



ALISTO ENGINEERING GROUP

March 29, 2004

Mr. Amir K. Gholami
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

20191
Alameda County
APR 07 2004
Environmental Health 10-210-20-001

Subject: Groundwater Monitoring and Sampling Report
Xtra Oil Company Service Station (dba Shell)
1701 Park Street
Alameda, California

Dear Mr. Gholami:

On behalf of Xtra Oil Company, Alisto Engineering Group is pleased to submit this groundwater monitoring and sampling report for the Xtra Oil Company service station (dba Shell), 1701 Park Street, Alameda, California.

Please call if you have questions or comments.

Sincerely,

ALISTO ENGINEERING GROUP

Chris Reinheimer
Project Manager

Enclosure

cc: Mr. Keith Simas, Xtra Oil Company (with enclosure)
Ms. Ade Fagorala, California Regional Water Quality Control Board, San Francisco Bay
Region (with enclosure)

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-210-20-001

**Alameda County
APR 07 2004
Environmental Health**

Prepared for:

**Xtra Oil Company
2307 Pacific Avenue
Alameda, California**

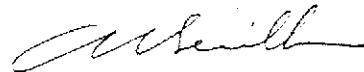
Prepared by:

**Alisto Engineering Group
2737 North Main Street, Suite 100
Walnut Creek, California**

March 29, 2004



**Chris Reinheimer
Project Manager**



**Al Sevilla, P.E.
Principal**



2006



GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-210-20-001

March 29, 2004

INTRODUCTION

This report presents the results and findings of the March 1, 2004 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 the Alameda County Health Care Services Agency (ACHCSA) 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 three 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. Groundwater monitoring was performed concurrently with former Exxon Service Station 7-0104, 1725 Park Street, Alameda, California, the results of which are summarized in Tables 1A and 1B.

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 March 1, 2004 groundwater monitoring and sampling event are as follows:

- Groundwater gradient as interpreted from the monitoring data was 0.008 foot per foot in a northeasterly direction across the Xtra Oil site.
- Analysis of the samples detected dissolved-phase petroleum hydrocarbons in Monitoring Wells MW-1, MW-2, and MW-4 at concentrations of up to 20,000 micrograms per liter (ug/l) total petroleum hydrocarbons as gasoline in Well MW-1 and up to 3900 ug/l benzene in Well MW-2.
- Total petroleum hydrocarbons as diesel was detected in the groundwater samples from Wells MW-1, MW-2 and MW-4 at concentrations of 3000, 43000, and 2500 ug/l, respectively.
- MTBE was detected using EPA Method 8015/8020 in groundwater samples from Wells MW-2 and MW-4 at concentrations of 1800 and 240 ug/l, respectively. MTBE was not detected above the reported detection limits in Wells MW-1 and MW-4.



