



BP OIL

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WOP 3878

March 16, 1994

Mr. Ron Owcarz
Alameda County Health Care Services Agency
80 Swan Way
Oakland, Ca 94621

RE: BP OIL Facility #11132
3201 35th Avenue
Oakland, California 94619

Dear Mr. Owcarz:

Attached please find our GROUNDWATER MONITORING AND SAMPLING REPORT DATED March 2, 1994 for the above referenced facility.

Please call me at (206) 251-0689 with questions regarding this submission.

Respectfully,

Scott T. Hooton
Group Leader

STH:js ERM11132

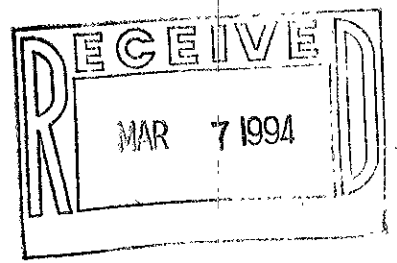
cc: Mr. Brady Nagle

Mr. Eddie so

Mr. Markus Niebanck

Mr. R. Merriker

site file



GROUNDWATER MONITORING AND SAMPLING REPORT

**BP Oil Company Service Station No. 11132
3201 35th Street
Oakland, California**

Project No. 10-024-03-003

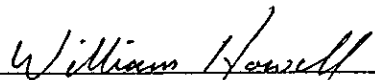
Prepared for:

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

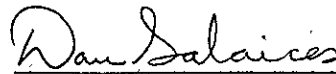
Prepared by:

**Alisto Engineering Group
1777 Oakland Boulevard, Suite 200
Walnut Creek, California**

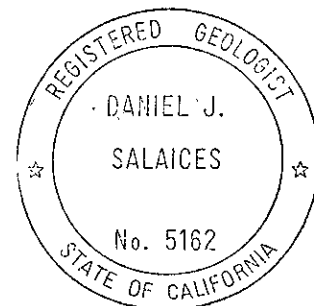
March 2, 1994



**William Howell
Project Manager**



**Dan Salaices
Registered Geologist**



GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11132
3201 35th Street
Oakland, California

Project No. 10-024-03-003

March 2, 1994

INTRODUCTION

This report presents the results and findings of the January 21, 1994 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11132, 3201 35th Street, 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 relative 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, and electrical conductivity. 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.

FREE PRODUCT MONITORING AND RECOVERY

Passive product recovery systems have been installed in Monitoring Wells MW-2, MW-8, MW-9, and MW-10 to recover liquid-phase product. Product thicknesses measured during this and previous monitoring events are presented in Table 1. The volume of free product recovered from the wells is presented in Table 2.



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION (a) (Feet) | DEPTH TO WATER (Feet) | PRODUCT THICKNESS (Feet) | GROUNDWATER ELEVATION (b) (Feet) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | LAB |
|----------|---------------------------------|--------------------------------|--------------------------|-----------------------------|-------------------------------------|----------------|------------|------------|------------|------------|------|
| MW-1 | 07/09/90 | 169.75 | -- | 0.22 | -- | -- | -- | -- | -- | -- | -- |
| MW-1 | 12/21/90 | 169.75 | -- | 0.58 | -- | -- | -- | -- | -- | -- | -- |
| MW-1 | 03/07/91 | 169.75 | 20.59 | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-1 | 06/27/91 | 169.75 | -- | 0.18 | -- | -- | -- | -- | -- | -- | -- |
| MW-1 | 09/27/91 | 169.75 | -- | 0.27 | -- | -- | -- | -- | -- | -- | -- |
| MW-1 | 12/18/91 | 169.75 | -- | 0.28 | -- | -- | -- | -- | -- | -- | -- |
| MW-1 | 04/01/91 | 169.75 | 16.51 | 0.15 | 153.35 | -- | -- | -- | -- | -- | -- |
| MW-1 | 07/03/92 | 169.75 | 22.30 | 0.27 | 147.65 | -- | -- | -- | -- | -- | -- |
| MW-1 | 10/05/92 | 169.75 | 23.98 | 0.24 | 145.95 | -- | -- | -- | -- | -- | -- |
| MW-1 | 01/13/93 | 169.75 | 17.03 | 0.24 | 152.90 | -- | -- | -- | -- | -- | -- |
| MW-1 | 04/23/93 | 169.75 | 18.10 | 0.42 | 151.97 | -- | -- | -- | -- | -- | -- |
| MW-1 | 07/12/93 | 169.75 | 22.02 | 0.49 | 148.10 | -- | -- | -- | -- | -- | -- |
| MW-1 | 10/21/93 | 169.75 | 25.12 | 1.09 | 145.45 | -- | -- | -- | -- | -- | -- |
| MW-1 | 01/21/94 | 169.75 | 23.02 | 0.76 | 147.30 | -- | -- | -- | -- | -- | -- |
| MW-2 | 07/09/90 | 168.14 | -- | 0.10 | -- | -- | -- | -- | -- | -- | -- |
| MW-2 | 12/21/90 | 168.14 | -- | 0.48 | -- | -- | -- | -- | -- | -- | -- |
| MW-2 | 03/07/91 | 168.14 | 19.18 | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-2 | 06/27/91 | 168.14 | -- | 0.19 | -- | -- | -- | -- | -- | -- | -- |
| MW-2 | 09/27/91 | 168.14 | -- | 0.15 | -- | -- | -- | -- | -- | -- | -- |
| MW-2 | 12/18/91 | 168.14 | -- | 0.36 | -- | -- | -- | -- | -- | -- | -- |
| MW-2 | 04/01/91 | 168.14 | 15.21 | 0.10 | 153.01 | -- | -- | -- | -- | -- | -- |
| MW-2 | 07/03/92 | 168.14 | 20.93 | 0.03 | 147.23 | -- | -- | -- | -- | -- | -- |
| MW-2 | 10/05/92 | 168.14 | 22.74 | 0.21 | 145.56 | -- | -- | -- | -- | -- | -- |
| MW-2 | 01/13/93 | 168.14 | 15.55 | 0.02 | 152.61 | -- | -- | -- | -- | -- | -- |
| MW-2 | 04/23/93 | 168.14 | 16.54 | 0.21 | 151.76 | -- | -- | -- | -- | -- | -- |
| MW-2 | 07/12/93 | 168.14 | 20.46 | 0.06 | 147.73 | -- | -- | -- | -- | -- | -- |
| MW-2 | 10/21/93 | 168.14 | 24.91 | 0.31 | 143.46 | -- | -- | -- | -- | -- | -- |
| MW-2 | 01/21/94 | 168.14 | 21.20 | -- | 146.94 | -- | -- | -- | -- | -- | -- |
| MW-3 | 07/09/90 | 167.17 | -- | -- | -- | 140 | 5.3 | 4.6 | 2.0 | 3.8 | -- |
| MW-3 | 12/21/90 | 167.17 | -- | -- | -- | 0.19 | 100 | 6.0 | 0.9 | 27 | -- |
| MW-3 | 03/07/91 | 167.17 | 17.40 | -- | 149.77 | 0.4 | 69 | 22 | 6.1 | 57 | -- |
| MW-3 | 06/27/91 | 167.17 | -- | -- | -- | 380 | 28 | 26 | 13 | 46 | -- |
| MW-3 | 09/27/91 | 167.17 | -- | -- | -- | 0.07 | 7.9 | ND | 0.4 | 1.1 | -- |
| MW-3 | 12/18/91 | 167.17 | -- | -- | -- | 0.26 | 34 | 24 | 0.8 | 28 | -- |
| MW-3 | 04/01/91 | 167.17 | 13.69 | -- | 153.48 | ND | ND | ND | ND | ND | -- |
| MW-3 | 07/03/92 | 167.17 | 19.59 | -- | 147.58 | 71 | 9.4 | 0.9 | 5.0 | 13 | ANA |
| MW-3 | 10/05/92 | 167.17 | 21.22 | -- | 145.95 | 67 | 5.1 | 1.1 | 6.1 | 8.1 | ANA |
| QC-1 (c) | 10/05/92 | -- | -- | -- | -- | ND<50 | 2.2 | ND<0.5 | 1.5 | 2.8 | ANA |
| MW-3 | 01/13/93 | 167.17 | 13.63 | -- | 153.54 | 830 | 50 | 34 | 42 | 89 | PACE |
| MW-3 | 04/23/93 | 167.17 | 15.02 | -- | 152.15 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| QC-1 (c) | 04/23/93 | -- | -- | -- | -- | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-3 | 07/12/93 | 167.17 | 19.16 | -- | 148.01 | 250 | 12 | 4.2 | 12 | 16 | PACE |
| MW-3 | 10/21/93 | 167.17 | 21.81 | -- | 145.36 | 52 | 4.4 | 1.4 | 4.7 | 3.3 | PACE |
| QC-1 (c) | 10/21/93 | -- | -- | -- | -- | 65 | 7.4 | 1.0 | 6.9 | 4.2 | PACE |
| MW-3 | 01/21/94 | 167.17 | 19.94 | -- | 147.23 | 57 | 3.0 | 3.4 | 3.6 | 9.0 | PACE |

