5 15 5 25 03

Xtra Oil Company
2307 Pacific Avenue, Alameda, CA 94501
Tel (510) 865-9503, Fax (510) 865-1889

August 7, 1995

Ms. Eva Chu
Hazardous Materials Program
Department of Environmental Health
1131 Harbor Bay Pkwy. 2nd floor
Alameda, Ca. 94502-6577

Regarding: 1701 Park St.
STID 3836

Dear Ms. Chu,

Please find enclosed the quarterly report for the above location. This report is for the second quarter of 1995. If you have any questions feel free to contact us.

Sincerely,

Keith Simas

cc: Mr. Eddie So, SWRCB
Mr. Jorge Del Rio

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-210-04-002

① on 3 mws, mw-2w/ FP. Flow direction may be skewed due to FP in one mw.

② Need CAP / delineate extent of plume. ASAP!

Prepared for:

Xtra Oil Company
2307 Pacific Avenue
Alameda, California

Prepared by:

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

June 29, 1995

John DeGeorge
Geologist

Al Sevilla, P.E.
Principal

REGISTERED PROFESSIONAL ENGINEER
ALBERTO SANCHEZ SEVILLA
26392
Exp. Date 3/31/96
CIVIL
STATE OF CALIFORNIA

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-210-04-002

June 29, 1995

INTRODUCTION

This report presents the results and findings of the May 25, 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 in 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 in Figure 2. The results of laboratory analysis are shown in Figure 3. The laboratory report and chain of custody record are presented in Appendix B.

SUMMARY OF FINDINGS

The findings of the May 25, 1995 groundwater monitoring and sampling event are summarized as follows:

- Approximately 0.01 foot of free product was observed in MW-2. Free product or sheen was not observed in MW-1 or MW-3.
- Groundwater elevation data indicate a gradient of approximately 0.008 foot per foot in an easterly direction across the site.
- Groundwater analysis detected 53000 micrograms per liter (ug/l) total petroleum hydrocarbons as gasoline (TPH-G), 4700 ug/l total petroleum hydrocarbons as diesel (TPH-D), and 11000 ug/l benzene in the sample collected from MW-1.
- Groundwater analysis detected 91 ug/l TPH-G and 28 ug/l benzene in the sample collected from MW-3. TPH-D was not detected above the reported detection limit in the groundwater sample collected from MW-3.
- Dissolved oxygen was measured at 4.3 milligrams per liter in the groundwater sample collected from MW-1.

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

WELL ID	DATE OF MONITORING/ SAMPLING	TOP OF CASING ELEVATION	DEPTH TO GROUND-WATER	FREE PRODUCT THICKNESS (a)	GROUND-WATER ELEVATION (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-1	11/04/94	19.49	8.64	—	10.85	60000	6400	13000	4900	1300	5500	—	MAI
QC-1 (c)	11/04/94	—	—	—	—	54000	—	12000	4500	1200	5200	—	MAI
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	—	MAI
QC-1 (c)	02/24/95	—	—	—	—	43000	—	8900	4600	970	3300	—	MAI
MW-1	05/25/95	19.49	6.54	—	12.95	53000	4700	11000	5700	1200	4000	4.3	MAI
QC-1 (c)	05/25/95	—	—	—	—	48000	—	11000	5300	1200	3800	—	MAI
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	—	—	—	—	—	—	—	—
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	—	MAI
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	—	MAI
MW-3	05/25/95	20.58	6.24	—	14.34	91	ND<50	28	12	2.1	6.5	—	MAI
QC-2 (d)	11/04/94	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	MAI
QC-2 (d)	02/24/95	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	MAI
QC-2 (d)	05/25/95	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	MAI

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.
mg/l	Milligrams per liter
ND	Not detected above reported detection limit
D	Duplicate
TB	Trip blank
MAI	McCampbell Analytical, Inc.

NOTES:

(a) Free product thickness measured in feet.

(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.

N

0 1000' 2000'

