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ENVIRONMENTAL
PROTECTION

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Alameda, CA 94501
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XTRA OIL COMPANY

February 25, 1999

Ms. Eva Chu
Alameda Health Care Services Agency
1131 Harbor Bay Parkway, Room 250
Alameda, CA 94502-6577

Regarding: 1701 Park Street, Alameda

Dear Ms. Chu:

Please find enclosed the quarterly report(s) for the above referenced sites.

If you have any questions, please do not hesitate to call.

Sincerely,



Keith Simas
Operations Supervisor

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GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-210-10-001

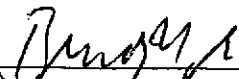
Prepared for:

Xtra Oil Company
2307 Pacific Avenue
Alameda, California


Prepared by:

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

February 10, 1999



Brady Nagle
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. 10-210-10-001

February 10, 1999

INTRODUCTION

This report presents the results and findings of the December 1, 1998 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 and electrical conductivity. 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 December 1, 1998 groundwater monitoring and sampling event are as follows:

- A hydrocarbon sheen was observed in Monitoring Well MW-2. Free product or sheen was not observed in Monitoring Wells MW-1, MW-3 or MW-4.
- Groundwater elevation data indicate a gradient of approximately 0.07 foot per foot in a southeasterly direction across the site.
- Analysis of the groundwater samples detected petroleum hydrocarbons in three of the four groundwater monitoring wells at concentrations of up to up to 57000 micrograms per liter (ug/l) total petroleum hydrocarbons as gasoline, 7400 ug/l benzene, 12000 ug/l toluene, 2100 ug/l ethylbenzene, 8200 ug/l xylenes, and 7200 ug/l methyl tert butyl ether in the sample collected from Well MW-1.