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 (a) (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)	OTHER SVOCs (ug/l)	NAPHTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB
MW-1	11/04/94	19.60	8.6	---	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	7.58	---	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	ND	280	ND<2	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	5200	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	MCC
QC-1 (c)	03/11/98	---	---	---	---	43000	---	7200	5000	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-1	03/30/99	19.60	5.74	---	13.86	67000	6500	5700	9400	2500	9400	3200	---	---	---	2.1	MCC
QC-1 (c)	03/30/99	---	---	---	---	64000	6400	5500	9000	2400	9100	3100	---	---	---	---	MCC
MW-1	08/16/99	19.60	7.02	---	12.58	63000	---	3800	9100	2800	11000	ND<1700	---	---	---	1.3	MCC
QC-1 (c)	08/16/99	---	---	---	---	64000	---	3700	8900	2800	11000	ND<1400	---	---	---	---	MCC
MW-1	12/31/99	19.60	7.45	---	12.15	62000	5100	2900	9400	2700	11000	ND<100	---	---	---	8.3	MCC
QC-1 (c)	12/31/99	---	---	---	---	67000	4900	2900	9700	2800	12000	ND<100	---	---	---	---	MCC
MW-1	03/31/00	19.60	5.85	---	13.75	48000	490	3200	5500	2000	6700	520	---	---	---	7.9	MCC
QC-1 (c)	03/31/00	---	---	---	---	54000	3300	3500	6000	2300	7300	730	---	---	---	---	MCC
MW-1	07/14/00	19.60	7.00	---	12.60	78000	5700	5600	14000	2300	9500	ND<200	---	---	---	3.2	MCC
QC-1 (c)	07/14/00	---	---	---	---	72000	---	4900	14000	2100	9200	ND<200	---	---	---	---	MCC
MW-1	10/04/00	19.60	7.60	---	12.00	65000	2900	3800	11000	2400	8200	ND<100	---	---	---	1.4	MCC
QC-1 (c)	10/04/00	---	---	---	---	68000	---	3900	13000	2400	9300	ND<100	---	---	---	---	MCC
MW-1	12/21/00	19.60	6.91	---	12.89	74000	2500	3800	17000	3400	15000	ND<200	---	---	---	1.3	MCC
QC-1 (c)	12/21/00	---	---	---	---	69000	---	2700	12000	2400	11000	ND<550	---	---	---	---	MCC
MW-1	04/13/01	19.60	6.06	---	13.54	55000	2400	2900	7800	2400	9400	ND<900	---	---	---	0.8	MCC
QC-1 (c)	04/13/01	---	---	---	---	51000	---	2300	6100	2000	7900	ND<350	---	---	---	---	MCC
MW-1	06/27/01	19.60	6.54	---	13.06	80000	3600	2800	13000	2300	10000	ND<250	---	---	---	1.1	MCC
QC-1 (c)	06/27/01	---	---	---	---	76000	---	3100	13000	2300	10000	ND<250	---	---	---	---	MCC
MW-1	09/20/01	19.60	7.08	---	12.52	74000	6600	1600	7700	2500	10000	ND<200	---	---	---	0.8	MCC
QC-1 (c)	09/20/01	---	---	---	---	67000	---	1600	7800	2600	10000	ND<200	---	---	---	---	MCC
MW-1	12/21/01	19.60	5.71	---	13.89	58000	5500	2100	11000	2400	10000	ND<720	---	---	---	1.4	MCC
QC-1 (c)	12/21/01	---	---	---	---	56000	---	2100	11000	2300	10000	ND<620	---	---	---	---	MCC
MW-1	02/04/02	19.60	5.01	---	14.59	6500	1800	74	100	230	1500	140	---	---	---	4.1	MCC
QC-1 (c)	02/04/02	---	---	---	---	8000	---	90	130	270	1800	ND<500	---	---	---	---	MCC
MW-1	05/07/02	19.60	6.10	---	13.50	41000	7900	1300	5200	1700	6300	ND<1000	---	---	---	4.3	MCC
QC-1 (c)	05/07/02	---	---	---	---	40000	---	1300	5200	1700	6400	ND<500	---	---	---	---	MCC
MW-1	08/22/02	19.60	6.91	---	12.89	42000	4800	1100	6300	1900	7900	ND<500	---	---	---	4.9	MCC
QC-1 (c)	08/22/02	---	---	---	---	40000	---	1000	6100	1800	7500	ND<500	---	---	---	---	MCC
MW-1	11/08/02	19.60	6.46	---	13.14	38000	6800	770	4600	1600	6600	ND<1000	---	---	---	---	MCC
QC-1 (c)	11/08/02	---	---	---	---	49000	---	880	4800	1800	6700	ND<1700	---	---	---	---	MCC
MW-1	02/07/03	19.60	5.80	---	13.80	43000	3700	1600	6100	2100	9700	ND<500	---	---	---	1.1	MCC
MW-1	05/02/03	19.60	5.60	---	14.00	48000	4600	1100	5900	1800	7300	ND<1000	---	---	---	---	MCC
QC-1 (c)	05/02/03	---	---	---	---	---	---	1200	5800	1800	7100	ND<500	---	---	---	---	MCC
MW-1	08/14/03	19.60	6.81	---	12.79	42000	3800	1000	4700	2000	8100	ND<500	---	---	---	1.3	MCC
QC-1 (c)	08/14/03	---	---	---	---	43000	---	1000	4600	2000	7900	ND<500	---	---	---	---	MCC
MW-1	11/14/03	19.6	6.71	---	12.88	40000	3000	610	4900	1900	7600	ND<500	---	---	---	0.8	MCC
