XTRA OIL COMPANY
2307 PACIFIC AVE.
ALAMEDA, CA 94501
(510) 865-9503

2/22 - Left msg for Simas to call.
Need WP or issue fund NOV

Analyze for MTBE

February 14, 1996

ALAMEDA COUNTY
DEPT. OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
1131 HARBOR BAY PKWY. ROOM 250
ALAMEDA, CA. 94502

ATTENTION: EVA CHU

REGARDING: 1701 PARK ST.
ALAMEDA

DEAR MS. CHU,

PLEASE FIND ENCLOSED, THE GROUNDWATER MONITORING AND SAMPLING REPORT FOR THE ABOVE LOCATION. IF YOU HAVE ANY QUESTIONS FEEL FREE TO CONTACT ME.

SINCERELY,

KEITH SIMAS

ENCLOSURES

96 FEB 20 PM 1:03

# GROUNDWATER MONITORING AND SAMPLING REPORT

Xtra Oil Company Service Station (dba Shell)
1701 Park Street
Alameda, California

Project No. 10-210-04-004

Prepared for:

Xtra Oil Company
2307 Pacific Avenue
Alameda, California

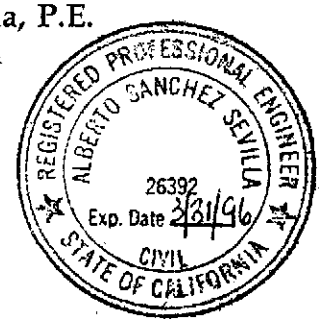
Prepared by:

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

February 7, 1996

Dale Swain
Project Manager

Al Sevilla, P.E.
Principal



# GROUNDWATER MONITORING AND SAMPLING REPORT

Xtra Oil Company Service Station (dba Shell)
1701 Park Street
Alameda, California

Project No. 10-210-04-004

February 7, 1996

## INTRODUCTION

This report presents the results and findings of the November 16, 1995 groundwater monitoring and sampling conducted by Alisto Engineering Group at the Xtra Oil Company service station (dba Shell), 1701 Park Street, Alameda, California. A site vicinity map is shown on Figure 1.

## FIELD PROCEDURES

Field activities were performed in accordance with the procedures and guidelines of 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 each 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 events are summarized in Table 1. 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.

## FINDINGS

The findings of the November 16, 1995 groundwater monitoring and sampling event are summarized as follows:

- Approximately 0.01 foot of free product was observed in Monitoring Well MW-2. Free product or sheen was not observed in MW-1 or MW-3.

- Groundwater elevation data indicate a gradient of approximately 0.006 foot per foot in a northeasterly direction across the site.

- Analysis of the groundwater samples detected 100000 micrograms per liter (ug/l) total petroleum hydrocarbons as gasoline, 5900 ug/l total petroleum hydrocarbons as diesel, and 22000 ug/l benzene in the sample collected from MW-1.

