501 Hesperian Blvd,
SAMPLER: DL San Lorenzo CA

| Well ID | Depth to Water | Diam | Cap/Lock | Product Depth | Thickness | Gal. | Time | Temp *F | pH | E.C. | D.O. | |
|--|----------------|------|----------|---------------|-----------|------|------|---------|------|------|------|--|
| MW-5 | 16.63 | 2" | DL | Φ | Φ | 1.5 | 1314 | 67.0 | 7.77 | 0.71 | 7.4 | <input type="checkbox"/> EPA 601 |
| Total Depth - Water Level= | | | | | | 3 | 1319 | 67.4 | 7.14 | 0.71 | | <input checked="" type="checkbox"/> TPH-G/BTEX <u>HW</u> |
| x Well Vol. Factor= | | | | | | 4.5 | 1324 | 67.6 | 7.09 | 0.73 | 7.4 | <input type="checkbox"/> TPH Diesel |
| x#vol. to Purge= | | | | | | | | | | | | <input type="checkbox"/> TOG 5520 |
| Purge Vol. | | | | | | | | | | | | Time Sampled |
| Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> Sys Port | | | | | | | | | | | | 1330 15-6 |
| Comments: <u>QC-1 from this well (5-7)</u> | | | | | | | | | | | | |

| Well ID | Depth to Water | Diam | Cap/Lock | Product Depth | Thickness | Gal. | Time | Temp *F | pH | E.C. | D.O. | |
|---|----------------|------|----------|---------------|-----------|------|------|---------|----|------|------|-------------------------------------|
| | | | | | | | | | | | | <input type="checkbox"/> EPA 601 |
| Total Depth - Water Level= | | | | | | | | | | | | <input type="checkbox"/> TPH-G/BTEX |
| x Well Vol. Factor= | | | | | | | | | | | | <input type="checkbox"/> TPH Diesel |
| x#vol. to Purge= | | | | | | | | | | | | <input type="checkbox"/> TOG 5520 |
| Purge Vol. | | | | | | | | | | | | Time Sampled |
| Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> Sys Port | | | | | | | | | | | | |
| Comments: | | | | | | | | | | | | |

| Well ID | Depth to Water | Diam | Cap/Lock | Product Depth | Thickness | Gal. | Time | Temp *F | pH | E.C. | D.O. | |
|---|----------------|------|----------|---------------|-----------|------|------|---------|----|------|------|-------------------------------------|
| | | | | | | | | | | | | <input type="checkbox"/> EPA 601 |
| Total Depth - Water Level= | | | | | | | | | | | | <input type="checkbox"/> TPH-G/BTEX |
| x Well Vol. Factor= | | | | | | | | | | | | <input type="checkbox"/> TPH Diesel |
| x#vol. to Purge= | | | | | | | | | | | | <input type="checkbox"/> TOG 5520 |
| Purge Vol. | | | | | | | | | | | | Time Sampled |
| Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Bailer(s) <input type="checkbox"/> Sys Port | | | | | | | | | | | | |
| Comments: | | | | | | | | | | | | |

* MW-1 (5-1) sample out of order because mechanic was working on a car. Mechanic said he was almost done; will sample later



SOURCE:
USGS MAP, HAYWARD & SAN LEONRO QUADRANGLES,
7.5 MINUTE SERIES, 1959.
PHOTOREVISED 1980.