MW-1	03/01/04	19.6	5.22	---	14.38	20000	3000	540	2500	720	2900	ND<50	---	---	---	0.01	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 (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	OTHER SVOCs (ug/l)	NAPHTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB
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	---	(d)	420	ND<10	---	MCC
QC-1 (c)	12/19/96	---	---	---	---	29000	---	580	210	1300	5100	---	---	---	---	---	MCC
MW-2	05/09/97	20.31	8.11	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	8900	920	---	---	---	---	MCC
MW-2	12/15/97	20.31	7.87	0.03	12.46	32000	68000	4600	130	2200	5400	ND<470	---	---	---	6	MCC
MW-2	03/11/98	20.31	5.61	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
MW-2	03/30/99	20.31	6.51	0.13	13.90	23000	23000	5000	100	610	870	21000	---	---	---	1.7	MCC
MW-2	08/16/99	20.31	8.04	0.21	12.43	30000	---	5200	67	1100	1800	6000	---	---	---	2.6	MCC
MW-2	12/31/99	20.31	8.20	0.01	12.12	43000	340000	7600	97	1400	2500	4300	---	---	---	9.0	MCC
MW-2	03/31/00	20.31	6.29	0.01	14.03	28000	200000	4000	58	1100	1500	13000	---	---	---	8.1	MCC
MW-2	07/14/00	20.31	8.02	---	12.29	35000	170000	5000	76	1100	2500	4900	---	---	---	3.9	MCC
MW-2	10/04/00	20.31	8.62	---	11.69	22000	67000	4700	97	1300	1000	1900	---	---	---	1.8	MCC
MW-2	12/21/00	20.31	7.70	---	12.61	23000	16000	7500	65	770	490	8600	---	220	ND<10	0.6	MCC
MW-2	04/13/01	20.31	7.05	---	13.26	25000	21000	6400	79	790	670	8300	---	---	---	1.1	MCC
MW-2	06/27/01	20.31	7.50	---	12.81	34000	10000	5400	100	520	370	6800	---	---	---	0.7	MCC
MW-2	09/20/01	20.31	8.10	---	12.21	28000	64000	4600	78	670	500	2000	---	---	---	0.4	MCC
MW-2	12/21/01	20.31	6.66	---	13.65	30000	18000	3000	52	1700	970	ND<100	---	---	---	0.9	MCC
MW-2	02/04/02	20.31	6.75	---	13.56	17000	35000	3600	ND<50	960	500	1200	---	---	---	1.3	MCC
MW-2	05/07/02	20.31	7.20	---	13.11	16000	59000	3500	43	520	220	3100	---	---	---	1.0	MCC
MW-2	08/22/02	20.31	7.96	---	12.35	15000	60000	2700	30	460	220	700	---	---	---	4.2	MCC
MW-2	11/08/02	20.31	7.89	---	12.62	15000	100000	2100	60	1100	150	ND<250	---	---	---	---	MCC
MW-2	02/07/03	20.31	6.52	---	13.79	11000	---	4400	24	ND<12	77	1900	---	---	---	0.7	MCC
MW-2	05/02/03	20.31	6.40	---	13.91	16000	79000	1800	23	860	210	ND<350	---	---	---	---	MCC
MW-2	08/14/03	20.31	7.77	---	12.54	13000	4300	1600	21	450	80	ND<400	---	---	---	0.9	MCC
MW-2	11/14/03	20.31	7.85	---	12.46	12000	13000	1700	29	600	100	ND<800	---	---	---	0.7	MCC
MW-2	03/01/04	20.31	6.10	---	14.21	17000	43000	3900	100	670	430	1800	---	---	---	0.42	MCC
MW-3	11/04/94	20.57	8.92	---	11.85	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	MCC
MW-3	01/11/95	20.57	5.87	---	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	28.0	12.0	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	8.92	---	13.65	ND<50	82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	7	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	0.6	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	MCC
MW-3	03/30/99	20.57	5.68	---	14.89	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	4.6	MCC
MW-3	08/16/99	20.57	7.67	---	12.90	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	2.7	MCC
MW-3	12/31/99	20.57	8.07	---	12.50	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	9.0	MCC
MW-3	03/31/00	20.57	5.59	---	14.98	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	2.8	MCC
MW-3	07/14/00	20.57	7.64	---	12.93	88	ND<50	0.89	1.7	9.5	---	ND<5.0	---	---	---	2.1	MCC
MW-3	10/04/00	20.57	8.34	---	12.23	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	2.0	MCC
MW-3	12/21/00	20.57	7.00	---	13.57	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	1.4	MCC
MW-3	04/13/01	20.57	6.38	---	14.19	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	1.3	MCC
MW-3	06/27/01	20.57	7.37	---	13.20	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	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) (a)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	OTHER SVOCs (ug/l)	NAPHTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB
MW-3	09/20/01	20.57	8.25	---	12.32	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	2.1	MCC
MW-3	12/21/01	20.57	5.72	---	14.85	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	2.9	MCC
MW-3	02/04/02	20.57	5.85	---	14.72	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	4.1	MCC
MW-3	05/07/02	20.57	6.49	---	14.08	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	4.0	MCC
MW-3	08/22/02	20.57	7.93	---	12.64	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	4.6	MCC
MW-3	11/08/02	20.57	7.67	---	12.90	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	---	MCC
MW-3	02/07/03	20.57	5.95	---	14.62	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	2.8	MCC
MW-3	05/02/03	20.57	5.75	---	14.82	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	---	MCC
MW-3	08/14/03	20.57	7.74	---	12.83	ND<50	ND<50	1.6	ND<0.6	0.62	3.2	ND<5.0	---	---	---	2.1	MCC
MW-3	11/14/03	20.57	7.75	---	12.82	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	0.8	MCC
MW-3	03/01/04	20.57	5.17	---	15.40	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	---	---	0.92	MCC
MW-4	05/09/97	19.69	7.17	---	12.52	31000	15000	540	1300	1000	4500	1900	ND	---	---	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	MCC
MW-4	03/11/98	19.69	3.51	---	16.18	2800	780	69	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
MW-4	03/30/99	19.69	5.41	---	14.28	41000	3600	3100	3400	1700	6700	5700	---	---	---	4.6	MCC
MW-4	08/16/99	19.69	7.35	---	12.34	24000	---	4600	940	1200	2700	9700	---	---	---	3.4	MCC
MW-4	12/31/99	19.69	7.71	---	11.98	14000	2000	510	630	600	3100	3500	---	---	---	10.1	MCC
MW-4	03/31/00	19.69	5.22	---	14.47	14000	1400	470	480	580	2200	2000	---	---	---	6.8	MCC
MW-4	07/14/00	19.69	7.31	---	12.38	37000	4300	770	1500	1800	7200	1700	---	---	---	3.3	MCC
MW-4	10/04/00	19.69	7.11	---	12.58	47000	3200	670	2000	2600	9800	ND<1500	---	---	---	1.7	MCC
MW-4	12/21/00	19.69	6.86	---	12.83	13000	1800	370	410	460	2300	1500	---	88	ND<10	0.6	MCC
MW-4	04/13/01	19.69	6.02	---	13.67	20000	2800	710	640	620	2900	2300	---	---	---	1.0	MCC
MW-4	06/27/01	19.69	6.72	---	12.97	23000	2100	510	1100	1100	4300	1400	---	---	---	1.0	MCC
MW-4	09/20/01	19.69	7.30	---	12.39	36000	4400	460	1300	1700	6700	1000	---	---	---	2.0	MCC
MW-4	12/21/01	19.69	4.55	---	15.14	11000	5600	130	250	480	2400	ND<320	---	---	---	1.6	MCC
MW-4	02/04/02	19.69	5.82	---	13.87	50000	12000	3000	6100	1900	7600	ND<500	---	---	---	2.0	MCC
MW-4	05/07/02	19.69	6.08	---	13.61	17000	3200	270	820	870	3700	ND<500	---	---	---	2.6	MCC
MW-4	08/22/02	19.69	7.45	---	12.24	26000	3800	720	920	1500	6500	2100	---	---	---	4.6	MCC
MW-4	11/08/02	19.69	6.74	---	12.95	20000	3600	290	630	1200	5100	670	---	---	---	---	MCC
MW-4	02/07/03	19.69	4.86	---	14.83	13000	---	520	1300	ND<25	3600	420	---	---	---	2.1	MCC
QC-1 (c)	02/07/03	---	---	---	---	13000	---	510	1200	---	3100	420	---	---	---	---	MCC
MW-4	05/02/03	19.69	5.45	---	14.24	19000	3600	280	550	810	3600	470	---	---	---	---	MCC
MW-4	08/14/03	19.69	7.20	---	12.49	31000	4100	720	810	1300	6400	1100	---	---	---	1.2	MCC
MW-4	11/14/03	19.69	6.92	---	12.77	18000	3300	400	320	1000	4500	ND<1000	---	---	---	0.7	MCC
QC-1 (c)	11/14/03	---	---	---	---	---	---	440	310	1100	4500	ND<1000	---	---	---	---	MCC
MW-4	03/01/04	19.69	5.10	---	14.59	15000	2500	110	210	580	2700	240	---	---	---	0.61	MCC
QC-1 (c)	03/01/04	---	---	---	---	15000	---	110	220	610	2800	250	---	---	---	---	MCC
QC-2 (e)	11/04/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	MCC
QC-2 (e)	02/24/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	MCC
QC-2 (e)	05/25/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	MCC
QC-2 (e)	08/30/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	MCC
QC-2 (e)	11/16/95	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	MCC
QC-2 (e)	03/20/96	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	MCC
QC-2 (e)	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) Other SVOCs detected at concentrations of 200 ug/l 2-methylnaphthalene and 14 ug/l phenanthrene.
- (e) Travel blank.