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION (a) (Feet) | DEPTH TO WATER (Feet) | PRODUCT THICKNESS (Feet) | GROUNDWATER ELEVATION (b) (Feet) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | LAB |
|----------|---------------------------------|--------------------------------|--------------------------|-----------------------------|-------------------------------------|----------------|------------|------------|------------|------------|------|
| MW-4 | 07/09/90 | 170.36 | -- | -- | -- | ND | ND | ND | ND | ND | -- |
| MW-4 | 12/21/90 | 170.36 | -- | -- | -- | ND | ND | ND | ND | 0.8 | -- |
| MW-4 | 03/07/91 | 170.36 | 20.72 | -- | 149.64 | ND | 2.2 | 3.8 | 1.5 | 2.8 | -- |
| MW-4 | 06/27/91 | 170.36 | -- | -- | -- | ND | 6.3 | 1.8 | 0.4 | 1.0 | -- |
| MW-4 | 09/27/91 | 170.36 | -- | -- | -- | ND | ND | ND | ND | ND | -- |
| MW-4 | 12/18/91 | 170.36 | -- | -- | -- | ND | ND | ND | ND | ND | -- |
| MW-4 | 04/01/91 | 170.36 | 17.49 | -- | 152.87 | ND | ND | ND | ND | ND | -- |
| MW-4 | 07/03/92 | 170.36 | 22.16 | -- | 148.20 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ANA |
| MW-4 | 10/05/92 | 170.36 | 23.38 | -- | 146.98 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ANA |
| MW-4 | 01/13/93 | 170.36 | 17.58 | -- | 152.78 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-4 | 04/23/93 | 170.36 | 15.72 | -- | 154.64 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-4 | 07/12/93 | 170.36 | 21.74 | -- | 148.62 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-4 | 10/21/93 | 170.36 | 23.84 | -- | 146.52 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-4 | 01/21/94 | 170.36 | 22.42 | -- | 147.94 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-5 | 07/09/90 | 165.14 | -- | -- | -- | 280 | 200 | 210 | 46 | 290 | -- |
| MW-5 | 12/21/90 | 165.14 | -- | -- | -- | 0.69 | 300 | 34 | 8.4 | 39 | -- |
| MW-5 | 03/07/91 | 165.14 | 16.60 | -- | 148.54 | ND | 17 | 0.9 | 0.7 | 1.6 | -- |
| MW-5 | 06/27/91 | 165.14 | -- | -- | -- | 330 | 120 | 10 | 12 | 8 | -- |
| MW-5 | 09/27/91 | 165.14 | -- | -- | -- | 0.73 | 230 | 16 | 20 | 22 | -- |
| MW-5 | 12/18/91 | 165.14 | -- | -- | -- | ND | ND | ND | ND | ND | -- |
| MW-5 | 04/01/91 | 165.14 | 11.99 | -- | 153.15 | 800 | 250 | 54 | 11 | 60 | -- |
| MW-5 | 07/03/92 | 165.14 | 18.65 | -- | 146.49 | 150 | 36 | ND<0.5 | ND<0.5 | 1.1 | ANA |
| MW-5 | 10/05/92 | 165.14 | 20.32 | -- | 144.82 | 270 | 79 | 4 | 1.7 | 2.9 | ANA |
| MW-5 | 01/13/93 | 165.14 | 13.03 | -- | 152.11 | 180 | 59 | 6.0 | 1.8 | 7.6 | PACE |
| MW-5 | 04/23/93 | 165.14 | 13.51 | -- | 151.63 | 8700 | 440 | 96 | 35 | 136 | PACE |
| MW-5 | 07/12/93 | 165.14 | 18.06 | -- | 147.08 | 250 | 57 | 2.9 | 2.1 | 6.0 | PACE |
| MW-5 | 10/21/93 | 165.14 | 20.41 | -- | 144.73 | 210 | 82 | 1.5 | ND<0.5 | 1.4 | PACE |
| MW-5 | 01/21/94 | 165.14 | 18.86 | -- | 146.28 | 110 | 36 | 1.2 | ND<0.5 | 0.7 | PACE |
| MW-6 | 07/09/90 | 165.40 | -- | -- | -- | ND | ND | ND | ND | ND | -- |
| MW-6 | 12/21/90 | 165.40 | -- | -- | -- | 0.17 | 2.6 | 7.0 | 4.9 | 26 | -- |
| MW-6 (d) | 03/07/91 | 165.40 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-6 (d) | 06/27/91 | 165.40 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-6 (d) | 09/27/91 | 165.40 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-6 | 12/18/91 | 165.40 | -- | -- | -- | ND | 1.3 | 22 | ND | 2.7 | -- |
| MW-6 | 04/01/91 | 165.40 | 11.79 | -- | 153.61 | ND | ND | ND | ND | ND | -- |
| MW-6 | 07/03/92 | 165.40 | 17.77 | -- | 147.63 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ANA |
| MW-6 | 10/05/92 | 165.40 | 19.46 | -- | 145.94 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ANA |
| MW-6 | 01/13/93 | 165.40 | 11.34 | -- | 154.06 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-6 | 04/23/93 | 165.40 | 12.92 | -- | 152.48 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-6 | 07/12/93 | 165.40 | 17.36 | -- | 148.04 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | 0.7 | PACE |
| MW-6 | 10/21/93 | 165.40 | 19.98 | -- | 145.42 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-6 | 01/21/94 | 165.40 | 18.10 | -- | 147.30 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION (a) (Feet) | DEPTH TO WATER (Feet) | PRODUCT THICKNESS (Feet) | GROUNDWATER ELEVATION (b) (Feet) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | LAB |
|----------|---------------------------------|--------------------------------|--------------------------|-----------------------------|-------------------------------------|----------------|------------|------------|------------|------------|------|
| MW-7 | 07/09/90 | 167.61 | -- | -- | -- | ND | ND | ND | ND | ND | -- |
| MW-7 | 12/21/90 | 167.61 | -- | -- | -- | ND | ND | ND | ND | ND | -- |
| MW-7 | 03/07/91 | 167.61 | 19.04 | -- | 148.57 | ND | ND | 0.4 | 0.3 | 2.4 | -- |
| MW-7 | 06/27/91 | 167.61 | -- | -- | -- | 70 | 17 | 4 | 0.8 | 2.2 | -- |
| MW-7 | 09/27/91 | 167.61 | -- | -- | -- | ND | 0.4 | ND | ND | 0.4 | -- |
| MW-7 | 12/18/91 | 167.61 | -- | -- | -- | ND | 0.7 | 2.9 | 0.8 | 3.3 | -- |
| MW-7 | 04/01/91 | 167.61 | 15.18 | -- | 152.43 | ND | ND | ND | ND | ND | -- |
| MW-7 | 07/03/92 | 167.61 | 20.28 | -- | 147.33 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ANA |
| MW-7 | 10/05/92 | 167.61 | 21.56 | -- | 146.05 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | 1.5 | ANA |
| MW-7 | 01/13/93 | 167.61 | 15.41 | -- | 152.20 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-7 | 04/23/93 | 167.61 | 15.84 | -- | 151.77 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-7 | 07/12/93 | 167.61 | 19.84 | -- | 147.77 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-7 | 10/21/93 | 167.61 | 21.61 | -- | 146.00 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-7 | 01/21/94 | 167.61 | 20.49 | -- | 147.12 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| QC-1 (c) | 01/21/94 | -- | -- | -- | -- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| MW-8 | 03/07/91 | 165.74 | 16.72 | -- | 149.02 | 2.7 | 780 | 450 | 64 | 310 | -- |
| MW-8 | 06/27/91 | 165.74 | -- | -- | -- | 12000 | 3400 | 1100 | 240 | 750 | -- |
| MW-8 | 09/27/91 | 165.74 | -- | -- | -- | 41 | 5700 | 5200 | 1100 | 4300 | -- |
| MW-8 | 12/18/91 | 165.74 | -- | -- | -- | 3.2 | 990 | 150 | 120 | 250 | -- |
| MW-8 | 04/01/91 | 165.74 | 12.54 | -- | 153.20 | 15000 | 3600 | 2600 | 410 | 1900 | -- |
| MW-8 | 07/03/92 | 165.74 | 18.78 | -- | 146.96 | 72000 | 19000 | 32000 | 3000 | 15000 | ANA |
| MW-8 | 10/05/92 | 165.74 | 20.48 | 0.01 | 145.27 | -- | -- | -- | -- | -- | -- |
| MW-8 | 01/13/93 | 165.74 | 12.87 | 0.01 | 152.88 | -- | -- | -- | -- | -- | -- |
| MW-8 | 04/23/93 | 165.74 | 13.90 | SHEEN | 151.84 | -- | -- | -- | -- | -- | -- |
| MW-8 | 07/12/93 | 165.74 | 18.30 | SHEEN | 147.44 | -- | -- | -- | -- | -- | -- |
| MW-8 | 10/21/93 | 165.74 | 21.91 | 0.95 | 144.54 | -- | -- | -- | -- | -- | -- |
| MW-8 | 01/21/94 | 165.74 | 19.12 | 0.03 | 146.64 | -- | -- | -- | -- | -- | -- |
| MW-9 | 03/07/91 | 166.20 | 16.79 | -- | 149.41 | 7.1 | 220 | 4 | 2.4 | 2400 | -- |
| MW-9 | 06/27/91 | 166.20 | -- | -- | -- | 3600 | 520 | 400 | 85 | 310 | -- |
| MW-9 | 09/27/91 | 166.20 | -- | -- | -- | 3.2 | 720 | 150 | 50 | 180 | -- |
| MW-9 | 12/18/91 | 166.20 | -- | -- | -- | ND | 2.5 | 1.1 | 0.3 | 5.8 | -- |
| MW-9 | 04/01/91 | 166.20 | 12.89 | -- | 153.31 | 12000 | 2000 | 2600 | 360 | 1600 | -- |
| MW-9 | 07/03/92 | 166.20 | 18.89 | -- | 147.31 | 5700 | 17000 | 840 | 230 | 800 | ANA |
| MW-9 | 10/05/92 | 166.20 | 20.52 | -- | 145.68 | 1400 | 440 | 17 | 14 | 100 | ANA |
| MW-9 | 01/13/93 | 166.20 | 12.92 | -- | 153.28 | 11000 | 1200 | 1700 | 340 | 1400 | PACE |
| QC-1 (c) | 01/13/93 | -- | -- | -- | 0.00 | 11000 | 1200 | 1600 | 330 | 1300 | PACE |
| MW-9 | 04/23/93 | 166.20 | 14.08 | -- | 152.12 | 24000 | 2800 | 4500 | 730 | 3400 | PACE |
| MW-9 | 07/12/93 | 166.20 | 18.44 | -- | 147.76 | 13000 | 1400 | 1100 | 360 | 1400 | PACE |
| QC-1 (c) | 07/12/93 | -- | -- | -- | -- | 10000 | 1200 | 900 | 310 | 1200 | PACE |
| MW-9 | 10/21/93 | 166.20 | 21.81 | 0.89 | 145.06 | -- | -- | -- | -- | -- | -- |
| MW-9 | 01/21/94 | 166.20 | 19.28 | -- | 146.92 | -- | -- | -- | -- | -- | -- |