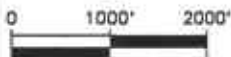


FIGURE 1

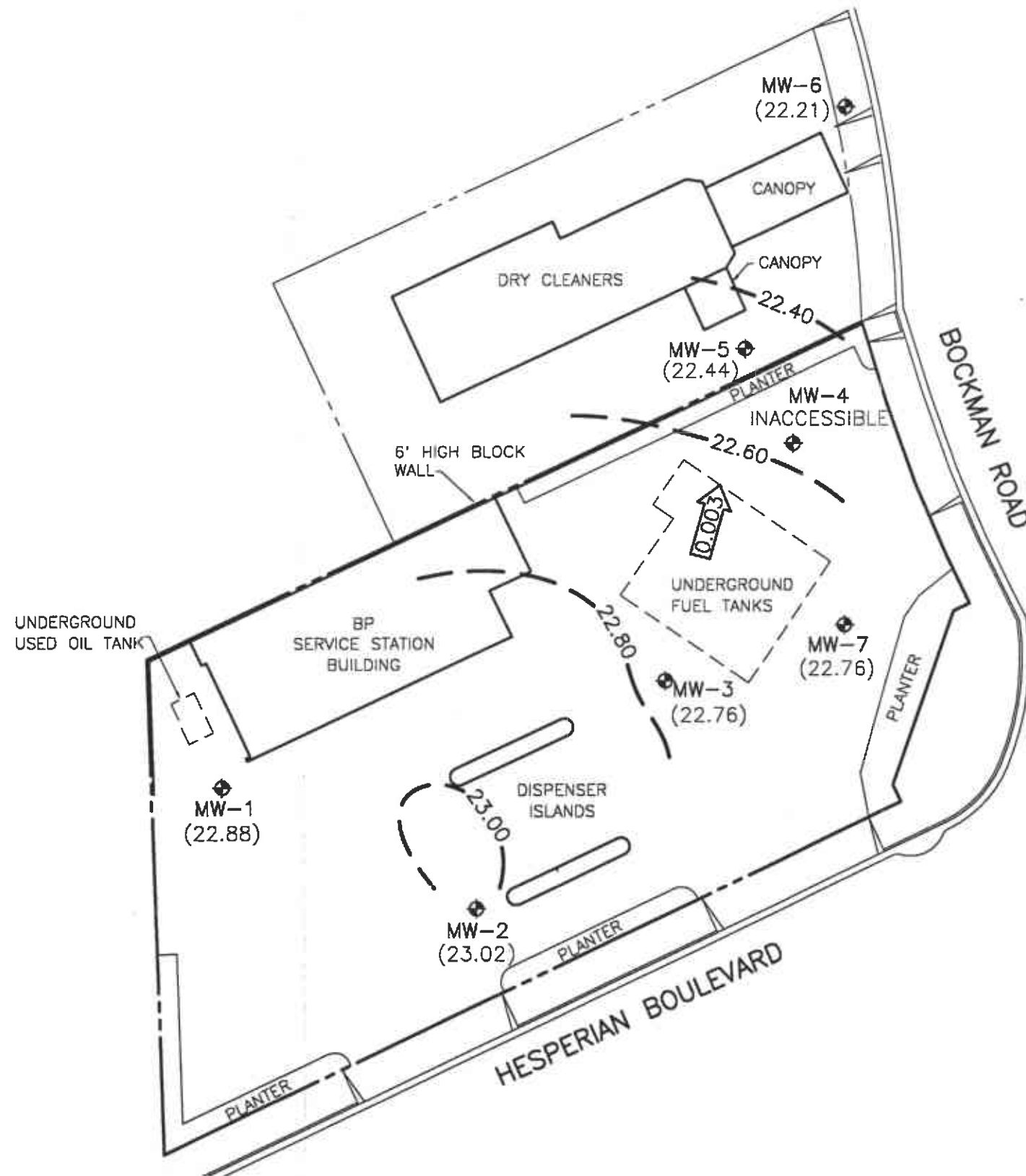
VICINITY MAP

BP OIL SERVICE STATION NO. 11107
18501 HESPERIAN BOULEVARD
SAN LORENZO, CALIFORNIA

PROJECT NO. 10-060



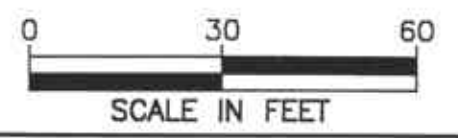
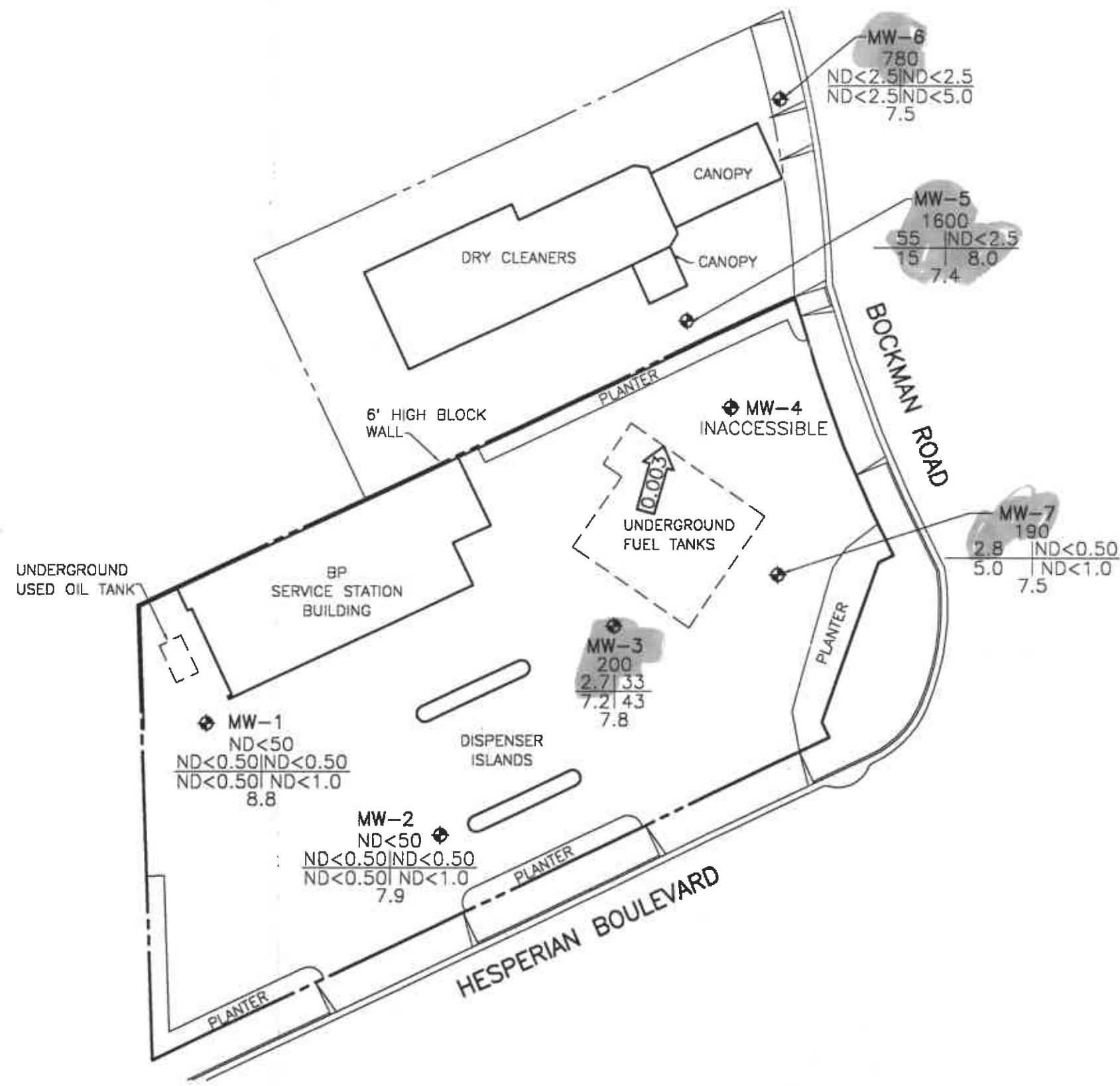
ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- ◆ GROUNDWATER MONITORING WELL
- (23.02) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 23.00 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL-0.20 FOOT)
- ←0.003 GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
SEPTEMBER 1, 1995
 BP OIL SERVICE STATION NO. 11107
 18501 HESPERIAN BOULEVARD
 SAN LORENZO, CALIFORNIA
 PROJECT NO. 10-060