TABLE 1-SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-210

| WELL ID | DATE OF MONITORING/ SAMPLING | CASING ELEVATION (a) (Feet) | DEPTH TO WATER (Feet) | PRODUCT THICKNESS (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) | DO (ppm) | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 11/04/94 | 19.49 | 8.64 | --- | 10.85 | 60000 | 6400 | 13000 | 4900 | 1300 | 5500 | — | MCC |
| QC-1 (c) | 11/04/94 | --- | --- | --- | --- | 54000 | --- | 12000 | 4500 | 1200 | 5200 | --- | MCC |
| MW-1 | 01/11/95 | 19.49 | 6.10 | --- | 13.39 | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-1 | 02/24/95 | 19.49 | 6.57 | --- | 12.92 | 56000 | 4400 | 13000 | 7000 | 1400 | 5100 | --- | MCC |
| QC-1 (c) | 02/24/95 | --- | --- | --- | --- | 43000 | --- | 8900 | 4600 | 970 | 3300 | --- | MCC |
| MW-1 | 05/25/95 | 19.49 | 6.54 | --- | 12.95 | 53000 | 4700 | 11000 | 5700 | 1200 | 4000 | 4.3 | MCC |
| QC-1 (c) | 05/25/95 | --- | --- | --- | --- | 48000 | --- | 11000 | 5300 | 1200 | 3800 | --- | MCC |
| MW-1 | 08/30/95 | 19.49 | 8.15 | --- | 11.34 | 14000 | 3700 | 5000 | 1100 | 3900 | 103 | 2.8 | MCC |
| QC-1 (c) | 08/30/95 | --- | --- | --- | --- | 57000 | --- | 17000 | 7000 | 1500 | 5200 | --- | MCC |
| MW-1 | 11/16/95 | 19.49 | 8.79 | --- | 10.70 | 100000 | 5900 | 22000 | 17000 | 2100 | 8500 | --- | MCC |
| QC-1 (c) | 11/16/95 | --- | --- | --- | --- | 95000 | --- | 20000 | 15000 | 1800 | 7800 | --- | MCC |
| MW-2 | 11/04/94 | 20.29 | 9.12 | 0.16 | 11.29 | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-2 | 01/11/95 | 20.29 | 6.75 | --- | 13.54 | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-2 | 02/24/95 | 20.29 | 7.11 | 0.18 | 13.32 | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-2 | 05/25/95 | 20.29 | 7.01 | 0.01 | 13.29 | Free Product | | | --- | --- | --- | --- | --- |
| MW-2 | 08/30/95 | 20.29 | 8.58 | 0.12 | 11.80 | | | | --- | --- | --- | --- | --- |
| MW-2 | 11/16/95 | 20.29 | 9.07 | 0.01 | 11.23 | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-3 | 11/04/94 | 20.58 | 8.92 | --- | 11.66 | ND<50 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | MCC |
| MW-3 | 01/11/95 | 20.58 | 5.67 | --- | 14.91 | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-3 | 02/24/95 | 20.58 | 6.11 | --- | 14.47 | ND<50 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | MCC |
| MW-3 | 05/25/95 | 20.58 | 6.24 | --- | 14.34 | 91 | ND<50 | 28 | 12 | 2.1 | 6.5 | --- | MCC |
| MW-3 | 08/30/95 | 20.58 | 8.27 | --- | 12.31 | ND<50 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | 4.6 | MCC |
| MW-3 | 11/16/95 | 20.58 | 8.82 | --- | 11.76 | ND<50 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | MCC |
| QC-2 (d) | 11/04/94 | --- | --- | --- | --- | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | MCC |
| QC-2 (d) | 02/24/95 | --- | --- | --- | --- | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | MCC |
| QC-2 (d) | 05/25/95 | --- | --- | --- | --- | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | MCC |
| QC-2 (d) | 08/30/95 | --- | --- | --- | --- | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | MCC |
| QC-2 (d) | 11/16/95 | --- | --- | --- | --- | ND<50 | --- | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | --- | MCC |

ABBREVIATIONS:

| | |
|---|---|
| TPH-G | Total petroleum hydrocarbons as gasoline |
| TPH-D | Total petroleum hydrocarbons as diesel |
| B | Benzene |
| T | Toluene |
| E | Ethylbenzene |
| X | Total xylenes |
| DO | Dissolved oxygen |
| ug/l | Micrograms per liter |
| ppm | Parts per million |
| ND | Not detected above reported detection limit |
| TB | Trip blank |
| MCC | McCampbell Analytical, Inc. |