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11132
 3201 35TH AVENUE, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION (a) (Feet) | DEPTH TO WATER (Feet) | PRODUCT THICKNESS (Feet) | GROUNDWATER ELEVATION (b) (Feet) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | LAB |
|----------|---------------------------------|--------------------------------|--------------------------|-----------------------------|-------------------------------------|----------------|------------|------------|------------|------------|------|
| MW-10 | 03/07/91 | 167.01 | 18.09 | -- | 148.92 | 1.6 | 120 | 190 | 32 | 230 | -- |
| MW-10 | 06/27/91 | 167.01 | -- | -- | -- | 12000 | 7300 | 500 | 150 | 300 | -- |
| MW-10 | 09/27/91 | 167.01 | -- | -- | -- | 57 | 12000 | 7200 | 1400 | 4600 | -- |
| MW-10 | 12/18/91 | 167.01 | -- | -- | -- | 5.3 | 2500 | 120 | 36 | 79 | -- |
| MW-10 | 04/01/91 | 167.01 | 13.92 | -- | 153.09 | ND | ND | ND | ND | ND | -- |
| MW-10 | 07/03/92 | 167.01 | 19.92 | -- | 147.09 | 8600 | 5100 | 1300 | 180 | 690 | ANA |
| MW-10 | 10/05/92 | 167.01 | 21.92 | 0.19 | 145.23 | -- | -- | -- | -- | -- | -- |
| MW-10 | 01/13/93 | 167.01 | 14.43 | 0.03 | 152.60 | -- | -- | -- | -- | -- | -- |
| MW-10 | 04/23/93 | 167.01 | 15.26 | 0.06 | 151.80 | -- | -- | -- | -- | -- | -- |
| MW-10 | 07/12/93 | 167.01 | 19.78 | 0.45 | 147.57 | -- | -- | -- | -- | -- | -- |
| MW-10 | 10/21/93 | 167.01 | 22.90 | 0.69 | 144.63 | -- | -- | -- | -- | -- | -- |
| MW-10 | 01/21/94 | 167.01 | 20.25 | 0.06 | 146.81 | -- | -- | -- | -- | -- | -- |
| RW-1 | 07/09/90 | 168.01 | -- | 1.21 | -- | -- | -- | -- | -- | -- | -- |
| RW-1 | 12/21/90 | 168.01 | -- | 0.01 | -- | -- | -- | -- | -- | -- | -- |
| RW-1 | 03/07/91 | 168.01 | 17.62 | SHEEN | 150.39 | -- | -- | -- | -- | -- | -- |
| RW-1 | 06/27/91 | 168.01 | -- | 0.04 | -- | -- | -- | -- | -- | -- | -- |
| RW-1 | 09/27/91 | 168.01 | -- | 0.02 | -- | -- | -- | -- | -- | -- | -- |
| RW-1 | 12/18/91 | 168.01 | -- | 0.02 | -- | -- | -- | -- | -- | -- | -- |
| RW-1 | 04/01/91 | 168.01 | 14.40 | 0.11 | 153.69 | -- | -- | -- | -- | -- | -- |
| RW-1 | 07/03/92 | 168.01 | 20.66 | SHEEN | 147.35 | -- | -- | -- | -- | -- | -- |
| RW-1 | 10/05/92 | 168.01 | 23.34 | 0.08 | 144.73 | -- | -- | -- | -- | -- | -- |
| RW-1 | 01/13/93 | 168.01 | 16.59 | 0.05 | 151.46 | -- | -- | -- | -- | -- | -- |
| RW-1 | 04/23/93 | 168.01 | 16.17 | 0.18 | 151.98 | -- | -- | -- | -- | -- | -- |
| RW-1 | 07/12/93 | 168.01 | 20.18 | 0.06 | 147.88 | -- | -- | -- | -- | -- | -- |
| RW-1 | 10/21/93 | 168.01 | 25.70 | 0.56 | 142.73 | -- | -- | -- | -- | -- | -- |
| RW-1 | 01/21/94 | 168.01 | 21.24 | 0.40 | 147.07 | -- | -- | -- | -- | -- | -- |
| QC-2 (e) | 10/05/92 | -- | -- | -- | -- | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ANA |
| QC-2 (e) | 01/13/93 | -- | -- | -- | -- | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| QC-2 (e) | 04/23/93 | -- | -- | -- | -- | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| QC-2 (e) | 07/12/93 | -- | -- | -- | -- | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| QC-2 (e) | 10/21/93 | -- | -- | -- | -- | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | PACE |
| QC-2 (e) | 01/21/94 | -- | -- | -- | -- | ND<50 | ND<0.5 | 2.1 | ND<0.5 | 2.1 | PACE |