LEGEND

- ◆ GROUNDWATER MONITORING WELL
- TPH-G CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
- B | T
- E | X
- DO
- TPH-G TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X TOTAL XYLENES
- DO DISSOLVED OXYGEN
- ND NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- ←0.003→ CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3
CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER
SEPTEMBER 1, 1995
 BP OIL SERVICE STATION NO. 11107
 18501 HESPERIAN BOULEVARD
 SAN LORENZO, CALIFORNIA
 PROJECT NO. 10-060

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



ATI I.D.: 50901

September 18, 1995

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

Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA
Project # : ???????/10-060-05-001

Attention: BILL HOWELL

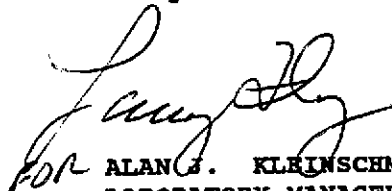
Analytical Technologies, Inc. has received the following sample(s):

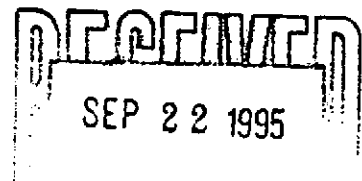
| <u>Date Received</u> | <u>Quantity</u> | <u>Matrix</u> |
|----------------------|-----------------|---------------|
| September 02, 1995 | 8 | WATER |

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 S. KLEINSCHMIDT
LABORATORY MANAGER



SAMPLE CROSS REFERENCE

Client : ALISTO ENGINEERING
 Project # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

Report Date: September 18, 1995
 ATI I.D. : 509016

| ATI # | Client Description | Matrix | Date Collected |
|-------|--------------------|--------|----------------|
| 1 | S-1 | WATER | 01-SEP-95 |
| 2 | S-2 | WATER | 01-SEP-95 |
| 3 | S-3 | WATER | 01-SEP-95 |
| 4 | S-4 | WATER | 01-SEP-95 |
| 5 | S-5 | WATER | 01-SEP-95 |
| 6 | S-6 | WATER | 01-SEP-95 |
| 7 | S-7 | WATER | 01-SEP-95 |
| 8 | S-8 | WATER | 01-SEP-95 |

---TOTALS---

| <u>Matrix</u> | <u># Samples</u> |
|---------------|------------------|
| WATER | 8 |

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 # : ???????/10-060-05-001
Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

ATI I.D.: 509016

| Analysis | Technique/Description |
|--|---|
| EPA 413.2 (OIL & GREASE) | INFRARED SPECTROMETER |
| EPA 6010 (CHROMIUM) | INDUCTIVELY COUPLED ARGON PLASMA |
| EPA 6010 (NICKEL) | INDUCTIVELY COUPLED ARGON PLASMA |
| EPA 6010 (ZINC) | INDUCTIVELY COUPLED ARGON PLASMA |
| EPA 7131 (CADMIUM) | INDUCTIVELY COUPLED ARGON PLASMA |
| EPA 7421 (LEAD) | INDUCTIVELY COUPLED ARGON PLASMA |
| 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 # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO,CA

ATI I.D.: 509016

| Sample # | Client ID | Matrix | Date Sampled | Date Received |
|----------|-----------|--------|--------------|---------------|
| 1 | S-1 | WATER | 01-SEP-95 | 02-SEP-95 |

| Parameter | Units | 1 |
|----------------|-------|------|
| OIL AND GREASE | MG/L | 0.06 |

GENERAL CHEMISTRY - QUALITY CONTROL

DUP/MS

Page 4

Client : ALISTO ENGINEERING

Project # : ???????/10-060-05-001

ATI I.D. : 509016

Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| Parameters | REF I.D. | Units | Sample Result | Dup Result | RPD | Spiked Sample | Spike Conc | % Rec |
|----------------|-----------|-------|---------------|------------|-----|---------------|------------|-------|
| OIL AND GREASE | 509016-01 | MG/L | 0.06 | 0.07 | 15 | 4.3 | 5.0 | 85 |