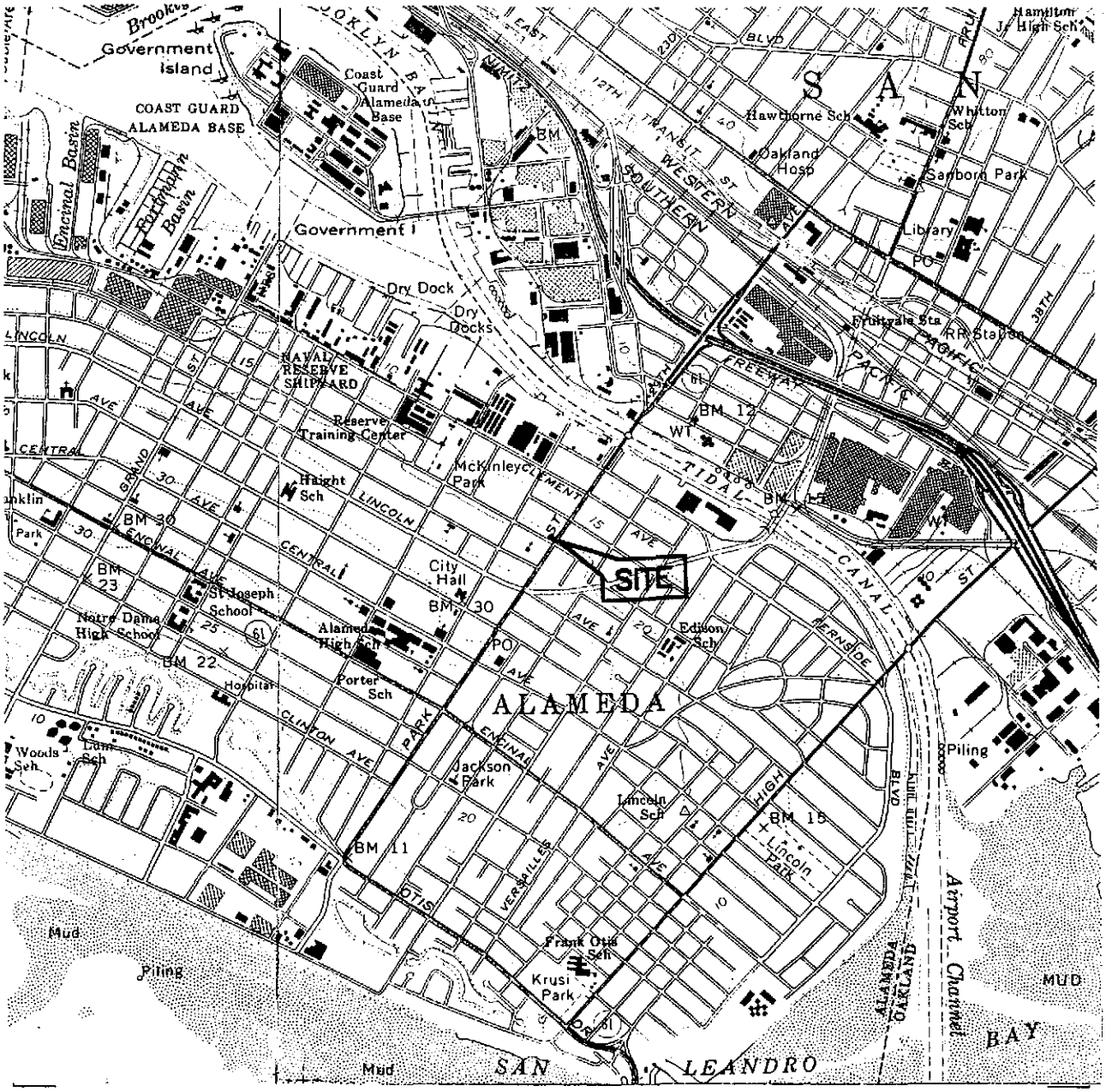
NOTES:

(a) Top of casing surveyed relative to mean sea level.

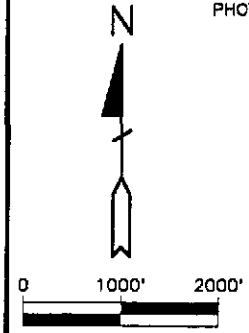
(b) Groundwater elevations expressed in feet above mean sea level, and adjusted assuming a specific gravity of 0.75 for free product.