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline
 B Benzene
 T Toluene
 E Ethylbenzene
 X Total xylenes
 ppb Parts per billion
 -- Not analyzed/available/applicable/measurable
 ND Not detected above reported detection limit
 ANA Anametrix, Inc.
 PACE Pace Inc.

NOTES:

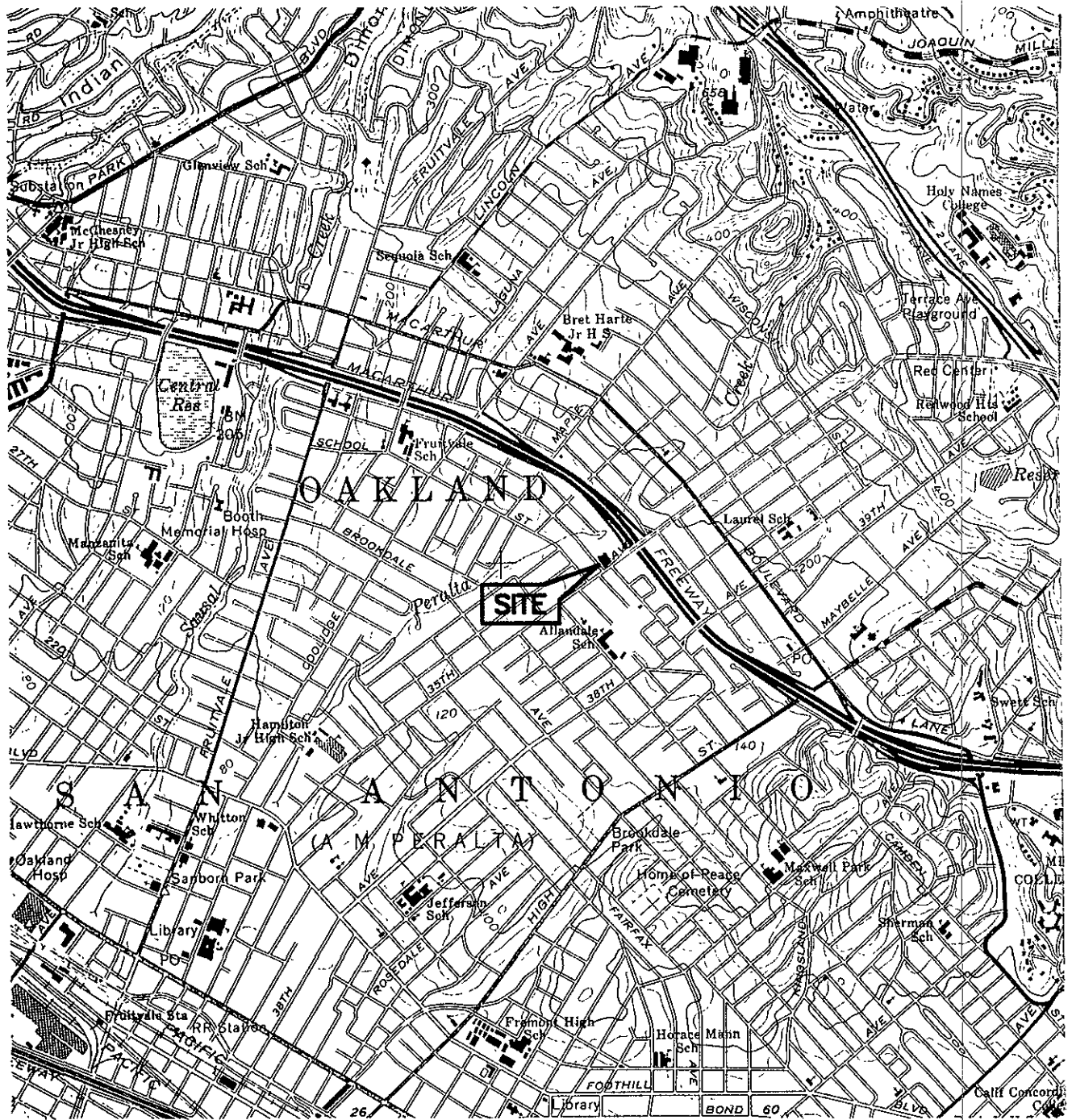
(a) Casing elevations surveyed to the nearest 0.01 foot relative to mean sea level.
 (b) Groundwater elevations adjusted assuming a specific gravity of 0.75 for free product.
 (c) Blind duplicate.
 (d) Not sampled due to an abandoned vehicle parked over well.
 (e) Travel blank.