% 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

Page 1

Client : ALISTO ENGINEERING

Project # : ???????/10-060-05-001

ATI I.D. : 509010

Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| Parameters | Blank Spike ID# | Units | Blank Result | Spiked Sample | Spike Conc. | % Rec |
|----------------|--------------------|-------|-----------------|------------------|----------------|----------|
| OIL AND GREASE | 58653 | MG/L | <0.05 | 4.5 | 5.0 | 90 |

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

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

METALS RESULTS

Client : ALISTO ENGINEERING
 Project # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

ATI I.D.: 50901

| Sample # | Client ID | Matrix | Date Sampled | Date Received |
|----------|-----------|--------|--------------|---------------|
| 1 | S-1 | WATER | 01-SEP-95 | 02-SEP-9 |

| Parameter | Units | 1 |
|-----------|-------|---------|
| CADMIUM | MG/L | <0.0005 |
| CHROMIUM | MG/L | 0.02 |
| NICKEL | MG/L | 0.03 |
| LEAD | MG/L | 0.004 |
| ZINC | MG/L | <0.05 |

METALS - QUALITY CONTROL

DUP/MS

Page 1

Client : ALISTO ENGINEERING
 Project # : ???????/10-060-05-001

ATI I.D. : 509010

Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| Parameters | REF I.D. | Units | Sample Result | Dup Result | RPD | Spiked Sample | Spike Conc | % Rec |
|------------|-----------|-------|---------------|------------|-----|---------------|------------|-------|
| CADMIUM | 509023-01 | MG/L | <0.005 | <0.0005 | 0 | 0.046 | 0.050 | 92 |
| CHROMIUM | 509023-01 | MG/L | <0.01 | <0.01 | 0 | 0.19 | 0.20 | 95 |
| LEAD | 509023-01 | MG/L | 0.009 | 0.009 | 0 | 0.48 | 0.50 | 94 |
| NICKEL | 509023-01 | MG/L | <0.01 | <0.01 | 0 | 0.48 | 0.50 | 96 |
| ZINC | 509023-01 | MG/L | <0.05 | <0.05 | 0 | 0.47 | 0.50 | 94 |

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

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

METALS - QUALITY CONTROL

BLANK SPIKE

Client : ALISTO ENGINEERING

Project # : ???????/10-060-05-001

ATI I.D. : 509016

Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| Parameters | Blank Spike ID# | Units | Blank Result | Spiked Sample | Spike Conc. | % Rec |
|------------|-----------------|-------|--------------|---------------|-------------|-------|
| CADMIUM | 58778 | MG/L | <0.0005 | 0.049 | 0.050 | 98 |
| CHROMIUM | 58763 | MG/L | <0.01 | 0.20 | 0.20 | 100 |
| LEAD | 58778 | MG/L | <0.002 | 0.49 | 0.50 | 98 |
| NICKEL | 58763 | MG/L | <0.01 | 0.50 | 0.50 | 100 |
| ZINC | 58764 | MG/L | <0.05 | 0.48 | 0.50 | 96 |

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

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

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS: C7-C24)
 Client : ALISTO ENGINEERING
 Project # : ????????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

ATI I.D. : 509016

| Sample Client ID # | Matrix | Date Sampled | Date Extracted | Date Analyzed | Dil. Factor |
|--------------------------------|--------|--------------|----------------|---------------|-------------|
| 1 S-1 | WATER | 01-SEP-95 | 05-SEP-95 | 06-SEP-95 | 1.00 |
| Parameter | Units | 1 | | | |
| FUEL HYDROCARBONS | MG/L | <0.05 | | | |
| HYDROCARBON RANGE | | - | | | |
| HYDROCARBONS QUANTITATED USING | | - | | | |
| <u>SURROGATES</u> | | | | | |
| BIS(2-ETHYLHEXYL) PHTHALATE | % | 88 | | | |