(c) Blind duplicate.

(d) Trip blank.




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




# FIGURE 1

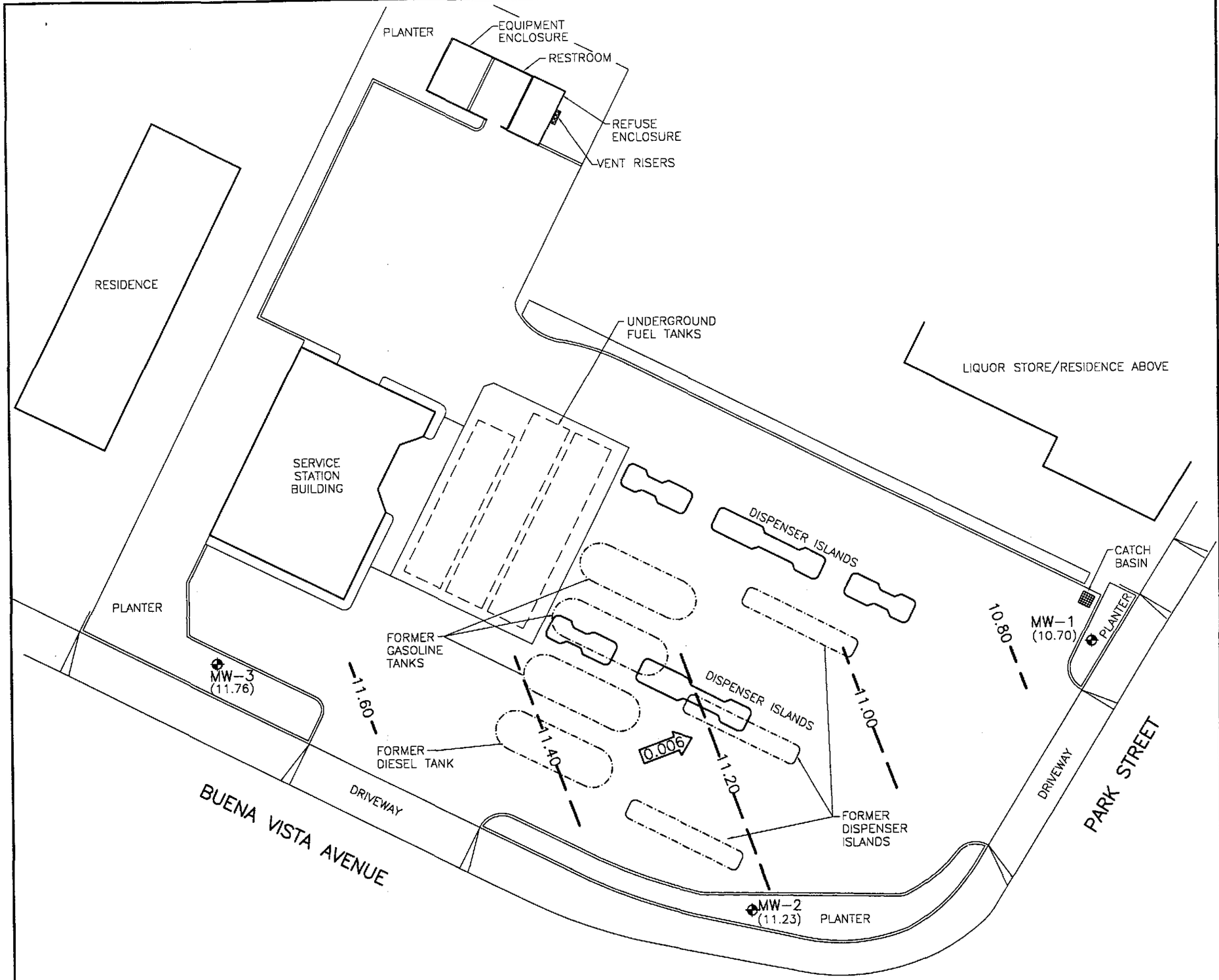
## SITE VICINITY MAP

XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10-210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