TABLE 2 - PRODUCT REMOVAL STATUS

BP OIL COMPANY SERVICE STATION NO. 11132
3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

| WELL ID | DATE | PRODUCT REMOVED (Gallons) | PRODUCT REMOVED CUMULATIVE (Gallons) |
|----------|----------|---------------------------|--------------------------------------|
| MW-2 | 09/29/93 | 0.10 | 0.10 |
| | 10/05/93 | 0.10 | 0.20 |
| | 10/14/93 | 0.10 | 0.30 |
| | 10/20/93 | 0.25 | 0.55 |
| | 11/02/93 | 0.10 | 0.65 |
| | 12/07/93 | 0.05 | 0.70 |
| | 12/17/93 | <0.01 | 0.70 |
| | 12/23/93 | 0.3 | 1 |
| | 01/12/94 | 0.05 | 1.05 |
| | 02/02/94 | 0.01 | 1.06 |
| | 02/11/94 | 0.01 | 1.07 |
| | MW-8 | 11/02/93 | 0.25 |
| 11/10/93 | | 0.10 | 0.35 |
| 11/16/93 | | 0.10 | 0.45 |
| 11/23/93 | | 0.10 | 0.55 |
| 11/30/93 | | 0.10 | 0.65 |
| 12/17/93 | | <0.01 | 0.65 |
| 12/23/93 | | <0.01 | 0.65 |
| 01/12/94 | | 0.01 | 0.66 |
| 02/02/94 | | 0.05 | 0.71 |
| 02/11/94 | | 0.08 | 0.79 |
| MW-9 | 11/02/93 | 0.10 | 0.10 |
| | 11/10/93 | 0.10 | 0.20 |
| | 11/16/93 | 0.10 | 0.30 |
| | 12/23/93 | <0.01 | 0.30 |
| | 01/12/94 | 0.01 | 0.31 |
| | 01/20/93 | 0.05 | 0.36 |
| | 02/02/94 | 0.05 | 0.41 |
| | 02/11/94 | 0.01 | 0.42 |
| MW-10 | 09/07/93 | 0.10 | 0.1 |
| | 09/14/93 | 0.10 | 0.2 |
| | 09/29/93 | 0.10 | 0.3 |
| | 10/05/93 | 1.60 | 1.9 |
| | 10/14/93 | 2.10 | 4 |
| | 10/20/93 | 1.00 | 5 |
| | 10/27/93 | 1.00 | 6 |
| | 11/02/93 | 0.35 | 6.35 |
| | 11/10/93 | 0.20 | 6.55 |
| | 11/16/93 | 0.10 | 6.65 |
| | 11/23/93 | 0.15 | 6.8 |
| | 11/30/93 | 0.36 | 7.16 |
| | 12/07/93 | 0.26 | 7.42 |
| | 12/17/93 | 0.26 | 7.68 |
| | 12/23/93 | <0.01 | 7.68 |
| | 01/04/94 | 0.1 | 7.78 |
| | 01/12/94 | 0.01 | 7.79 |
| | 01/20/94 | 0.15 | 7.94 |
| | 02/02/94 | 0.01 | 7.95 |
| | 02/11/94 | 0.01 | 7.96 |



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



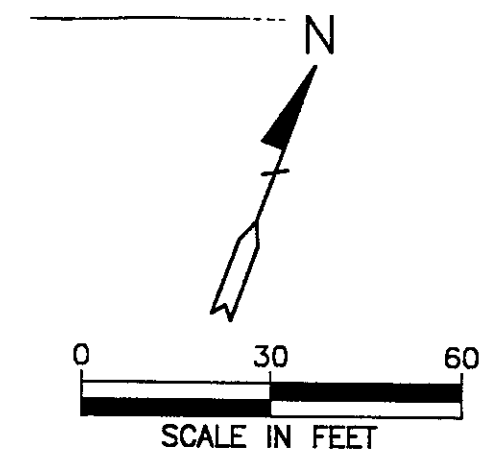
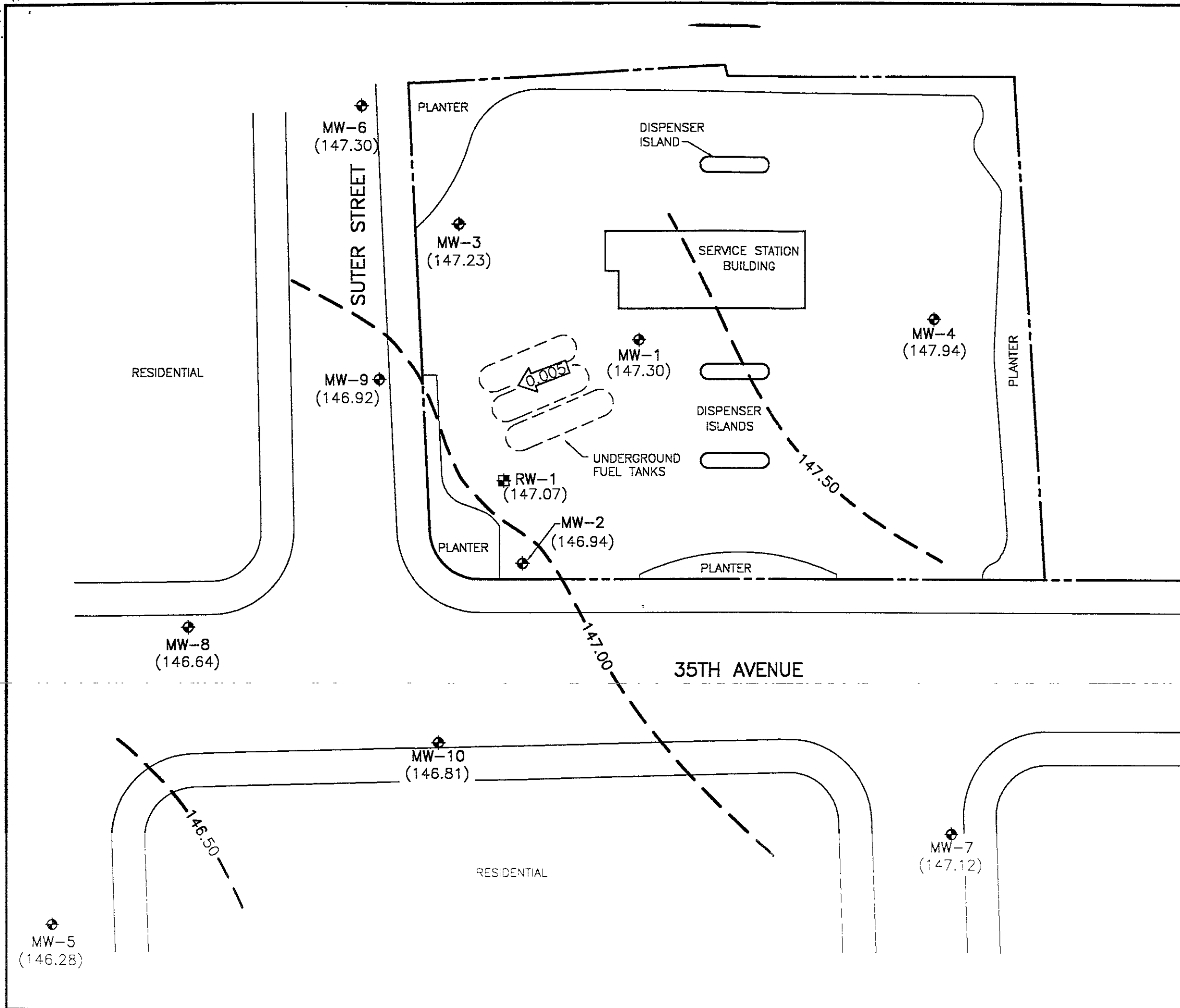
FIGURE 1

SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11132
3201 35TH STREET
OAKLAND, CALIFORNIA
PROJECT NO. 10-024