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 Blank I.D. : 36638
 Client : ALISTO ENGINEERING
 Project # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

ATI I.D. : 509016
 Date Extracted: 05-SEP-95
 Date Analyzed : 06-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 | % | 113 |

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)
 MSMSD # : 78336
 Client : ALISTO ENGINEERING

ATI I.D. : 509016
 Date Extracted: 05-SEP-95
 Date Analyzed : 07-SEP-95
 Sample Matrix : WATER
 REF I.D. : REAGENT WATER

Project # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| Parameters | Units | Sample Result | Conc Spike | Spiked Sample | % Rec | Dup Spike | Dup % Rec | RPD |
|-------------------|-------|---------------|------------|---------------|-------|-----------|-----------|-----|
| FUEL HYDROCARBONS | MG/L | <0.050 | 1.0 | 0.54 | 54 | 0.54 | 54 | 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. : 509016
 Project # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| Sample # | Client ID | Matrix | Date Sampled | Date Extracted | Date Analyzed | Dil. Factor |
|----------|-----------|--------|--------------|----------------|---------------|-------------|
| 1 | S-1 | WATER | 01-SEP-95 | N/A | 15-SEP-95 | 1.00 |
| 2 | S-2 | WATER | 01-SEP-95 | N/A | 15-SEP-95 | 1.00 |
| 3 | S-3 | WATER | 01-SEP-95 | N/A | 15-SEP-95 | 1.00 |

| Parameter | Units | 1 | 2 | 3 |
|--------------------------------|-------|----------|----------|----------|
| METHYL T-BUTYL ETHER | UG/L | <5.0 | <5.0 | <5.0 |
| BENZENE | UG/L | <0.50 | <0.50 | 2.7 |
| TOLUENE | UG/L | <0.50 | <0.50 | 33 |
| ETHYLBENZENE | UG/L | <0.50 | <0.50 | 7.2 |
| XYLENES (TOTAL) | UG/L | <1.0 | <1.0 | 43 |
| FUEL HYDROCARBONS | UG/L | <50 | <50 | 200 |
| HYDROCARBON RANGE | | C6-C12 | C6-C12 | C6-C12 |
| HYDROCARBONS QUANTITATED USING | | GASOLINE | GASOLINE | GASOLINE |
| <u>SURROGATES</u> | | | | |
| TRIFLUOROTOLUENE | % | 88 | 97 | 96 |

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING ATI I.D. : 509016
 Project # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| Sample # | Client ID | Matrix | Date Sampled | Date Extracted | Date Analyzed | Dil. Factor |
|----------|-----------|--------|--------------|----------------|---------------|-------------|
| 4 | S-4 | WATER | 01-SEP-95 | N/A | 15-SEP-95 | 5.00 |
| 5 | S-5 | WATER | 01-SEP-95 | N/A | 14-SEP-95 | 1.00 |
| 6 | S-6 | WATER | 01-SEP-95 | N/A | 15-SEP-95 | 5.00 |

| Parameter | Units | 4 | 5 | 6 |
|--------------------------------|-------|----------|----------|----------|
| METHYL T-BUTYL ETHER | UG/L | 2800 | 10 | 1200 |
| BENZENE | UG/L | <2.5 | 2.8 | 55 |
| TOLUENE | UG/L | <2.5 | <0.50 | <2.5 |
| ETHYLBENZENE | UG/L | <2.5 | 5.0 | 15 |
| XYLENES (TOTAL) | UG/L | <5.0 | <1.0 | 8.0 |
| FUEL HYDROCARBONS | UG/L | 780 | 190 | 1600 |
| HYDROCARBON RANGE | | C6-C12 | C6-C12 | C6-C12 |
| HYDROCARBONS QUANTITATED USING | | GASOLINE | GASOLINE | GASOLINE |
| SURROGATES | | | | |
| TRIFLUOROTOLUENE | % | 102 | 120 | 114 |