102108--.DWG 6-3-94 RKW 1=1




N

0 20 40

SCALE IN FEET

## LEGEND

- ◆ GROUNDWATER MONITORING WELL
- (10.70) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 10.80 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–0.20 FOOT)
- 0.006 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

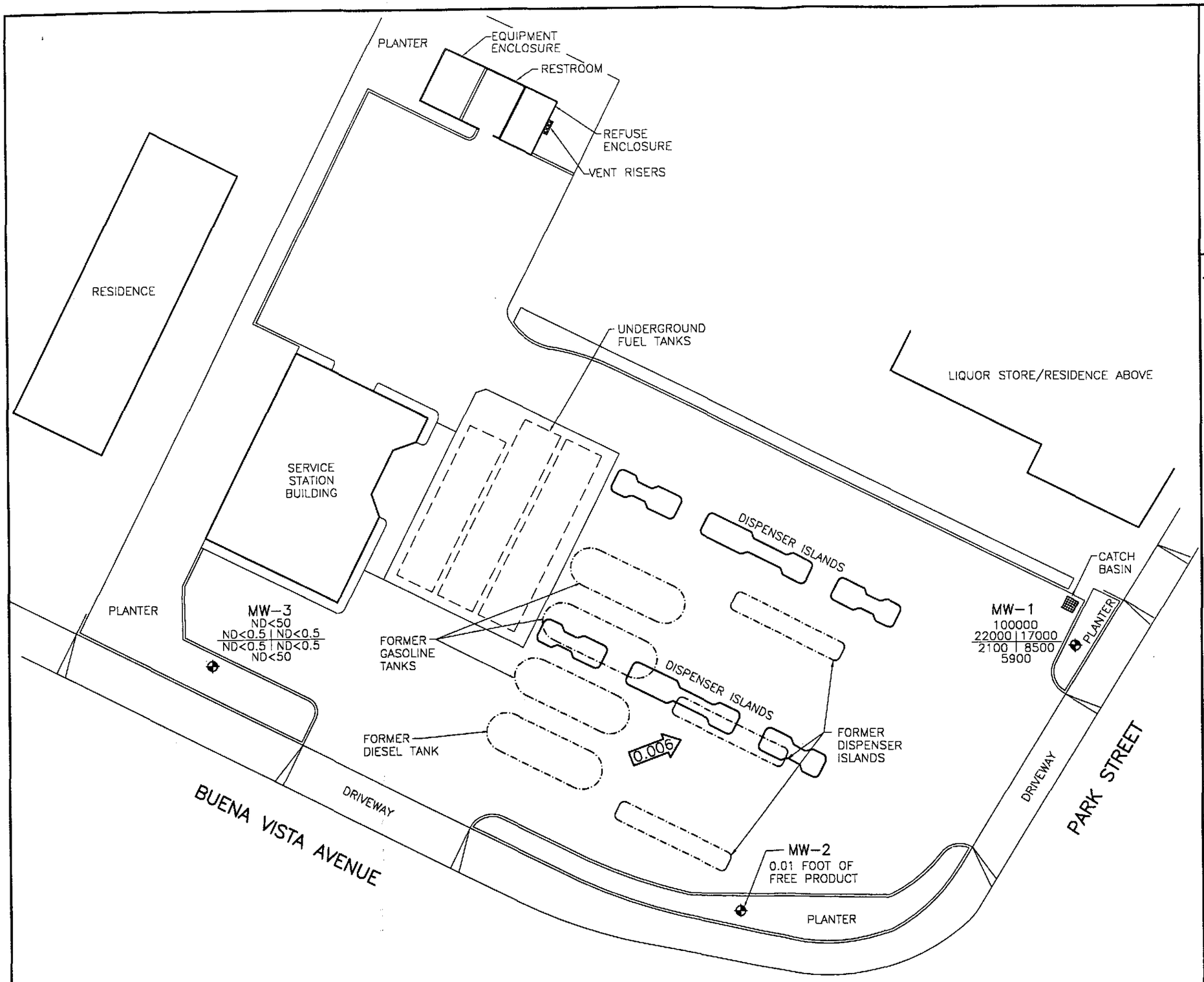
NOVEMBER 16, 1995

XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10–210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10210D-P.DWG 12-21-95 MAP 1=20