TABLE 1 - SUMMARY 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)	MTBE (ug/l)	SVOCs (ug/l)	DO (ppm)	LAB	
MW-1	11/04/94	19.60	8.64	---	10.96	60000	6400	13000	4900	1300	5500	---	---	---	MCC	
QC-1 (c)	11/04/94	---	---	---	---	54000	---	12000	4500	1200	5200	---	---	---	MCC	
MW-1	01/11/95	19.60	6.10	---	13.50	---	---	---	---	---	---	---	---	---	---	
MW-1	02/24/95	19.60	6.57	---	13.03	56000	4400	13000	7000	1400	5100	---	---	---	MCC	
QC-1 (c)	02/24/95	---	---	---	---	43000	---	8900	4600	970	3300	---	---	---	MCC	
MW-1	05/25/95	19.60	6.54	---	13.06	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	19.60	8.15	---	11.45	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	19.60	8.79	---	10.81	100000	5900	22000	17000	2100	8500	---	---	---	MCC	
QC-1 (c)	11/16/95	---	---	---	---	95000	---	20000	15000	1800	7800	---	---	---	MCC	
MW-1	03/20/96	19.60	6.45	---	13.15	46000	3300	10000	6200	1100	3200	---	---	---	MCC	
QC-1 (c)	03/20/96	---	---	---	---	42000	---	9800	5800	970	3000	---	---	---	MCC	
MW-1	06/13/96	19.60	7.14	---	12.46	44000	5400	9500	5500	1100	4000	19000	---	---	MCC	
QC-1 (c)	06/13/96	---	---	---	---	48000	---	9300	5600	1000	3800	17000	---	---	MCC	
MW-1	09/23/96	19.60	7.56	---	12.04	76000	14000	14000	11000	1600	7100	17000	---	---	6.1	MCC
MW-1	12/19/96	19.60	7.08	---	12.52	46000	---	12000	5500	1200	4100	---	---	---	MCC	
MW-1	05/09/97	19.60	7.39	---	12.21	80000	7500	14000	12000	1700	7600	14000	280 (d)	2.7	MCC/CHR	
MW-1	09/11/97	19.60	7.50	---	12.10	100000	7700	19000	19000	2400	11000	ND<2100	---	7.2	MCC	
MW-1	12/15/97	19.60	7.61	---	11.99	45000	3500	11000	5300	1500	13000	---	---	6.8	MCC	
QC-1 (c)	12/15/97	---	---	---	---	45000	---	11000	5400	1400	5100	14000	---	---	MCC	
MW-1	03/11/98	19.60	5.35	---	14.25	40000	3600	5900	3900	1300	4900	8700	---	6.0	MCC	
QC-1 (c)	03/11/98	---	---	---	---	43000	---	7200	5300	1400	5300	14000	---	---	MCC	
MW-1	06/23/98	19.60	6.63	---	12.97	44000	3700	5900	6200	1800	6200	870	---	6.2	MCC	
QC-1 (c)	06/23/98	---	---	---	---	47000	---	6000	6400	1800	6300	1000	---	---	MCC	
MW-1	12/01/98	19.60	6.48	---	13.12	57000	---	7400	12000	2100	8200	7200	---	2.4	MCC	
QC-1 (c)	12/01/98	---	---	---	---	57000	---	6800	11000	1900	7500	8300	---	---	MCC	
MW-2	11/04/94	20.31	9.12	0.16	11.31	---	---	---	---	---	---	---	---	---	---	
MW-2	01/11/95	20.31	6.75	---	13.56	---	---	---	---	---	---	---	---	---	---	
MW-2	02/24/95	20.31	7.11	0.18	13.34	---	---	---	---	---	---	---	---	---	---	
MW-2	05/25/95	20.31	7.01	0.01	13.31	---	---	---	---	---	---	---	---	---	---	
MW-2	08/30/95	20.31	8.58	0.12	11.82	---	---	---	---	---	---	---	---	---	---	
MW-2	11/16/95	20.31	9.07	0.01	11.25	---	---	---	---	---	---	---	---	---	---	
MW-2	03/20/96	20.31	6.79	0.01	13.53	---	---	---	---	---	---	---	---	---	---	
MW-2	06/13/96	20.31	7.41	0.01	12.91	---	---	---	---	---	---	---	---	---	---	
MW-2	09/23/96	20.31	7.83	0.01	12.49	30000	19000	4600	180	1500	4100	2600	---	5.5	MCC	
QC-1 (c)	09/23/96	---	---	---	---	33000	---	4700	170	1600	3900	2400	---	---	MCC	
MW-2	12/19/96	20.31	7.37	0.01	12.95	29000	---	1800	240	1400	5400	---	(e)	---	MCC	
QC-1 (c)	12/19/96	---	---	---	---	29000	---	580	210	1300	5100	---	---	---	MCC	
MW-2	05/09/97	20.31	6.11	0.21	14.36	34000	6700000	4600	260	1500	4300	1600	---	3.7	MCC	
MW-2	09/11/97	20.31	7.70	0.03	12.63	44000	1200000	3900	250	2400	7400	ND<610	---	6.5	MCC	
QC-1 (c)	09/11/97	---	---	---	---	47000	1100000	4000	420	2700	8300	920	---	---	MCC	
MW-2	12/15/97	20.31	7.87	0.03	12.46	32000	68000	4600	130	2200	5400	ND<470	---	6.0	MCC	
MW-2	03/11/98	20.31	5.81	0.18	14.84	44000	3800	5200	220	2000	5000	1100	---	6.2	MCC	
MW-2	06/23/98	20.31	6.74	0.02	13.59	75000	570000	5900	390	3100	8300	8400	---	6.3	MCC	
MW-2	12/01/98	20.31	7.30	---	13.01	36000	---	3800	73	1500	3900	2000	---	1.9	MCC	