GAS CHROMATOGRAPHY RESULTS

Test : MOD EPA 8015-CDOHS/8020 (HYDROCARBONS C6-C12/BTXE)
 Client : ALISTO ENGINEERING ATI I.D. : 509016
 Project # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| Sample # | Client ID | Matrix | Date Sampled | Date Extracted | Date Analyzed | Dil. Factor |
|----------|-----------|--------|--------------|----------------|---------------|-------------|
| 7 | S-7 | WATER | 01-SEP-95 | N/A | 15-SEP-95 | 5.00 |
| 8 | S-8 | WATER | 01-SEP-95 | N/A | 15-SEP-95 | 1.00 |

| Parameter | Units | 7 | 8 |
|--------------------------------|-------|----------|----------|
| METHYL T-BUTYL ETHER | UG/L | 1300 | <5.0 |
| BENZENE | UG/L | 64 | <0.50 |
| TOLUENE | UG/L | <2.5 | <0.50 |
| ETHYLBENZENE | UG/L | 14 | <0.50 |
| XYLENES (TOTAL) | UG/L | 3.1 | <1.0 |
| FUEL HYDROCARBONS | UG/L | 1200 | <50 |
| HYDROCARBON RANGE | | C6-C12 | C6-C12 |
| HYDROCARBONS QUANTITATED USING | | GASOLINE | GASOLINE |
| <u>SURROGATES</u> | | | |
| TRIFLUOROTOLUENE | % | 118 | 99 |

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

| | | | |
|--|---|-----------------|-----------|
| Test | : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE) | ATI I.D. | : 509016 |
| Blank I.D. | : 36749 | Date Extracted: | N/A |
| Client | : ALISTO ENGINEERING | Date Analyzed: | 15-SEP-95 |
| Project # | : ???????/10-060-05-001 | Dil. Factor | : 1.00 |
| Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, 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 | % | 97 |

GAS CHROMATOGRAPHY - QUALITY CONTROL

REAGENT BLANK

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE)
 Blank I.D. : 36751
 Client : ALISTO ENGINEERING
 Project # : ???????/10-060-05-001
 Project Name: BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

ATI I.D. : 509016
 Date Extracted: N/A
 Date Analyzed : 16-SEP-95
 Dil. Factor : 1.00

| Parameters | Units | Results |
|--------------------------------|-------|----------|
| METHYL T-BUTYL ETHER | UG/L | <5.0 |
| BENZENE | UG/L | <0.50 |
| TOLUENE | UG/L | <0.50 |
| ETHYLBENZENE | UG/L | <0.50 |
| XYLENES (TOTAL) | UG/L | <1.0 |
| FUEL HYDROCARBONS | UG/L | <50 |
| HYDROCARBON RANGE | | C6-C12 |
| HYDROCARBONS QUANTITATED USING | | GASOLINE |
| <u>SURROGATES</u> | | |
| TRIFLUOROTOLUENE | % | 97 |

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTXE) ATI I.D. : 509016
 Blank Spike #: 58879 Date Extracted: N/A
 Client : ALISTO ENGINEERING Date Analyzed : 15-SEP-95
 Project # : ???????/10-060-05-001 Sample Matrix : WATER
 Project Name : BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

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

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

GAS CHROMATOGRAPHY - QUALITY CONTROL

BLANK SPIKE

Test : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS/BTEX) ATI I.D. : 509016
 Blank Spike #: 58881 Date Extracted: N/A
 Client : ALISTO ENGINEERING Date Analyzed : 16-SEP-95
 Project # : ???????/10-060-05-001 Sample Matrix : WATER
 Project Name : BP SITE#11107/18501 HESPESIVAN BLVD, SAN LORENZO, CA