N

0 20 40

SCALE IN FEET

## LEGEND

| | |
|---|---|
| ◆ | GROUNDWATER MONITORING WELL |
| TPH-G / B \| T / E \| X / TPH-D | CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER |
| TPH-G | TOTAL PETROLEUM HYDROCARBONS AS GASOLINE |
| B | BENZENE |
| T | TOLUENE |
| E | ETHYLBENZENE |
| X | TOTAL XYLENES |
| TPH-D | TOTAL PETROLEUM HYDROCARBONS AS DIESEL |
| ND | NOT DETECTED ABOVE REPORTED DETECTION LIMIT |
| 0.006 | CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT |

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

NOVEMBER 16, 1995

XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10-210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10210E-P.DWG 12-21-95 MAP 1=20

# APPENDIX A

# WATER SAMPLING FIELD SURVEY FORMS

# ALISTO

## Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94598 (510) 295-1650 FAX 295-1823

Project No. 10-210-04-004 Date: 11/16/95
Address 1701 Park Street Day: M T W TH F
Contract No. Pending City: Alameda
Station No. XTRA Sampler: WS

### DEPTH TO GROUNDWATER SUMMARY

| WELL ID | SAMPLE ID | WELL DIAM | TOTAL DEPTH | DEPTH TO WATER | PRODUCT THICKNESS | TIME SAMPLED | COMMENTS: |
|---|---|---|---|---|---|---|---|
| MW-1 | S-2 | 2" | 20.00 | 8.79 | Ø | 1530 | S-2 |
| MW-2 | | ↓ | | 9.07 | .01 | N/S | N/S |
| MW-3 | S-1 | ↓ | 19.50 | 8.82 | Ø | 1435 | S-1 |

### FIELD INSTRUMENT CALIBRATION DATA

pH METER ICM 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1000 WEATHER Clear

D.O. METER ICM ZERO d.O. SOLUTION 0 BAROMETRIC PRESSURE 760 TEMP 63

CONDUCTIVITY METER ICM 10,000 10,000 TURBIDITY METER _____ 5.0 NTU _____ OTHER _____

| Well ID | Depth to Water | Diam | Cap/Lock | Product Dept | Iridescence | Gal. | Time | Temp *F | pH | E.C. | D.O. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 8.82 | 2" | DK | Ø | Y (N) | 1.5 | 1410 | 64.1 | 7.27 | ~~3.77 MS~~ | |
| Total Depth - Water Level= | x Well Vol. Factor= | x#vol. to Purge | PurgeVol. | | | 3.5 | | 63.3 | 7.14 | 379 MS | |
| 19.50 - 8.82 = 10.68 | X .16 = 1.71 | X3 = | 5.13 | | | 5.5 | 1431 | 62.5 | 7.07 | 374 MS | |

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port

Comments:

O EPA 601 ____
Ø TPH-G/BTEX HCL
Ø TPH Diesel ____
O TOG 5520 ____

TIME/SAMPLE ID: 1435

| Well ID | Depth to Water | Diam | Cap/Lock | Product Dept | Iridescence | Gal. | Time | Temp *F | pH | E.C. | D.O. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 8.79 | 2" | DK | Ø | Y (N) | 1.5 | 1510 | 63.2 | 7.31 | 842 MS | |
| Total Depth - Water Level= | x Well Vol. Factor= | x#vol. to Purge | PurgeVol. | | | 3.5 | | 62.5 | 7.12 | 831 MS | |
| 20.00 - 8.79 = 11.21 | X .16 = 1.79 | X3 = | 5.37 | | | 5.5 | 1527 | 62.1 | 7.10 | 826 MS | |