TABLE 1 - SUMMARY 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 (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)	MTBE (ug/l)	SVOCs (ug/l)	DO (ppm)	LAB
MW-3	11/04/94	20.57	8.92	---	11.65	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
MW-3	01/11/95	20.57	5.67	---	14.90	---	---	---	---	---	---	---	---	---	---
MW-3	02/24/95	20.57	6.11	---	14.46	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
MW-3	05/25/95	20.57	6.24	---	14.33	91	ND<50	28	12	2.1	6.5	---	---	---	MCC
MW-3	08/30/95	20.57	8.27	---	12.30	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	4.6	MCC
MW-3	11/16/95	20.57	8.82	---	11.75	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
MW-3	03/20/96	20.57	5.44	---	15.13	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
MW-3	06/13/96	20.57	6.17	---	14.40	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	MCC
MW-3	09/23/96	20.57	6.57	---	14.00	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	4.9	MCC
MW-3	12/19/96	20.57	6.59	---	13.98	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
MW-3	05/09/97	20.57	7.00	---	13.57	ND<50	59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	3.3	MCC
MW-3	09/11/97	20.57	6.92	---	13.65	ND<50	82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	7.0	MCC
MW-3	12/15/97	20.57	7.03	---	13.54	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	6.5	MCC
MW-3	03/11/98	20.57	4.71	---	15.86	ND<50	ND<50	ND<0.5	1.8	0.57	3.1	ND<5.0	---	6.1	MCC
MW-3	06/23/98	20.57	6.33	---	14.24	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	5.7	MCC
MW-3	12/01/98	20.57	6.74	---	13.83	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	4.0	MCC
MW-4	05/09/97	19.69	7.17	---	12.52	31000	15000	540	1300	1000	4500	1900	2.1 (d)	3.1	MCC/CHR