FIGURE 1

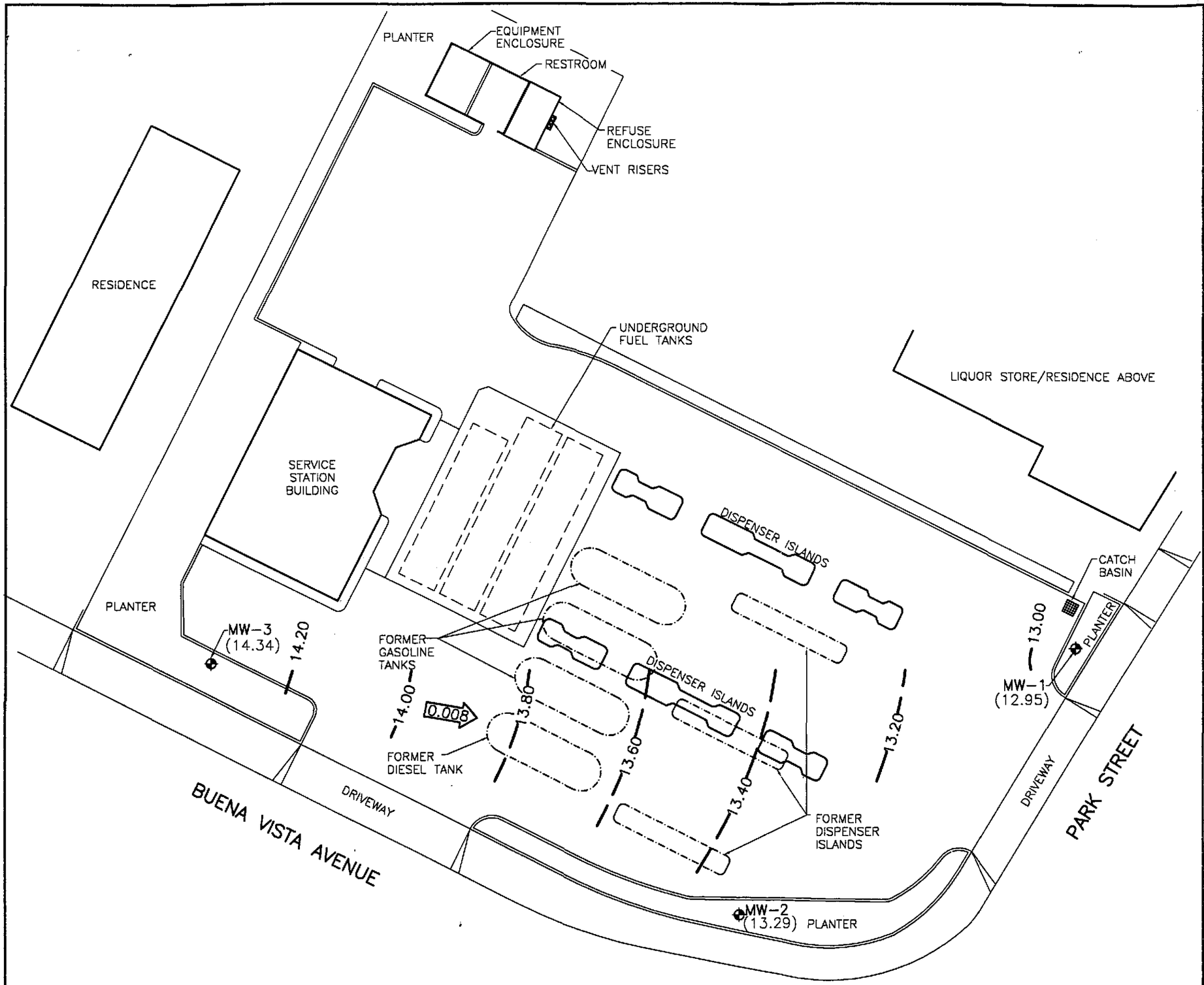
SITE VICINITY MAP

XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10-210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10210B01 8-5-91 RKV 1=1