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port

Comments: QC-1 (S-3) taken from this well

O EPA 601 ____
Ø TPH-G/BTEX HCL
Ø TPH Diesel ____
O TOG 5520 ____

TIME/SAMPLE ID: 1536

Sample ID
S-3 QC-1
S-4 TB

# ALISTO

## Field Report / Sampling Data Sheet

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94598 (510) 295-1650 FAX 295-1823

Project No. 10-210-04-004 Date: 11/16/95
Address 1701 Park Street Day: M T W TH F
Contract No. Pending City: Alameda
Station No. XTRA Sampler: LB

| Well ID | Depth to Water | Diam | Cap/Lock | Product Depth | Iridescence | Gal. | Time | Temp °F | pH | E.C. | D.O. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| * MW-2 | 9.07 | 2" | OIL | 9.06 | Y N | | | | | | |
| Total Depth - Water Level= NM | x Well Vol. Factor= .01 FP | x#vol. to Purge | PurgeVol. | | | | | | | | |
| Purge Method: OSurface Pump ODisp.Tube OWInch ODisp. Bailer(s)___ OSys Port | | | | | | | | | | | |
| Comments: | | | | | | | | | | | |

- O EPA 601_____
- O TPH-G/BTEX N/S
- O TPH Diesel_____
- O TOG 5520 ___

TIME/SAMPLE ID

* MW-2 Bailed 3gal TF <.002 gal FP

PAGE_____ OF_____

# APPENDIX B

# LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

11/29/95

Dear Bill:

Enclosed are:

1). the results of 4 samples from your # **10-210-04-004; Xtra** project,

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

| | | |
|---|---|---|
| Alisto Engineering Group<br>1575 Treat Blvd. # 201<br>Walnut Creek, CA 94598 | Client Project ID: # 10-210-04-004; Xtra | Date Sampled: 11/16/95 |
| | | Date Received: 11/17/95 |
| | Client Contact: Bill Howell | Date Extracted: 11/19-11/20/95 |
| | Client P.O: | Date Analyzed: 11/19-11/20/95 |

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX***

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

| Lab ID | Client ID | Matrix | TPH(g)+ | Benzene | Toluene | Ethylben-zene | Xylenes | % Rec. Surrogate |
|---|---|---|---|---|---|---|---|---|
| 58822 | S-1 | W | ND | ND | ND | ND | ND | 107 |
| 58823 | S-2 | W | 100,000,a,h | 22,000 | 17,000 | 2100 | 8500 | 107 |
| 58824 | S-3 | W | 95,000,a,h | 20,000 | 15,000 | 1800 | 7800 | 93 |
| 58825 | S-4 | W | ND | ND | ND | ND | ND | 109 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | 0.5 | 0.5 | 0.5 | 0.5 | |
| | | S | 1.0 mg/kg | 0.005 | 0.005 | 0.005 | 0.005 | |

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

# cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

| | | |
|---|---|---|
| Alisto Engineering Group<br>1575 Treat Blvd. # 201<br>Walnut Creek, CA 94598 | Client Project ID: # 10-210-04-004; Xtra | Date Sampled: 11/16/95 |
| | | Date Received: 11/17/95 |
| | Client Contact: Bill Howell | Date Extracted: 11/17/95 |
| | Client P.O: | Date Analyzed: 11/17-11/18/95 |

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel ***

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

| Lab ID | Client ID | Matrix | TPH(d)+ | % Recovery Surrogate |
|---|---|---|---|---|
| 58822 | S-1 | W | ND | 104 |
| 58823 | S-2 | W | 5900,d,h | 104 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
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| | | | | |
| | | | | |
| | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | |
| | | S | 1.0 mg/kg | |