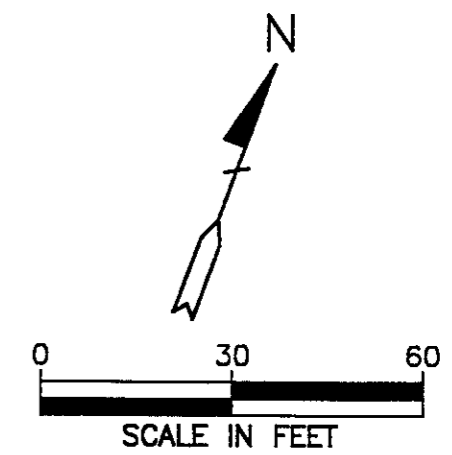
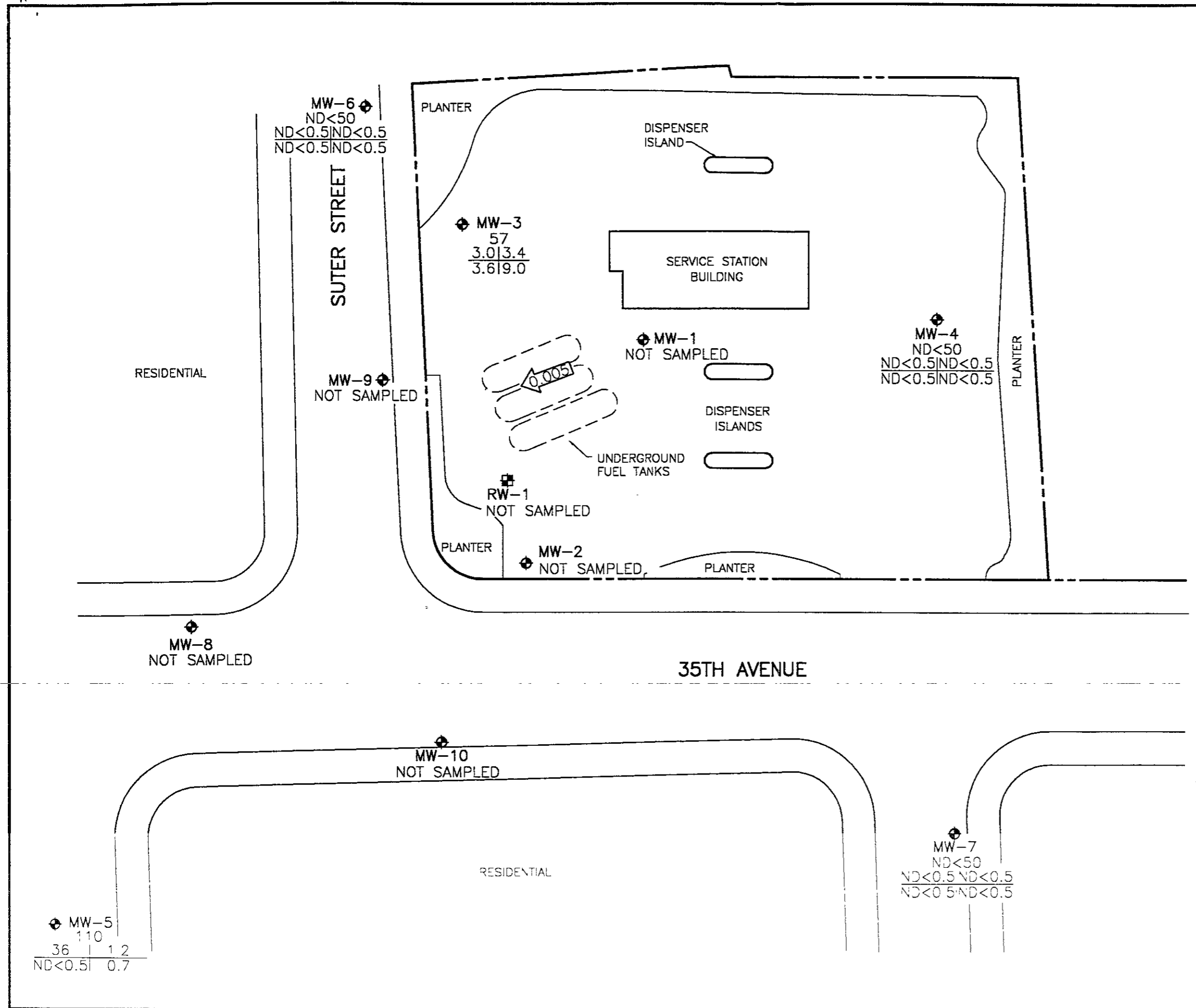
ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA



- LEGEND**
- ◆ GROUNDWATER MONITORING WELL
 - ⊞ GROUNDWATER RECOVERY WELL
 - (147.30) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
 - 147.50 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL-0.50 FOOT)
 - ← 0.005 → CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
 JANUARY 21, 1994
 BP OIL SERVICE STATION NO. 11132
 3201 35TH STREET
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-024

100240-1.DWG 7-26-94 8:44 1-5



LEGEND

- ⊕ GROUNDWATER MONITORING WELL
- ⊕ GROUNDWATER RECOVERY WELL
- TPH-G | B | T | E | X CONCENTRATION OF CONSTITUENTS IN PARTS PER BILLION
- TPH-G TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X TOTAL XYLENES
- ND NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- ←0.005 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3
CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER
 JANUARY 21, 1994
 BP OIL SERVICE STATION NO. 11132
 3201 35TH STREET
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-024

APPENDIX A
WATER SAMPLING FIELD SURVEY FORMS

Field Report / Data Sheet

Groundwater Sampling
 Groundwater Monitoring
 Well Development
 Drill Support
 Stockpile Sampling

| | | | | |
|----------------------------------------------------------|----------------------------------|-------------------------------------|-----------------------------------------------------------------|-----------------------------|
| 116 Liberty St Santa Cruz, Ca 95060 (408) 459-0718 | Firm: ALISTO | Date: <u>1/21/94</u> | Station #: <u>BP11132</u> | Day: M Tu W Th F |
| | Project Number: 10-024-03-003 | Field Technician: DJBIRCH | Address: <u>3201</u> <u>35th Street</u> <u>DANFORD</u> | Weather: OVERCAST |

| DT/Order | Well ID | Well Diam | Cap Lock | Total Depth (feet) | 1st Depth | 2nd Depth | Depth to Product | Product Thickness | Comments |
|----------|---------|-----------|----------|--------------------|-----------------|-----------------|------------------|-------------------|----------------|
| | | | | | to Water (feet) | to Water (feet) | | | |
| x 12 | MW-1 | 2" | OK | 44.09 | 1135 | 23.02 | 0.76 | PPRS* | 0 |
| x 7 | MW-2 | 2" | OK | 34.31 | 1235 | 21.20 | IRRID-ESCAL | PPRS | |
| - 5 | MW-3 | 2" | OK | 34.58 | 19.92 | 19.94 | | | |
| - 3 | MW-4 | 2" | OK | 38.74 | 22.58 | 22.42 | | | |
| - 4 | MW-5 | 2" | OK | 30.88 | 19.01 | 18.86 | | | |
| - 1 | MW-6 | 2" | OK | 34.56 | 18.10 | 18.10 | | | |
| 2 | MW-7 | 2" | OK | 34.49 | 19.96 | 20.49 | | QC-1 | |
| x 9 | MW-8 | 2" | OK | 38.72 | | 19.12 | 19.09 | 0.03 | PPRS |
| x 8 | MW-9 | 2" | OK | 29.49 | | 18.28 | IRRI-ASSUMER | PPRS | 18.28 |
| x 10 | MW-10 | 2" | OK | 34.00 | | 20.25 | 20.19 | 0.06 | PPRS |
| x 11 | RW-1 | 6" | OK | 38.41 | | 21.24 | | 0.40 | PUMP DOWN WELL |

SYSTEM OFF

Notes: The wells were opened and PPRS's were removed from wells. The non product wells were measured at approximately 1135 then again at 1235 along with the product wells. Product thicknesses were measured using product indicator paste. Wells MW-3, 4, 5, 6 and 7 were sampled. Two drums total exist at site.