N

0 20 40

SCALE IN FEET

LEGEND

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

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

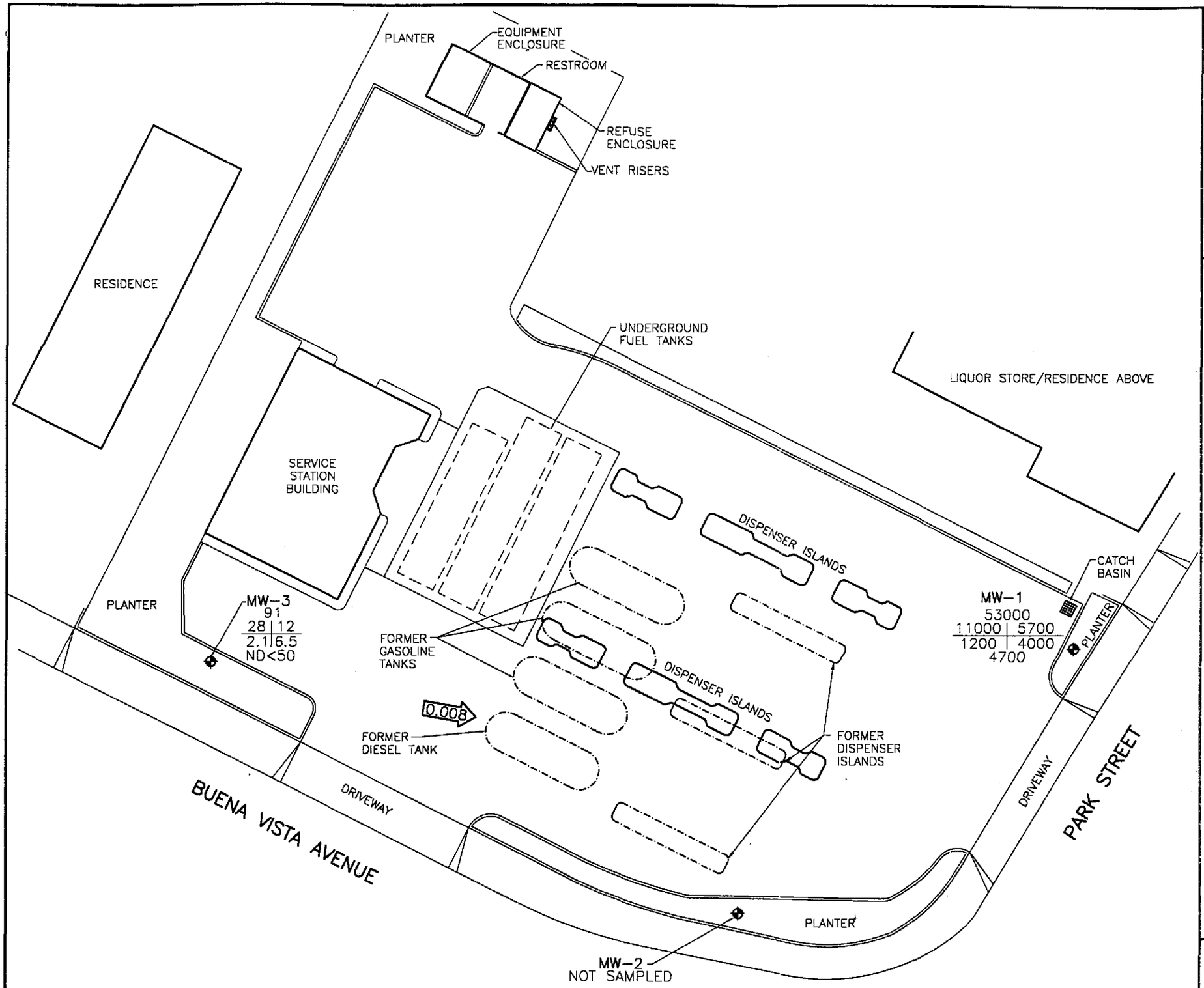
MAY 25, 1995

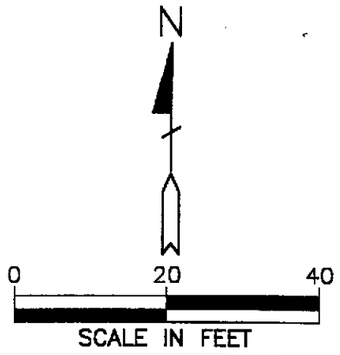
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10–210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

102100-N.DWG 6-29-95 ROW 1=20





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
0.008	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

MAY 25, 1995

XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10-210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10210E-NLDWG 8-9-95 RKW 1-20

APPENDIX A

WATER SAMPLING FIELD SURVEY FORM

ALISTO

Field Report / Sampling Data Sheet

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

Project No. 10-210-04-002 Date: 05/25/95
Contract No. XTRA Day: M T W (H) F
Station No. City: Alameda
Address: 1701 Park Ave. Sampler: CCB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	DEPTH TO WATER	COMMENTS:
MW-1	S-2	6.54	
MW-2		7.01	
MW-3	S-1	6.24	

FIELD INSTRUMENT CALIBRATION DATA

Ph METER Ion 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1100

D.O. METER _____ BAROMETRIC PRESSURE _____ TEMP _____ WEATHER _____ ZERO d.O. SOLUTION _____

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

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Irridensence	Gal.	Time	Temp *F	pH	E.C.X100	D.O.
MW-3	6.24	2"	OK	Ø	Y (N)	2	1130	68.8	7.33	4.86	
						4		68.2	7.17	4.82	
						6.5	1142	67.7	7.10	4.79	

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
19.50-6.24=13.26x.16=2.12X3=6.36
Purge Method: OSurface Pump ODisp.Tube OWinch XDisp. Bailer(s) OSys Port
Comments:

O EPA 601 _____
X TPH-G/BTEX HCL
X TPH Diesel _____
O TOG 5520 _____
TIME/SAMPLE ID
1150 / S-1

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Irridensence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-2	7.01	2"	OK	7.00	Ø (N)						

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
~~20.00~~ NM-7.01
Purge Method: OSurface Pump ODisp.Tube OWinch XDisp. Bailer(s) OSys Port
Comments: Bailed 5gl T.F. Approx 1-2oz FP