MW-4	09/11/97	19.69	7.71	---	11.98	40000	6500	2000	3100	1700	7700	3400	---	6.4	MCC
MW-4	12/15/97	19.69	7.87	---	11.82	14000	2100	910	690	390	2700	1700	---	6.0	MCC
MW-4	03/11/98	19.69	3.51	---	16.18	2800	780	68	94	72	430	140	---	5.5	MCC
MW-4	06/23/98	19.69	5.21	---	14.48	15000	2800	240	630	720	2700	370	---	5.4	MCC
MW-4	12/01/98	19.69	6.45	---	13.24	21000	---	580	1000	530	3600	1700	---	4.4	MCC
QC-2 (f)	11/04/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (f)	02/24/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (f)	05/25/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (f)	08/30/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (f)	11/16/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (f)	03/20/96	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (f)	06/13/96	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC

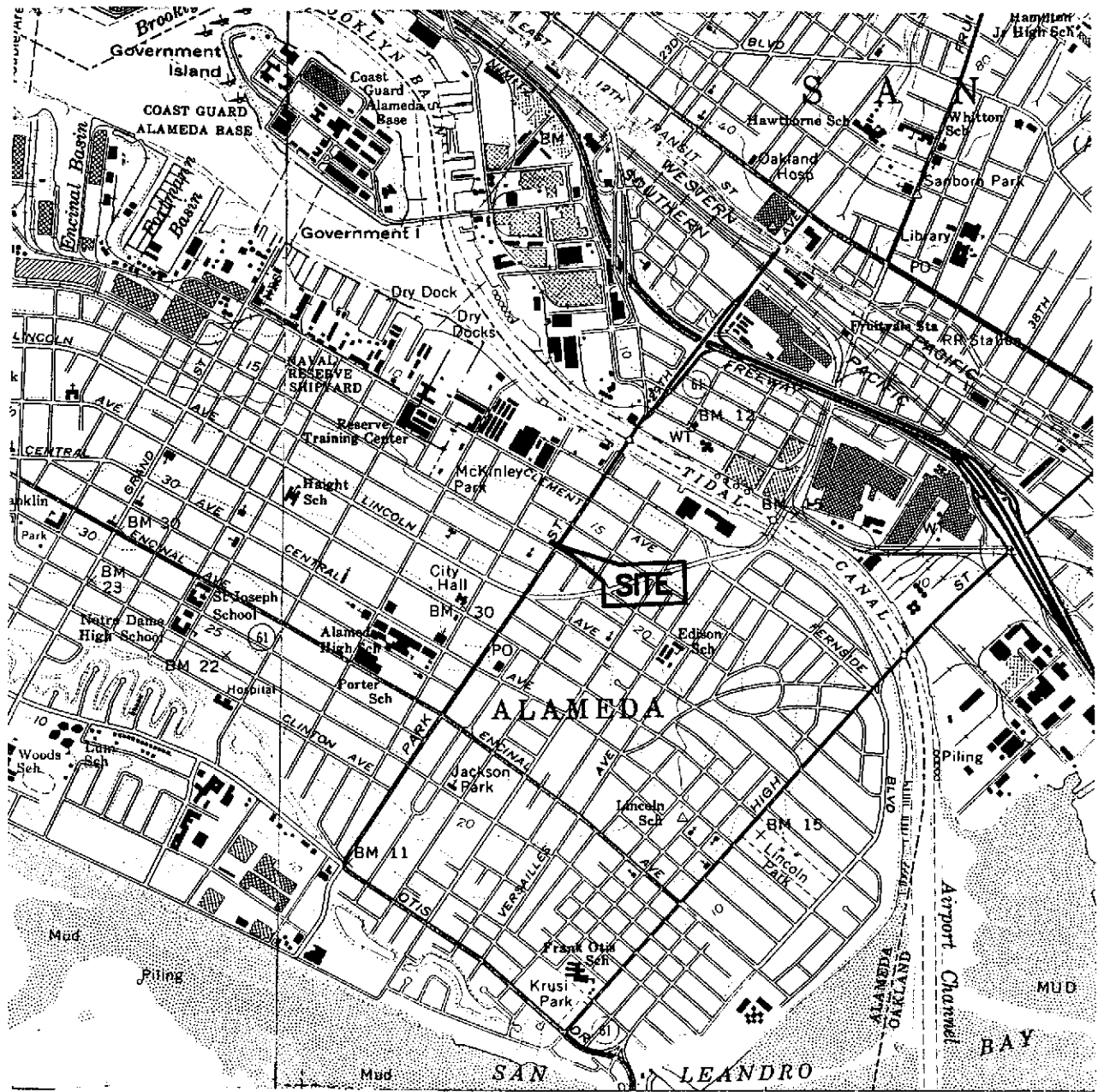
ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline using EPA Methods 5030/8015
TPH-D	Total petroleum hydrocarbons as diesel using EPA Methods 3510/8015
B	Benzene using EPA Methods 5030/8020
T	Toluene using EPA Methods 5030/8020
E	Ethylbenzene using EPA Methods 5030/8020
X	Total xylenes using EPA Methods 5030/8020
MTBE	Methyl tert butyl ether using EPA Methods 5030/8020
SVOCs	Semivolatile organic compounds using EPA Method 8270
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
---	Not analyzed/applicable/measurable
ND	Not detected above reported detection limit
MCC	McCampbell Analytical, Inc.
CHR	Chromalab, 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) SVOC analysis for polynuclear aromatics detected only naphthalene at the concentration stated.
- (e) SVOCs detected at concentrations of 420 ug/l naphthalene, 200 ug/l 2-methylnaphthalene, and 14 ug/l phenanthrene.
- (f) Travel blank.