* PPRS = PASSIVE PRODUCT RECOVERY SYSTEM

CALIBRATION pH 7.00 7.00 pH 4.00 4.00 pH 10.00 10.00 at 71 °F

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



REPORT OF LABORATORY ANALYSIS

Alisto Engineering Group
 1777 Oakland Blvd., Ste. 200
 Walnut Creek, CA 94596

February 08, 1994
 PACE Project Number: 440128520

Attn: Mr. Bill Howell

Client Reference: BP Station # 11132/10-024-03-003

PACE Sample Number: 70 0237289
 Date Collected: 01/21/94
 Date Received: 01/28/94
 Client Sample ID: MW-3

| <u>Parameter</u> | <u>Units</u> | <u>MDL</u> | | <u>DATE ANALYZED</u> |
|------------------|--------------|------------|--|----------------------|
|------------------|--------------|------------|--|----------------------|

ORGANIC ANALYSIS

| | | | | |
|-------------------------------------------------|------|-----|-----|----------|
| <u>PURGEABLE FUELS AND AROMATICS</u> | | | | |
| <u>TOTAL FUEL HYDROCARBONS, (LIGHT):</u> | | | | |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | - | 02/02/94 |
| <u>PURGEABLE AROMATICS (BTXE BY EPA 8020M):</u> | | | | |
| Benzene | ug/L | 0.5 | 3.0 | 02/02/94 |
| Toluene | ug/L | 0.5 | 3.4 | 02/02/94 |
| Ethylbenzene | ug/L | 0.5 | 3.6 | 02/02/94 |
| Xylenes, Total | ug/L | 0.5 | 9.0 | 02/02/94 |

Mr. Bill Howell
 Page 2

February 08, 1994
 PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

PACE Sample Number: 70 0237297
 Date Collected: 01/21/94
 Date Received: 01/28/94
 Client Sample ID: MW-4

| <u>Parameter</u> | <u>Units</u> | <u>MDL</u> | <u>DATE ANALYZED</u> |
|------------------|--------------|------------|----------------------|
|------------------|--------------|------------|----------------------|

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

| | | | | |
|------------------------------------------|------|-----|----|----------|
| TOTAL FUEL HYDROCARBONS, (LIGHT): | | | - | 02/02/94 |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | ND | 02/02/94 |
| PURGEABLE AROMATICS (BTXE BY EPA 8020M): | | | - | 02/02/94 |
| Benzene | ug/L | 0.5 | ND | 02/02/94 |
| Toluene | ug/L | 0.5 | ND | 02/02/94 |
| Ethylbenzene | ug/L | 0.5 | ND | 02/02/94 |
| Xylenes, Total | ug/L | 0.5 | ND | 02/02/94 |

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
 Page 3

February 08, 1994
 PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

PACE Sample Number:
 Date Collected:
 Date Received:
 Client Sample ID:
Parameter

70 0237300
 01/21/94
 01/28/94
 MW-5

Units MDL DATE ANALYZED

ORGANIC ANALYSIS

| | | | | |
|------------------------------------------|------|-----|-----|----------|
| PURGEABLE FUELS AND AROMATICS | | | | |
| TOTAL FUEL HYDROCARBONS, (LIGHT): | | | | |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | - | 02/02/94 |
| PURGEABLE AROMATICS (BTXE BY EPA 8020M): | | | | |
| Benzene | ug/L | 0.5 | 36 | 02/02/94 |
| Toluene | ug/L | 0.5 | 1.2 | 02/02/94 |
| Ethylbenzene | ug/L | 0.5 | ND | 02/02/94 |
| Xylenes, Total | ug/L | 0.5 | 0.7 | 02/02/94 |

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
 Page 4

February 08, 1994
 PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

PACE Sample Number: 70 0237319
 Date Collected: 01/21/94
 Date Received: 01/28/94
 Client Sample ID: MW-6

| <u>Parameter</u> | <u>Units</u> | <u>MDL</u> | <u>DATE ANALYZED</u> |
|------------------|--------------|------------|----------------------|
|------------------|--------------|------------|----------------------|

ORGANIC ANALYSIS

| | | | |
|------------------------------------------|------|-----|-------------|
| PURGEABLE FUELS AND AROMATICS | | | |
| TOTAL FUEL HYDROCARBONS, (LIGHT): | | - | 02/03/94 |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | ND 02/03/94 |
| PURGEABLE AROMATICS (BTXE BY EPA 8020M): | | | |
| Benzene | ug/L | 0.5 | ND 02/03/94 |
| Toluene | ug/L | 0.5 | ND 02/03/94 |
| Ethylbenzene | ug/L | 0.5 | ND 02/03/94 |
| Xylenes, Total | ug/L | 0.5 | ND 02/03/94 |

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
 Page 5

February 08, 1994
 PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

PACE Sample Number: 70 0237327
 Date Collected: 01/21/94
 Date Received: 01/28/94
 Client Sample ID: MW-7

| <u>Parameter</u> | <u>Units</u> | <u>MDL</u> | | <u>DATE ANALYZED</u> |
|------------------|--------------|------------|--|----------------------|
|------------------|--------------|------------|--|----------------------|

ORGANIC ANALYSIS

| | | | | |
|------------------------------------------|------|-----|----|----------|
| PURGEABLE FUELS AND AROMATICS | | | | |
| TOTAL FUEL HYDROCARBONS, (LIGHT): | | | | |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | ND | 02/03/94 |
| PURGEABLE AROMATICS (BTXE BY EPA 8020M): | | | | |
| Benzene | ug/L | 0.5 | ND | 02/03/94 |
| Toluene | ug/L | 0.5 | ND | 02/03/94 |
| Ethylbenzene | ug/L | 0.5 | ND | 02/03/94 |
| Xylenes, Total | ug/L | 0.5 | ND | 02/03/94 |

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
 Page 6

February 08, 1994
 PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

PACE Sample Number: 70 0237335
 Date Collected: 01/21/94
 Date Received: 01/28/94
 Client Sample ID: QC-1

| <u>Parameter</u> | <u>Units</u> | <u>MDL</u> | | <u>DATE ANALYZED</u> |
|------------------|--------------|------------|--|----------------------|
|------------------|--------------|------------|--|----------------------|

ORGANIC ANALYSIS

| | | | | |
|------------------------------------------|------|-----|----|----------|
| PURGEABLE FUELS AND AROMATICS | | | | |
| TOTAL FUEL HYDROCARBONS, (LIGHT): | | | | |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | - | 02/03/94 |
| PURGEABLE AROMATICS (BTXE BY EPA 8020M): | | | | |
| Benzene | ug/L | 0.5 | ND | 02/03/94 |
| Toluene | ug/L | 0.5 | ND | 02/03/94 |
| Ethylbenzene | ug/L | 0.5 | ND | 02/03/94 |
| Xylenes, Total | ug/L | 0.5 | ND | 02/03/94 |

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
 Page 7

February 08, 1994
 PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

PACE Sample Number: 70 0237343
 Date Collected: 01/21/94
 Date Received: 01/28/94
 Client Sample ID: QC-2

| <u>Parameter</u> | <u>Units</u> | <u>MDL</u> | | <u>DATE ANALYZED</u> |
|------------------|--------------|------------|--|----------------------|
|------------------|--------------|------------|--|----------------------|

ORGANIC ANALYSIS

| | | | | |
|------------------------------------------|------|-----|-----|----------|
| PURGEABLE FUELS AND AROMATICS | | | | |
| TOTAL FUEL HYDROCARBONS, (LIGHT): | | | | |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | - | 02/03/94 |
| PURGEABLE AROMATICS (BTXE BY EPA 8020M): | | | | |
| Benzene | ug/L | 0.5 | ND | 02/03/94 |
| Toluene | ug/L | 0.5 | 1.2 | 02/03/94 |
| Ethylbenzene | ug/L | 0.5 | ND | 02/03/94 |
| Xylenes, Total | ug/L | 0.5 | 2.1 | 02/03/94 |

These data have been reviewed and are approved for release.