| 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

ACCESSION #: 509016

INITIALS: LY

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

| | | | |
|----|--|--------------------------------------|--------------------------------------|
| 1 | Does this project require special handling according to NFESC Levels C, D, AFCEE or CLP protocols? If yes, complete a) and b) a) pH sample aliquoted: yes / no / na b) Either 1) Record Bottle Lot #'s: Or 2) Attach Sample Kit Request Form(s) | YES | <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 | 2 | |
| 3 | Are custody seals required for this project ? | YES | <input checked="" type="radio"/> N/A |
| | a) are Custody Seals present on Cooler(s) ? | YES | <input checked="" type="radio"/> NO |
| | If yes, are seals intact ? | YES | <input checked="" type="radio"/> 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. | <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. | SEE MCD | |
| | 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: * 2 VOA VIALS RECEIVED FOR S-1 LABELED ANALYSIS 8010 - NOT REQUESTED

COC
 (1) ONE VOA VIAL FOR S-2 RECEIVED FROZEN WITH BOTTOM OF VOA VIAL POPPED OFF - ONE VOA VIAL REMAINING = LIMITED SAMPLE.

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 # 509016

CHAIN OF CUSTODY

No. 055927

Page 1 of 1

| | | | | | | |
|--|--|--|--|-------------------------------------|---|--|
| CONSULTANT'S NAME <i>Aristo Engineering</i> | | ADDRESS <i>1575 Tenth Blvd</i> | | CITY <i>Wauwatosa WI</i> | STATE <i>WI</i> | ZIP CODE <i>53190</i> |
| BP SITE NUMBER <i>11107</i> | BP CORNER ADDRESS/CITY <i>18501 Hesperia Blvd, San Lorenzo CA</i> | | | | CONSULTANT PROJECT NUMBER <i>10-060-05-001</i> | |
| CONSULTANT PROJECT MANAGER <i>Bill Howell</i> | | PHONE NUMBER <i>(510) 295 1650</i> | | FAX NUMBER <i>(510) 295 1823</i> | | CONSULTANT CONTRACT NUMBER <i>Pending</i> |
| BP CONTACT <i>Scott Houston</i> | | BP ADDRESS <i>Renton WA</i> | | PHONE NUMBER | | FAX NO. |
| LAB CONTACT <i>ATI Inc</i> | | LABORATORY ADDRESS <i>San Diego CA</i> | | PHONE NUMBER | | FAX NO. |
| SAMPLED BY (Please Print Name) <i>Dave Cusack</i> | | SAMPLED BY (Signature) <i>[Signature]</i> | | SHIPMENT DATE <i>9/1/95</i> | | SHIPMENT METHOD <i>Fed-ex</i> |

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER
6680235870

| SAMPLE DESCRIPTION | COLLECTION DATE | MATRIX SOIL/WATER | CONTAINERS | | PRESERVATIVE | HC | HC | HC | HC | COMMENTS | | | |
|--------------------|-----------------|-------------------|------------|-------------|--------------|-----|-----|-----|-----|----------|---|-----|----|
| | COLLECTION TIME | | NO. | TYPE (VOL.) | LAB SAMPLE # | TPH | TPH | TPH | TPH | | | | |
| S-1 1150 | 9/1/95 | H2O | 9 | var | 01 | X | X | X | X | | | | |
| S-2 1125 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | | |
| S-3 1720 | | | | | | | | | | | 2 | Vol | 02 |
| S-4 1302 | | | | | | | | | | | | | 03 |
| S-5 1237 | | | | | | | | | | | | | 04 |
| S-6 1330 | | | | | | | | | | | | | 05 |
| S-7 - | | | | | | | | | | | | | 06 |
| S-8 - | | | | | | | | | | | | | 07 |
| | | | | | | | | | | | | | 08 |

| RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | ADDITIONAL COMMENTS |
|-------------------------------|---------------|-------------|---------------------------|---------------|--------------|---------------------|
| <i>Jane White Aristo</i> | <i>9/1/95</i> | <i>1100</i> | <i>[Signature] / ATI</i> | <i>9-2-95</i> | <i>08:45</i> | |