O EPA 601 _____
X TPH-G/BTEX HCL
X TPH Diesel _____
O TOG 5520 _____
TIME/SAMPLE ID

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Irridensence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-1	6.54	2"	OK	Ø	Y (N)	2	1200	69.1	7.21	960	
						4		68.3	7.10	940	
						6.5	1215	67.6	7.02	940	

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
20.00-6.54=13.46X.16=2.15X3=6.45
Purge Method: OSurface Pump ODisp.Tube OWinch XDisp. Bailer(s) OSys Port
Comments: DC-1 Dup Taken From this well

O EPA 601 _____
X TPH-G/BTEX HCL
X ~~TPH Diesel~~ BE
Ø ~~TOG 5520~~ _____
TIME/SAMPLE ID
1220 / S-2

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

Alisto Engineering Group 1575 Treat Blvd. # 201 Walnut Creek, CA 94598	Client Project ID: # 10-210-04; 1701 Park St.	Date Sampled: 05/25/95
		Date Received: 05/25/95
	Client Contact: John DeGeorge	Date Extracted: 05/27-05/28/95
	Client P.O:	Date Analyzed: 05/27-05/28/95

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	Ethylbenzene	Xylenes	% Rec. Surrogate
52841	MW3	W	91,a	28	12	2.1	6.5	105
52842	MW1	W	53,000,a	11,000	5700	1200	4000	111#
52843	QC-1	W	48,000,a	11,000	5300	1200	3800	101
52844	QC-2	W	ND	ND	ND	ND	ND	106
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 1575 Treat Blvd. # 201 Walnut Creek, CA 94598	Client Project ID: # 10-210-04; 1701 Park St.	Date Sampled: 05/25/95
		Date Received: 05/25/95
	Client Contact: John DeGeorge	Date Extracted: 05/25/95
	Client P.O:	Date Analyzed: 05/25/95

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
52841	MW3	W	ND	96
52842	MW1	W	4700,d	97
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

Alisto Engineering Group 1575 Treat Blvd. # 201 Walnut Creek, CA 94598	Client Project ID: # 10-210-04; 1701 Park St.	Date Sampled: 05/25/95
		Date Received: 05/25/95
	Client Contact: John DeGeorge	Date Extracted: 05/25/95
	Client P.O:	Date Analyzed: 05/25/95

			Dissolved Oxygen
Analytical methods			EPA 360.1
Lab ID	Client ID	Matrix	DO#
52842	MW1	W	4.3
Reporting Limit unless otherwise-tated; ND means not detected above the reporting limit		W	1.0 mg/L
		S	N/A

* water samples are *reported in mg/L* and soil samples in mg/kg

water samples are reported in µmhos/cm or mg/L, at 25°C

o solid samples are extracted in accordance with CA Title 22, Chapter 11, Appendix II

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: 05/25/95 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	100.0	109.4	100	100.0	109.4	9.0
Benzene	0	10.4	10.9	10	104.0	109.0	4.7
Toluene	0	10.1	10.7	10	101.0	107.0	5.8
Ethyl Benzene	0	10	10.6	10	100.0	106.0	5.8
Xylenes	0	31.1	33.8	30	103.7	112.7	8.3
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	0	24400	24700	23700	103	104	1.2

% 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: 05/28/95 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	100.3	93.0	100	100.3	93.0	7.5
Benzene	0	9.6	10	10	96.0	100.0	4.1
Toluene	0	9.4	9.8	10	94.0	98.0	4.2
Ethyl Benzene	0	9.4	9.7	10	94.0	97.0	3.1
Xylenes	0	29.5	30.8	30	98.3	102.7	4.3
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

AAEGX21 41208

McCAMPBELL ANALYTICAL

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

CHAIN OF CUSTODY RECORD

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

REPORT TO: Scha DeGeorge BILL TO: Xtra Oil Company

COMPANY: Alisto Engineering Group
1575 Treat Blvd # 201
Walnut Creek, CA 94598

TELE: 510-295-1650 FAX #: 510-295-1823

PROJECT NUMBER: 10-210-04 PROJECT NAME: —

PROJECT LOCATION: 1701 Park Street, Alameda, CA 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	~~MW-3~~	S-1	5/25/95		4	HCL Voas	X							
S-2	~~MW-1~~	MW-1 S-2	5/25/95		5									
S-3	~~QC-1~~				3									
	QC-2	Trip Blank			2									

ANALYSIS REQUEST																		OTHER	
BTEX & TPH as Gasoline (602/8020 & 8015)	TPH 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	1 0		COMMENTS
X	X																
X	X														X		MW3
↓	↓																MW1
																	QC-1
																	QC-2

52841
52842
52843
52844

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
	5/25/95	4:20	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY:

REMARKS:

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE APPROPRIATE ✓
VOAS O&G METALS OTHER
CONTAINERS ✓