Darrell C. Cain
 Darrell C. Cain
 Regional Director

Mr. Bill Howell
Page 8

FOOTNOTES
for pages 1 through 7

February 08, 1994
PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Bill Howell
Page 9

QUALITY CONTROL DATA

February 08, 1994
PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

PURGEABLE FUELS AND AROMATICS

Batch: 70 28083

Samples: 70 0237289, 70 0237297, 70 0237300, 70 0237319, 70 0237327
70 0237343

METHOD BLANK:

| Parameter | Units | MDL | Method Blank |
|------------------------------------------|-------|-----|--------------|
| TOTAL FUEL HYDROCARBONS, (LIGHT): | | | - |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | ND |
| PURGEABLE AROMATICS (BTXE BY EPA 8020M) | | | - |
| Benzene | ug/L | 0.5 | ND |
| Toluene | ug/L | 0.5 | ND |
| Ethylbenzene | ug/L | 0.5 | ND |
| Xylenes, Total | ug/L | 0.5 | ND |

SPIKE AND SPIKE DUPLICATE:

| Parameter | Units | MDL | 700237564 | Spike | Spike Recv | Spike Dupl Recv | RPD |
|------------------------------------------|-------|-----|-----------|-------|------------|-----------------|-----|
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | ND | 1000 | 98% | 68% | 36% |
| Benzene | ug/L | 0.5 | ND | 40 | 102% | 92% | 10% |
| Toluene | ug/L | 0.5 | ND | 40 | - | - | - |
| Ethylbenzene | ug/L | 0.5 | ND | 40 | 106% | 100% | 5% |
| Xylenes, Total | ug/L | 0.5 | ND | 120 | 97% | 93% | 4% |

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

| Parameter | Units | MDL | Reference Value | Recv | Dupl Recv | RPD |
|------------------------------------------|-------|-----|-----------------|------|-----------|-----|
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | 1000 | 92% | 91% | 1% |
| Benzene | ug/L | 0.5 | 40.0 | 93% | 92% | 1% |
| Toluene | ug/L | 0.5 | 40.0 | 97% | 95% | 2% |
| Ethylbenzene | ug/L | 0.5 | 40.0 | 101% | 99% | 2% |
| Xylenes, Total | ug/L | 0.5 | 120 | 93% | 92% | 1% |

Mr. Bill Howell
Page 10

QUALITY CONTROL DATA

February 08, 1994
PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

PURGEABLE FUELS AND AROMATICS

Batch: 70 28129
Samples: 70 0237335

METHOD BLANK:

| Parameter | Units | MDL | Method Blank |
|------------------------------------------|-------|-----|-----------------|
| TOTAL FUEL HYDROCARBONS, (LIGHT): | | | - |
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | ND |
| PURGEABLE AROMATICS (BTXE BY EPA 8020M) | | | - |
| Benzene | ug/L | 0.5 | ND |
| Toluene | ug/L | 0.5 | ND |
| Ethylbenzene | ug/L | 0.5 | ND |
| Xylenes, Total | ug/L | 0.5 | ND |

SPIKE:

| Parameter | Units | MDL | 700239320 | Spike | Spike Recv |
|------------------------------------------|-------|-----|-----------|-------|---------------|
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | ND | 1000 | 82% |
| Benzene | ug/L | 0.5 | ND | 40 | 99% |
| Toluene | ug/L | 0.5 | 1.6 | 40 | 91% |
| Ethylbenzene | ug/L | 0.5 | 0.8 | 40 | 91% |
| Xylenes, Total | ug/L | 0.5 | 5.4 | 120 | 86% |

LABORATORY CONTROL SAMPLE:

| Parameter | Units | MDL | Reference Value | Recv |
|------------------------------------------|-------|-----|--------------------|------|
| Purgeable Fuels, as Gasoline (EPA 8015M) | ug/L | 50 | 100 | 931% |
| Benzene | ug/L | 0.5 | 40 | 110% |
| Toluene | ug/L | 0.5 | 40 | 104% |
| Ethylbenzene | ug/L | 0.5 | 40 | 102% |
| Xylenes, Total | ug/L | 0.5 | 120 | 98% |

Mr. Bill Howell
Page 11

FOOTNOTES
for pages 9 through 10

February 08, 1994
PACE Project Number: 440128520

Client Reference: BP Station # 11132/10-024-03-003

MDL Method Detection Limit
ND Not detected at or above the MDL.
RPD Relative Percent Difference



440128.520

CHAIN OF CUSTODY

No. 051388

Page 1 of 1
ZIP CODE

CONSULTANT'S NAME: **ALISTO ENGINEERING** ADDRESS: **1777 DAKLAND BLVD WALNUT CREEK CA**

BP SITE NUMBER: **BP11132** BP CORNER ADDRESS/CITY: **3201 35TH ST. DAKLAND** CONSULTANT PROJECT NUMBER: **10-024-03-003**

CONSULTANT PROJECT MANAGER: **BILL HOWELL** PHONE NUMBER: **510 295 1650** FAX NUMBER: **255 1823** CONSULTANT CONTRACT NUMBER:

BP CONTACT: **Scott Hooten** BP ADDRESS: PHONE NUMBER: FAX NO:

LAB CONTACT: **JIM OYES** LABORATORY ADDRESS: **11 DIGITAL DR. 415-843-6700** PHONE NUMBER: FAX NO:

SAMPLED BY (Please Print Name): **D J BIRCH** SAMPLED BY (Signature): *[Signature]* SHIPMENT DATE: **1-28-94** SHIPMENT METHOD: **Parcel Courier**

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER

| SAMPLE DESCRIPTION | COLLECTION DATE | MATRIX SOIL/WATER | CONTAINERS | | PRESERVATIVE | PH GAS BTEX | COMMENTS | | | | |
|--------------------|-----------------|-------------------|------------|-------------|--------------|-------------------|----------|--|---------|---|---------|
| | COLLECTION TIME | | NO. | TYPE (VOL.) | LAB SAMPLE # | | | | | | |
| MW-3 | 1-21-94 | W | 3 | 100 | 23728.9 | X | | | | | |
| MW-4 | } | } | } | } | 23729.7 | X | | | | | |
| MW-5 | | | | | 23730.0 | X | | | | | |
| MW-6 | | | | | 23731.9 | X | | | | | |
| MW-7 | | | | | 23732.7 | X | | | | | |
| MW-8 | | | | | | | | | | | No MW-8 |
| QC-1 | | | | | | | 1 | | 23733.5 | X | |
| QC-2 | | | | | | | 1 | | 23734.3 | X | |

| RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | ADDITIONAL COMMENTS |
|-------------------------------|---------|------|---------------------------|---------|------|---------------------|
| <i>[Signature]</i> | 1/28/94 | 1450 | <i>[Signature]</i> - BP | 1/28/94 | 1700 | F973521 15/2 |
| <i>[Signature]</i> - BP | 1/28 | 1700 | <i>[Signature]</i> - BP | 1/28/94 | 1700 | |