F:\02\10-210\10-210GW.WQ2



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



QUADRANGLE LOCATION

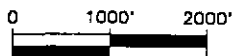


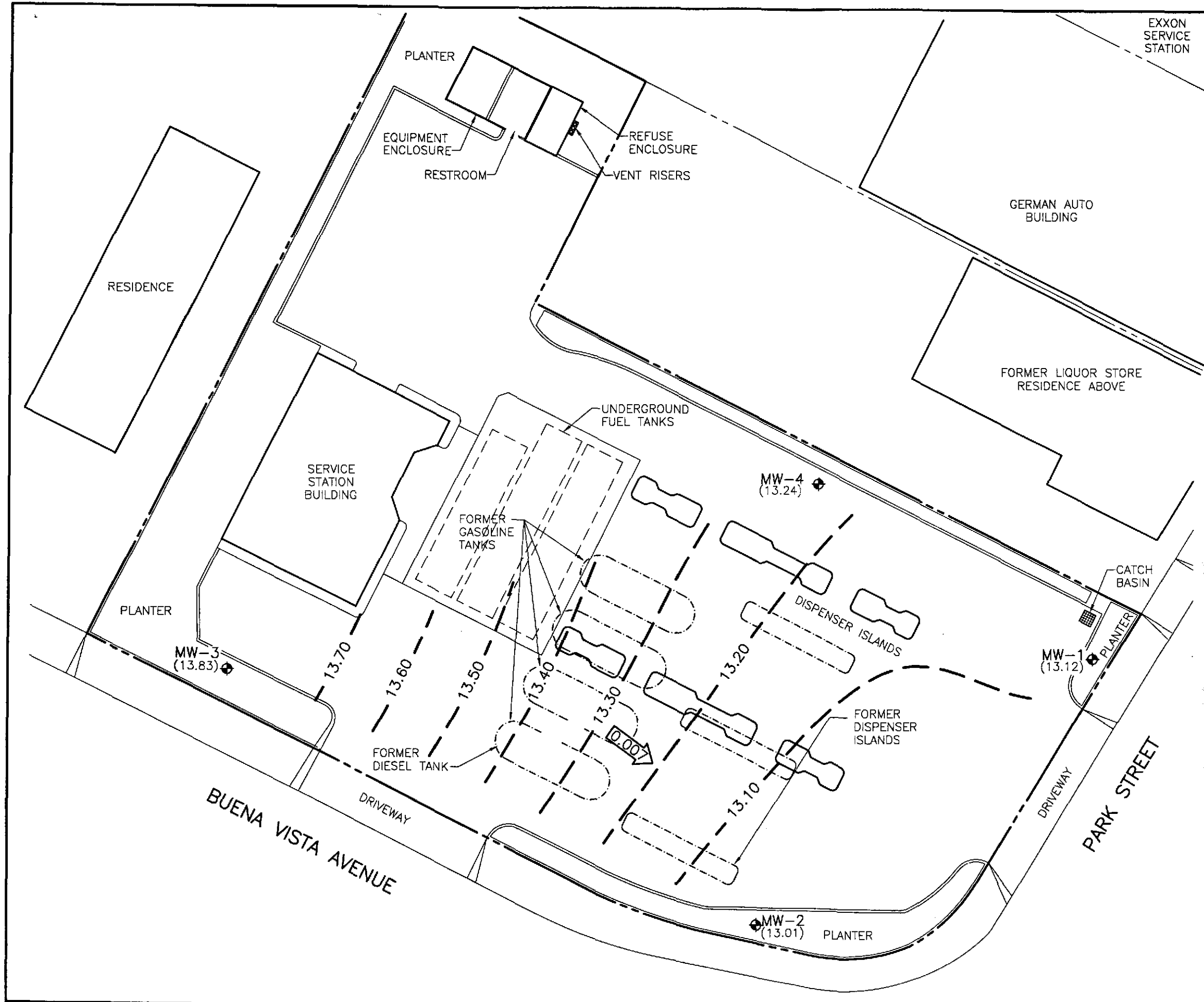
FIGURE 1 SITE VICINITY MAP

XTRA OIL COMPANY SERVICE STATION
 1701 PARK STREET
 ALAMEDA, CALIFORNIA

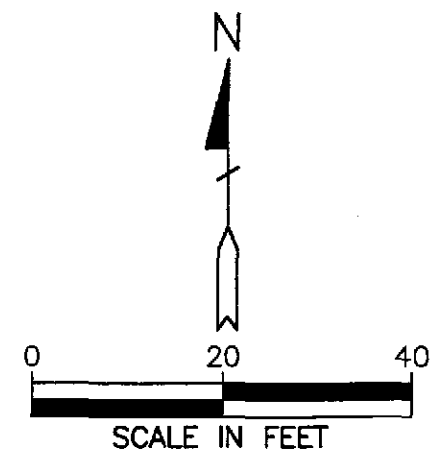
PROJECT NO. 10-210



ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA



EXXON
SERVICE
STATION

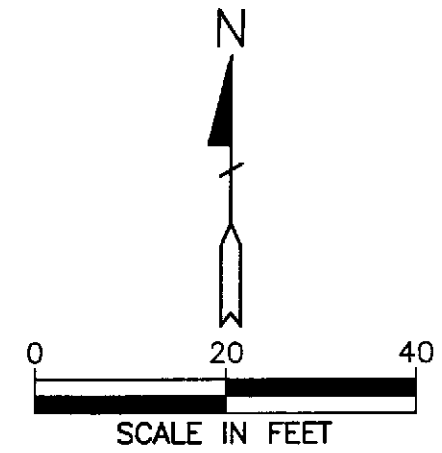
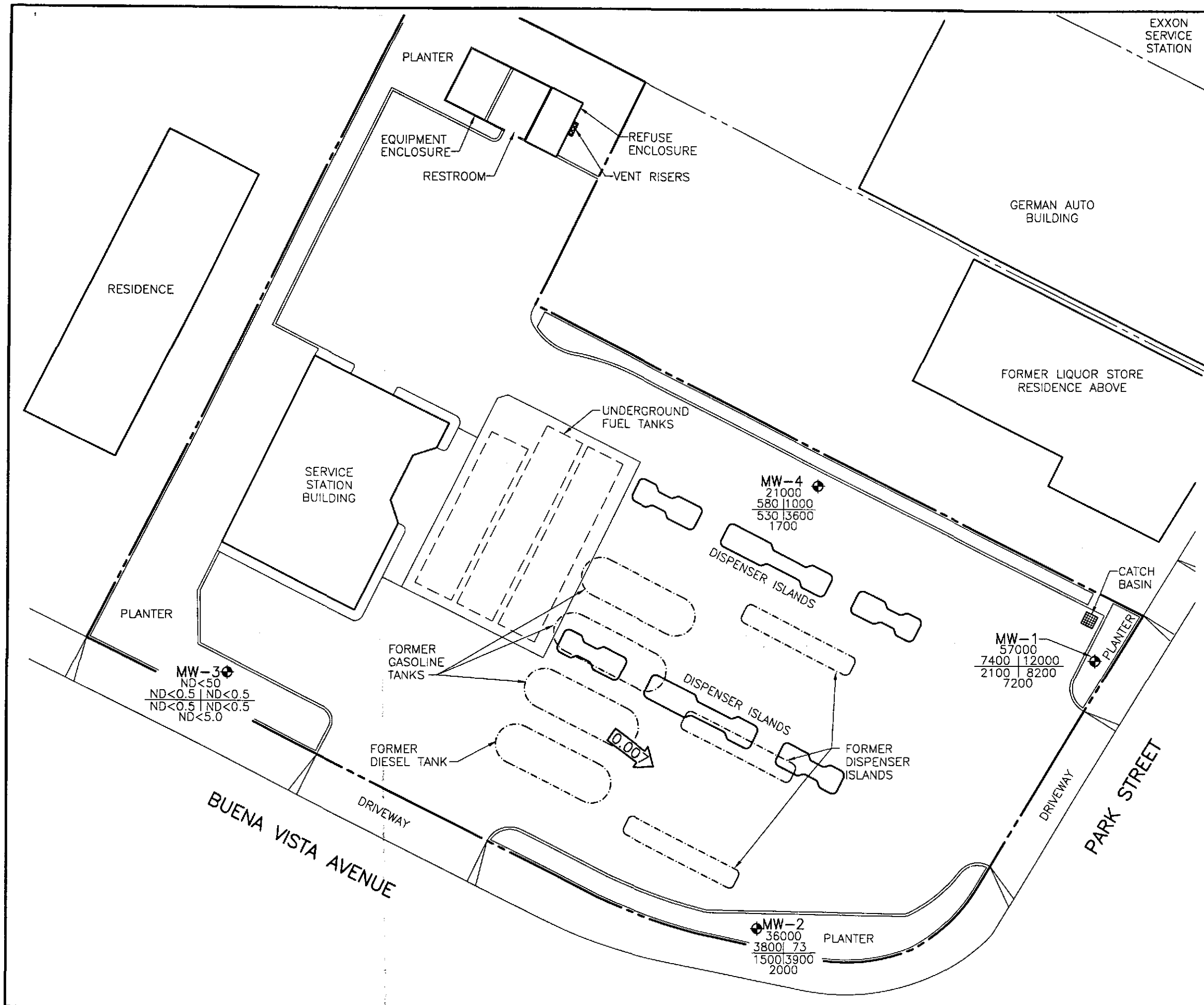


LEGEND

- ◆ GROUNDWATER MONITORING WELL
- (13.01) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 13.10 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL - 0.10 FOOT)
- ← 0.007 → CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

NOTE:
Potentiometric groundwater elevation contours were generated with Quicksurf using the standard triangulation method with a continuous curvature on a square grid surface.

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
DECEMBER 1, 1998
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA
PROJECT NO. 10-210



LEGEND

- ◆ GROUNDWATER MONITORING WELL
- TPH-G
B | T
E | X
MTBE
TPH-G
CONCENTRATION OF CONSTITUENTS
IN MICROGRAMS PER LITER
- TPH-G
TOTAL PETROLEUM
HYDROCARBONS AS GASOLINE
- B
T
E
X
BENZENE
TOLUENE
ETHYLBENZENE
TOTAL XYLENES
- MTBE
METHYL TERT BUTYL ETHER
- ND
NOT DETECTED ABOVE REPORTED
DETECTION LIMIT
- ←0.007
CALCULATED GROUNDWATER
GRADIENT DIRECTION AND
MAGNITUDE IN FOOT PER FOOT

FIGURE 3
CONCENTRATIONS OF PETROLEUM
HYDROCARBONS IN GROUNDWATER
DECEMBER 1, 1998
 XTRA OIL COMPANY SERVICE STATION
 1701 PARK STREET
 ALAMEDA, CALIFORNIA
 PROJECT NO. 10-210

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. 10-210-10-001

Address 1701 Park Street

Contract No. 10-98-154

Station No. XTRA

Date: 12-1-98

Day: M T W T H F

City: Alameda

Sampler: KTB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-1	MW-1	2"	20.00	6.48		0740	Blind duplicate sample collected
MW-2	MW-2	2"	20.00	7.30	Sheen	0755	
MW-3	MW-3	2"	20.00	6.74		0746	
MW-4	MW-4	2	20	6.45		0750	

FIELD INSTRUMENT CALIBRATION DATA

pH METER AQ ✓ 4.00 ✓ 7.00 ✓ 10.00 ✓ TEMPERATURE COMPENSATED Y N TIME 0730 WEATHER Clear
 D.O. METER _____ ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE _____ TEMP _____
 CONDUCTIVITY METER ✓ _____ 10,000 4 pt soln TURBIDITY METER _____ 5.0 NTU _____ OTHER _____
 LEAK DETECTOR : _____ ALARM MODE NON ALARM MODE

Well ID	Depth to Wat	Diam	Cap/Loc	Product De	Iridescend	Gal.	Time	Temp *F	pH	E.C.	D.O.	<input type="radio"/> EPA 601 _____ <input type="radio"/> TPH-G/BTEX _____ <input type="radio"/> TPH Diesel _____ <input type="radio"/> TOG 5520 _____ TIME/SAMPLE ID
					Y N							
Total Depth - Water Level= _____ x Well Vol. Factor= _____ x#vol. to Purge PurgeVol. _____												
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:												
<u>See page 2</u>												

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: 12-1-98 Project No. 10-210
Day: Tues Station No. SHELL
Weather: Cool, wet Address 1701 PARK ST ALAMEDA
SAMPLER: DTB

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.		
MW-3	6.74	2	dp/dk			2	0800	62.6	7.23	690 ^{µm}	4.2	<input type="radio"/> EPA 601	
Total Depth - Water Level=						x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.					<input checked="" type="radio"/> TPH-G/BTEX <u>Hel</u>
<u>20 - 6.74 = 13.3</u>						<u>x .16 x 3 =</u>	<u>7</u>	<u>7</u>					<input type="radio"/> TPH Diesel
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Baller(s) <input type="checkbox"/> Sys Port												<input type="radio"/> TOG 5520	
Comments: <u>DTW MITSUBISHI 0730</u>												Time Sampled	
												MW-3 / 0811	

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.		
MW-4	6.45	2	dp/dk			3	0821	63.0	6.51	710	4.1	<input type="radio"/> EPA 601	
Total Depth - Water Level=						x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.					<input checked="" type="radio"/> TPH-G/BTEX
<u>20 - 6.45 = 13.5</u>						<u>7</u>	<u>7</u>					<input type="radio"/> TPH Diesel	
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Baller(s) <input type="checkbox"/> Sys Port												<input type="radio"/> TOG 5520	
Comments: <u>DTW @ 0735</u>												Time Sampled	
												/ 0830	

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.		
MW-1	6.48	2	dp/dk			3	0842	66.7	6.57	802	1.9	<input type="radio"/> EPA 601	
Total Depth - Water Level=						x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.					<input checked="" type="radio"/> TPH-G/BTEX
<u>20 - 6.48 = 13.5</u>						<u>7</u>	<u>7</u>					<input type="radio"/> TPH Diesel	
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Baller(s) <input type="checkbox"/> Sys Port												<input type="radio"/> TOG 5520	
Comments: <u>QC-1 from MW-1 DTW @ 0740</u>												Time Sampled	
												0845 / 0850 / 0854	

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.		
MW-2	7.30	2	dp/dk			3	0900	67.4	6.50	1098	2.6	<input type="radio"/> EPA 601	
Total Depth - Water Level=						x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.					<input checked="" type="radio"/> TPH-G/BTEX <u>Hel</u>
<u>20 - 7.3 = 12.7</u>						<u>7</u>	<u>7</u>					<input type="radio"/> TPH Diesel	
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Baller(s) <input type="checkbox"/> Sys Port												<input type="radio"/> TOG 5520	
Comments: <u>DTW @ 0750</u>												Time Sampled	
												/ 0915	

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.		
												<input type="radio"/> EPA 601	
Total Depth - Water Level=						x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.					<input type="radio"/> TPH-G/BTEX
<u>AQUA-CHEK Calibrated at 0800 w/ 4,7,10 buffers</u>												<input type="radio"/> TPH Diesel	
Purge Method: <input type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input type="checkbox"/> Disp. Baller(s) <input type="checkbox"/> Sys Port												<input type="radio"/> TOG 5520	
Comments: <u>AND 4 PT CONDUCTIVITY SOLNS.</u>												Time Sampled	

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



McCAMPBELL ANALYTICAL INC.

110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
<http://www.mccampbell.com> E-mail: main@mccampbell.com

Alisto Engineering Group 1575 Treat Blvd, Ste 201 Walnut Creek, CA 94598	Client Project ID: #10-210; Extra Oil Co.	Date Sampled: 12/01/98
		Date Received: 12/01/98
	Client Contact: Brady Nagle	Date Extracted: 12/01/98
	Client P.O.:	Date Analyzed: 12/01/98

12/08/98

Dear Brady:

Enclosed are:

- 1). the results of 5 samples from your #10-210; Extra Oil Co. project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. 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, Lab Director

RECEIVED
DEC 10 1998

QC REPORT FOR HYDROCARBON ANALYSES

Date: 12/01/98

Matrix: WATER

Analyte	Concentration (mg/L)			Amount Spiked	% Recovery		
	Sample (#99306)	MS	MSD		MS	MSD	RPD
TPH (gas)	0.0	94.6	92.1	100.0	94.6	92.1	2.6
Benzene	0.0	9.5	9.5	10.0	95.0	95.0	0.0
Toluene	0.0	9.8	9.8	10.0	98.0	98.0	0.0
Ethyl Benzene	0.0	10.1	10.0	10.0	101.0	100.0	1.0
Xylenes	0.0	30.0	29.8	30.0	100.0	99.3	0.7
TPH(diesel)	0.0	170	176	150	114	118	3.5
TRPH (oil & grease)	0	27600	27500	23700	116	116	0.4

$$\dagger \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

13179 X AEG 320

McCAMBELL ANALYTICAL INC.

110 2ND AVENUE SOUTH, #07
PACIFIC, CA 94553

Telephone: (510) 798-1620

Fax: (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HOUR 48 HOUR 5 DAY

Report To: **BRADY NACLE** Bill To: **ALISTO**

Company: **Alisto Engineering Group**
1575 Trent Blvd., #201
Walnut Creek, CA 94598

Tele: (510) 295-1650 Fax: (510) 295-1823

Project #: **10-210** Project Name: **XTRA OIL (D)**

Project Location: **1701 PARK ST ALAMEDA**

Sampler Signature: *[Signature]*

Analysis Request		Other	Comments
BTX & TPE as Gas (8015)			
TPE as Diesel (8015)			
Total Petroleum Oil & Grease (5520 E&F/BA&F)			
Total Petroleum Hydrocarbons (418.1)			
EPA 601 / 8010			
BTX ONLY (EPA 602 / 8020)			
EPA 608 / 8080			
EPA 606 / 8060 PCB'S ONLY			
EPA 624 / 8240 / 8260			
EPA 625 / 8270			
PAH'S / PNA'S by EPA 625 / 8270 / 8310			
CAM-17 Metals			
LUFT 5 Metals			
Lead (7240/7421/739.2/6010)			
RCI			

99482
99483
99484
99485
99486

SAMPLER ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other	
MW-3	ALAMEDA	12/1/98	0411	3	VOA	X						X	X		
MW-4	↓		0830									X	X		
MW-1	↓		0950									X	X		
MW-2	↓		0915									X	X		
QC-1	↓	✓	0855	✓	✓	✓						X	X		

Relinquished By: *[Signature]* Date: 12/1/98 Time: 10:30
 Received By: Patricia Lytton

Relinquished By: Patricia Lytton Date: 12/1/98 Time: 5:25 PM
 Received By: Heidi Ricca

Remarks:

ICE/ ✓
 GOOD CONDITION ✓
 HEAD SPACE ABSENT ✓

PRESERVATION APPROPRIATE CONTAINERS ✓

VOAB ✓ O&G METALS OTHER