* water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 11/19/95 Matrix: Water

| Analyte | Concentration (ug/L) | | | Amount Spiked | % Recovery | | RPD |
|---|---|---|---|---|---|---|---|
| | Sample | MS | MSD | | MS | MSD | |
| TPH (gas) | 0.0 | 101.8 | 99.7 | 100 | 102 | 100 | 2.1 |
| Benzene | 0 | 9 | 9 | 10 | 92 | 91 | 1.1 |
| Toluene | 0 | 10 | 10 | 10 | 96 | 95 | 1.0 |
| Ethyl Benzene | 0 | 10 | 10 | 10 | 98 | 96 | 2.1 |
| Xylenes | 0 | 29 | 29 | 30 | 98 | 96 | 1.7 |
| TPH (diesel) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| TRPH (oil & grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 11/16/95-11/18/95 Matrix: Water

| Analyte | Concentration (ug/L) | | | Amount Spiked | % Recovery | | RPD |
|---|---|---|---|---|---|---|---|
| | Sample | MS | MSD | | MS | MSD | |
| TPH (gas) | 0.0 | 106.4 | 103.2 | 100 | 106 | 103 | 3.1 |
| Benzene | 0 | 10 | 11 | 10 | 104 | 108 | 3.8 |
| Toluene | 0 | 10 | 11 | 10 | 102 | 107 | 4.8 |
| Ethyl Benzene | 0 | 10 | 11 | 10 | 102 | 106 | 3.8 |
| Xylenes | 0 | 30 | 31 | 30 | 101 | 104 | 3.2 |
| TPH (diesel) | 0 | 149 | 148 | 150 | 99 | 98 | 0.9 |
| TRPH (oil & grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

#5305AAEGX37

# McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

# CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

REPORT TO: Bill Howell BILL TO:

COMPANY: Alisto Engineering

1575 Treat Blvd #201 W.C., CA 94598

TELE: (510) 295-1650 FAX #: 295-7823

PROJECT NUMBER: 10-210-04 007 PROJECT NAME: XTRA

PROJECT LOCATION: Alameda SAMPLER SIGNATURE:

| SAMPLE ID | LOCATION | SAMPLING DATE | SAMPLING TIME | # CONTAINERS | TYPE CONTAINERS | MATRIX: WATER | SOIL | AIR | SLUDGE | OTHER | METHOD PRESERVED: HCL | $HNO_3$ | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (+) S-1 | | 11/6/95 | | 3 | HCl VOAs | X | | | | | | | |
| (+) S-2 | | | | 3 | | X | | | | | | | |
| (+) S-3 | | | | 2 | | X | | | | | | | |
| S-4 | | | | 2 | | X | | | | | | | |

ANALYSIS REQUEST

| BTEX & TPH as Gasoline (602/8020 & 8015) | THP as Diesel (8015) | Total Petroleum Oil & Grease (5520 E&F/5520 B&F) | Total Petroleum Hydrocarbons (418.1) | EPA 601/8010 | EPA 602/8020 | EPA 608/8080 | EPA 608/8080 - PCBs Only | EPA 624/8240/8260 | EPA 625/8270 | CAM - 17 Metals | EPA - Priority Pollutant Metals | LEAD (7240/7421/239.2/6010) | ORGANIC LEAD | RCI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X | X | | | | | | | | | | | | | |
| X | X | | | | | | | | | | | | | |
| X | | | | | | | | | | | | | | |
| X | | | | | | | | | | | | | | |

OTHER

COMMENTS

58822
58823
58824
58825

VOAs ... PRESERVATIVE ... HEADSPACE ... CONTAINERS ... ABSENT

| RELINQUISHED BY: | DATE | TIME | RECEIVED BY: |
|---|---|---|---|
| | 11/7/95 | 1400 | Patricia Yelton |
| RELINQUISHED BY: Patricia Yelton | 11/7/95 | 1750 | RECEIVED BY: Ron Hamilton |
| RELINQUISHED BY: | DATE | TIME | RECEIVED BY LABORATORY: |

REMARKS: