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

ENVIRONMENTAL PROTECTION
98 JAN -2 PM 4:01

December 31, 1997

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

1/2/98
Need QMR, RBCA,
Product thickness
OTZ Ksimas in charge
Brady will send QMR
then send the for RBCA

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-210-08-001

Prepared for:

Xtra Oil Company
2307 Pacific Avenue
Alameda, California

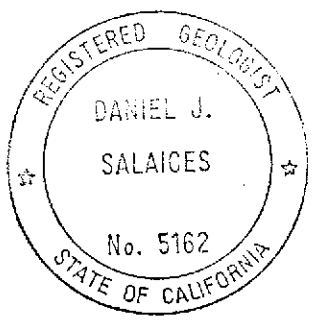
Prepared by:

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

November 24, 1997

Brady Nagle
Project Manager

Daniel Salaices
Registered Geologist



GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-210-08-001

November 24, 1997

INTRODUCTION

This report presents the results and findings of the September 11, 1997 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 September 11, 1997 groundwater monitoring and sampling event are summarized as follows:

- Approximately 0.03 foot of free product was observed in Monitoring Well MW-2. Free product or sheen was not observed in Monitoring Wells MW-1 and MW-3.

- Groundwater elevation data indicate a gradient of approximately 0.02 foot per foot in a northeasterly direction across the site.

- Analysis of the groundwater samples detected up to 100000 micrograms per liter (ug/l) total petroleum hydrocarbons as gasoline and up to 19000 ug/l benzene in the sample collected from Monitoring Well 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 (Feet)	(a)	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	19.49		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-1		03/20/96	19.49		6.45	---	13.04	46000	3300	10000	6200	1100	3200	---	---		---	MCC
QC-1	(c)	03/20/96	---		---	---	---	42000	---	9800	5800	970	3000	---	---		---	MCC
MW-1		06/13/96	19.49		7.14	---	12.35	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	19.49		7.56	---	11.93	76000	14000	14000	11000	1600	7100	17000	---		6.1	MCC
MW-1		12/19/96	19.49		7.08	---	12.41	46000	---	12000	5500	1200	4100	---	---		---	MCC
MW-1		05/09/97	19.60	(d)	7.39	---	12.21	80000	7500	14000	12000	1700	7600	14000	280	(e)	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-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-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-2		03/20/96	20.29		6.79	0.01	13.51	---	---	---	---	---	---	---	---		---	---
MW-2		06/13/96	20.29		7.41	0.01	12.89	---	---	---	---	---	---	---	---		---	---
MW-2		09/23/96	20.29		7.83	0.01	12.47	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	20.29		7.37	0.01	12.93	29000	---	1800	240	1400	5400	---	(f)		---	MCC
QC-1	(c)	12/19/96	---		---	---	---	29000	---	580	210	1300	5100	---	---		---	MCC
MW-2		05/09/97	20.31	(d)	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

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)	MTBE (ug/l)	SVOCs (ug/l)	DO (ppm)	LAB
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
MW-3	03/20/96	20.58	5.44	---	15.14	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
MW-3	06/13/96	20.58	6.17	---	14.41	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	20.58	6.57	---	14.01	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	20.58	6.59	---	13.99	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
MW-3	05/09/97	20.57 (d)	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-4	05/09/97	19.69	7.17	---	12.52	31000	15000	540	1300	1000	4500	1900	2.1 (e)	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
QC-2 (g)	11/04/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (g)	02/24/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (g)	05/25/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (g)	08/30/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (g)	11/16/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (g)	03/20/96	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	MCC
QC-2 (g)	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)	Top of casing elevation resurveyed on April 29, 1997.
(e)	SVOC analysis for polynuclear aromatics detected only napthalene at the concentration stated.
(f)	SVOCs detected at concentrations of 420 ug/l naphthalene, 200 ug/l 2-methylnapthalene, and 14 ug/l phenanthrene.
(g)	Travel blank.

F:\0\10-210\210-7-1.WQ2

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

N

0 1000' 2000'

FIGURE 1

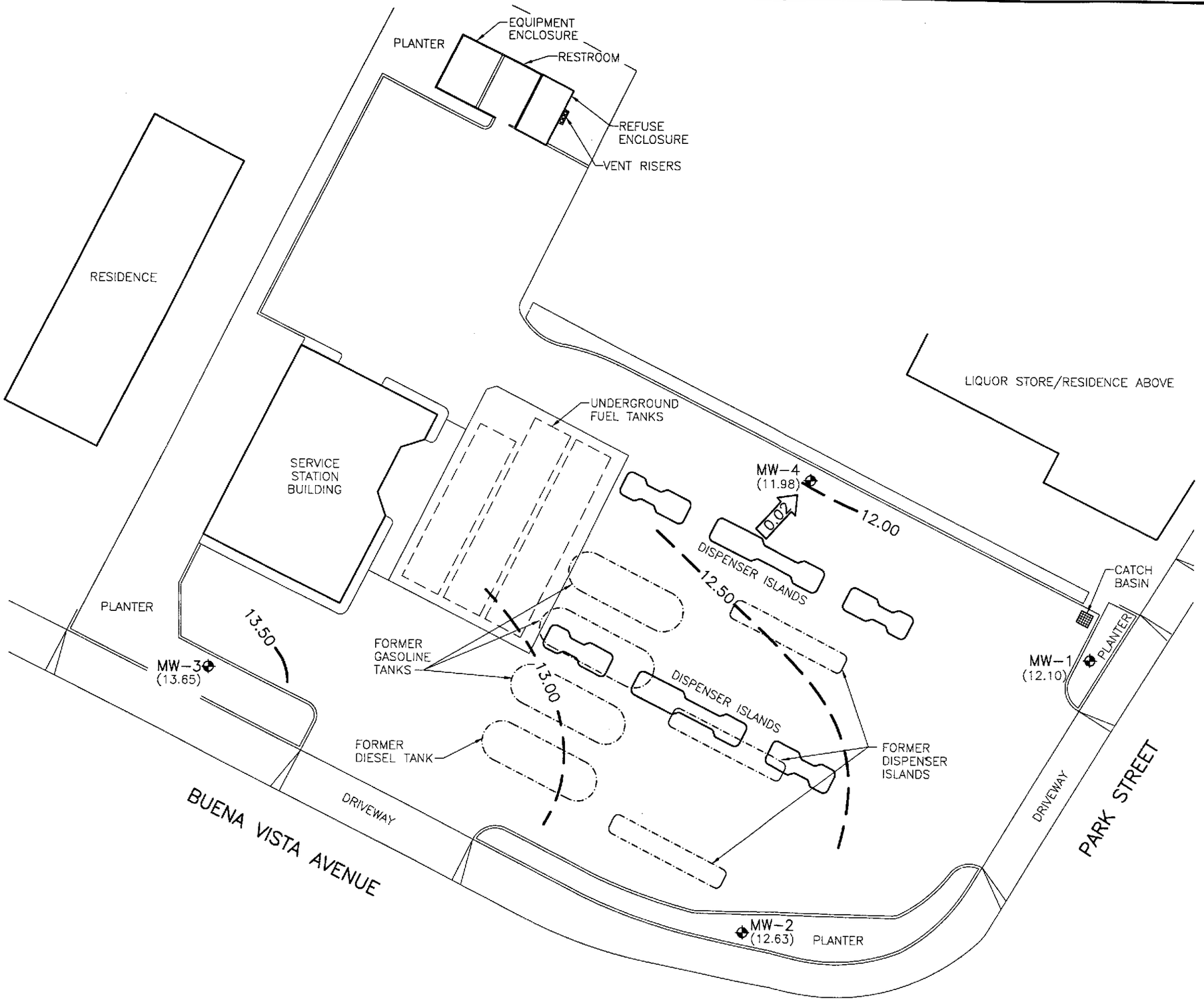
SITE VICINITY MAP

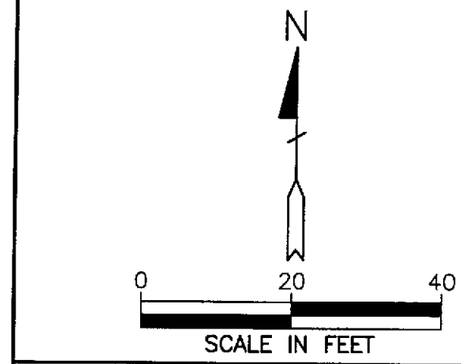
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10-210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10210B---DWG 8-3-94 RKW 1=1





LEGEND

- ◆ GROUNDWATER MONITORING WELL
- (11.98) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 12.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–0.50 FOOT)
- 0.02 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

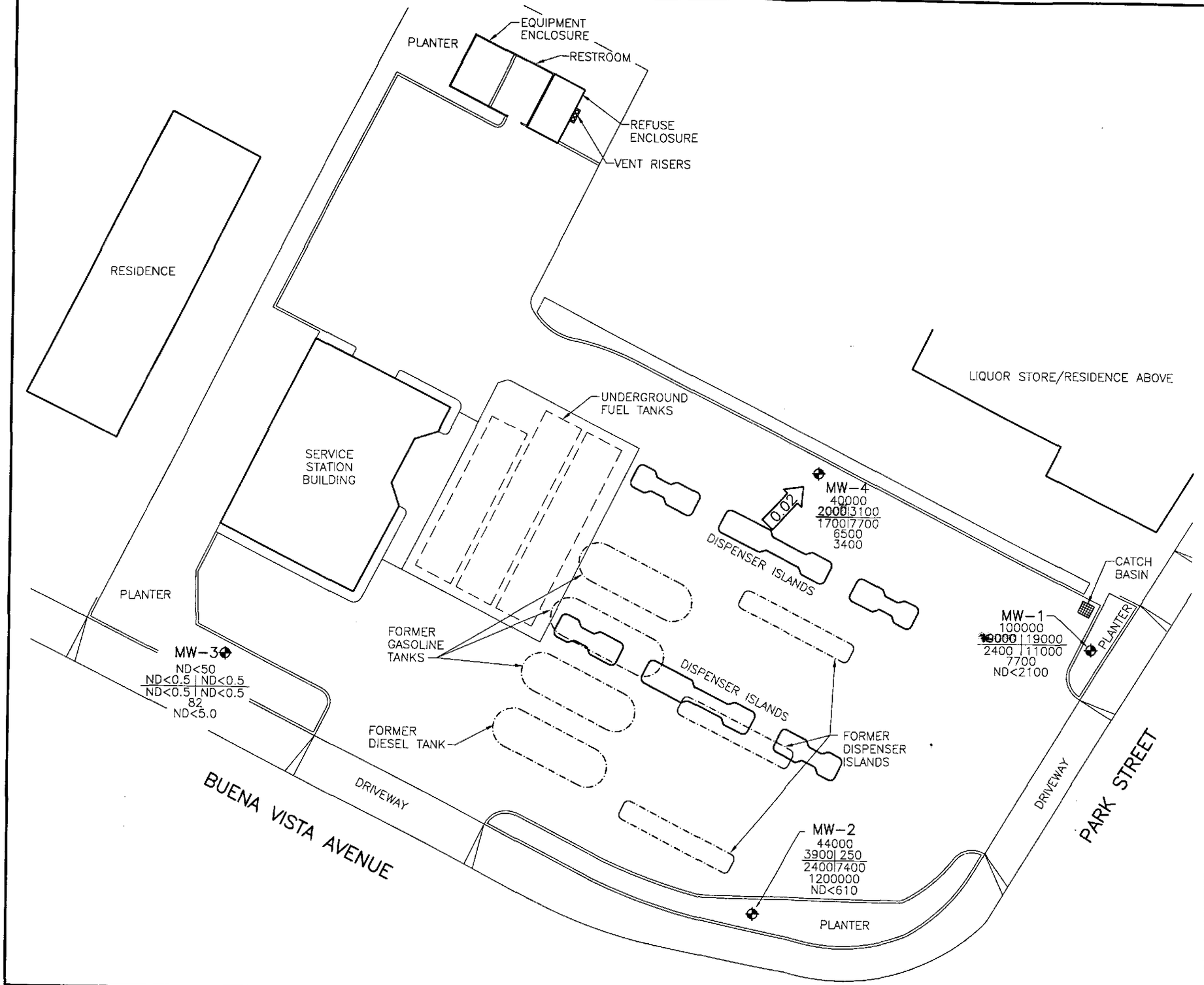
SEPTEMBER 11, 1997

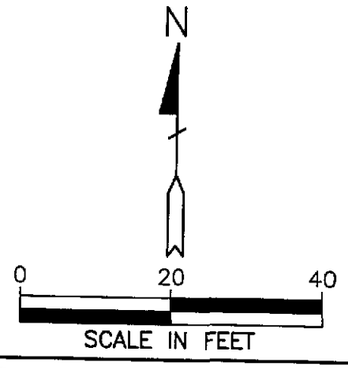
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10–210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

102100-W.DWG 11-5-97 RKW 1=20





LEGEND

◆	GROUNDWATER MONITORING WELL
TPH-G / B | T / E | X / TPH-D / MTBE	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
MTBE	METHYL TERT BUTYL ETHER
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
0.02	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

SEPTEMBER 11, 1997

XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT NO. 10-210

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10210E-W.DWG 11-18-97 RKW 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 - 08 - 001 Date: 9/11/97
Address 1701 Park Street Day: M T W (TH) F
Contract No. Pending City: Alameda
Station No. XTRA Sampler: CB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-1	S-3	2"	20.00	7.50	Ø	1429	
MW-2	S-4	2"	20.00	7.70	.03	1435	QC-1 (S-5) From this well
MW-3	S-1	2"	20.00	6.92	Ø	1420	
MW-4	S-2	2"	20.00	7.71	Ø	1426	

FIELD INSTRUMENT CALIBRATION DATA

pH METER Ion 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 1045 WEATHER clear
D.O. METER Ion ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE 760 TEMP _____
CONDUCTIVITY METER Ion 10,000 _____ TURBIDITY METER _____ 5.0 NTU _____ OTHER X
LEAK DETECTOR : _____ ALARM MODE X NON ALARM MODE

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-3	6.92	2"	OK	Ø	Y (N)	2	1452	72.4	7.14	671 µS	7.0
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			4		71.6	7.06	710 µS	
20.00 - 6.92 = 13.08	X .16 = 2.09	x3 =	6.27			7	1501	71.2	7.02	719 µS	7.0

Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601 ____
(X) TPH-G/BTEX ____
(X) TPH Diesel ____
O TOG 5520 ____
TIME/SAMPLE ID: 1507

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-4	7.71	2"	OK	Ø	Y (N)	2	1521	73.1	7.31	771 µS	6.3
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			4		72.6	7.20	803 µS	
20.00 - 7.71 = 12.29	X .16 = 1.97	X3 =	5.91			6	1530	72.4	7.14	810 µS	6.4

Purge Method: (X)Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601 ____
(X) TPH-G/BTEX ____
(X) TPH Diesel ____
O TOG 5520 ____
TIME/SAMPLE ID: 1535

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 | Date: 9/11/97
Address 1701 Park Street | Day: M T W TH F
Contract No. Pending | City: Alameda
Station No. XTRA | Sampler: LW

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-1	7.50	2"	OIC	Ø	Y (N)	2	1547	73.8	7.39	810µS	7.0
						4		72.5	7.10	859µS	
						6	1556	71.9	7.03	864µS	7.2

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
20.00 - 7.50 = 12.50 x .16 = 2.00 x 3 = 6.00
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

EPA 601___ TPH-G/BTEX___ TPH Diesel___ TOG 5520___
TIME/SAMPLE ID: 1603

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-2	7.70	2"	OIC	7.67	(Y) N	2	1614	72.1	7.47	979µS	6.3
						4		71.3	7.29	1010µS	
						6	1627	70.2	7.17	1024µS	6.5

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.
20.00 - 7.70 = 12.30 x .16 = 1.97 x 3 = 5.91
Purge Method: Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: Removed < .005 gal FP

EPA 601___ TPH-G/BTEX___ TPH Diesel___ TOG 5520___
TIME/SAMPLE ID: 1630

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Alisto Engineering Group 1575 Treat Blvd, Ste 201 Walnut Creek, CA 94598	Client Project ID: #10-210-8-1; Xtra Oil	Date Sampled: 09/11/97
		Date Received: 09/12/97
	Client Contact: Keith Simas	Date Extracted: 09/12/97
	Client P.O:	Date Analyzed: 09/12/97

09/19/97

Dear Keith:

Enclosed are:

1). the results of **5** samples from your **#10-210-8-1; Xtra Oil** 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

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
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http://www.mccampbell.com E-mail: main@mccampbell.com

Alisto Engineering Group	Client Project ID: #10-210-8-1; Xtra Oil	Date Sampled: 09/11/97
1575 Treat Blvd, Ste 201		Date Received: 09/12/97
Walnut Creek, CA 94598	Client Contact: Keith Simas	Date Extracted: 09/12/97
	Client P.O:	Date Analyzed: 09/12/97

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & 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)+	MTBE	Benzene	Toluene	Ethylben -zene	Xylenes	% Recovery Surrogate
80744	S-1	W	ND	ND	ND	ND	ND	ND	92
80745	S-2	W	40,000,a	3400	2000	3100	1700	7700	100
80746	S-3	W	100,000,a	ND<2100	19,000	19,000	2400	11,000	98
80747	S-4	W	44,000,a,h	ND<610	3900	250	2400	7400	97
80748	S-5	W	47,000,a,h	920	4000	420	2700	8300	96
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

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

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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
80744	S-1	W	82,b	99
80745	S-2	W	6500,d,b	103
80746	S-3	W	7700,d,a	100
80747	S-4	W	1,200,000,a,d,h	101
80748	S-5	W	1,100,000,a,d,h	105
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/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.

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QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/12/97 Matrix: Water

Analyte	Concentration (mg/L) Sample #(79625)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.0	111.9	111.5	100.0	111.9	111.5	0.4
Benzene	0.0	11.2	11.0	10.0	112.0	110.0	1.8
Toluene	0.0	11.4	11.2	10.0	114.0	112.0	1.8
Ethyl Benzene	0.0	11.1	11.0	10.0	111.0	110.0	0.9
Xylenes	0.0	33.0	32.8	30.0	110.0	109.3	0.6
TPH(diesel)	0	142	143	150	94	95	0.8
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

9430XAEG158

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
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CHAIN OF CUSTODY RECORD

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

REPORT TO: Keith Simas BILL TO: Xtra

COMPANY: Allsto Engineering
1575 Treat Blvd # 201

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

PROJECT NUMBER: 10-210-8-1 PROJECT NAME: XTRA

PROJECT LOCATION: Alameda SAMPLER SIGNATURE: [signature]

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCl	HNO3	OTHER	BTEX & TPH as Gasoline (602/8020 & 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/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	TPH-D	MTBE			COMMENTS
S-1		9/11/97		4		X								X															X	X			80744
S-2																																	80745
S-3																																	80746
S-4																																	80747
S-5				3																													80748

COMMENTS: Bill Xtra Directly

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
[signature]	9/12/97	1042	Patricia Yelton
Patricia Yelton	9/12/97	1240	Nedi Ricca
			RECEIVED BY LABORATORY:

REMARKS:

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

	VOAS	O&G	METALS	OTHER
PRESERVATION	✓			

APPROPRIATE CONTAINERS ✓