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0104
1725 Park Street
Alameda, California

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X
(TOC)	Date	<.....	feet	>.....	ug/l.....						
Notes:											
SUBJ	=	Results of subjective evaluation, liquid-phase hydrocarbon thickness in feet.									
TOC	=	Elevation of top of well casing; in feet above mean sea level.									
DTW	=	Depth to water.									
Elev.	=	Elevation of groundwater in feet above mean sea level.									
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 5030/8015 (modified).									
TPHd	=	Total petroleum hydrocarbons as diesel using EPA Method 5030/8015 (modified).									
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.									
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.									
1,2-Dibromoethane	=	1,2-Dibromoethane analyzed using EPA Method 8260B.									
1,2-DCA	=	1,2-Dichloroethane analyzed using EPA Method 8260B.									
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.									
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.									
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.									
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.									
NLPH	=	No liquid-phase hydrocarbons.									
SPL	=	Separate-phase liquids present.									
ND	=	Not detected at or above laboratory reporting limits.									
---	=	Not sampled.									
ug/L	=	Micrograms per liter.									
<	=	Less than the stated laboratory method reporting limit.									
a	=	Total volatile hydrocarbons by DHS /LUFT Manual Method.									
b	=	Results obtained from a 1:10 dilution analyzed on January 17, 1995.									
c	=	Methyl tertiary butyl ether by EPA Method 8260 (GC/MS).									
d	=	Diesel-range hydrocarbons reportedly detected in bailer blank; result is suspect.									
e	=	TPHd was detected in the sample; however, the detections do not resemble the typical diesel pattern.									
f	=	Well inaccessible.									
g	=	MTBE analyzed using EPA Method 8260B.									

Data prior to second Quarter 2000 provided by Delta Environmental Consultants, Inc.

TABLE 1B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0104
1725 Park Street
Alameda, California

Well ID #	Sampling	ETBE	TAME	TBA	1,2 DCA	1,2 EDB	DIPE
(TOC)	Date	<.....ug/L.....>					
MW1	03/01/04	<0.50	<0.50	42.3	<0.50	<0.50	<0.50
MW2	03/01/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50
MW3	03/01/04	<0.50	<0.50	3,550	<0.50	<0.50	<0.50
MW4	03/01/04	<0.50	<0.50	1,780	<0.50	<0.50	<0.50
MW5	03/01/04	<0.50	<0.50	528	<0.50	<0.50	0.90
MW6	03/01/04	<0.50	<0.50	2,000	<0.50	<0.50	<0.50
MW7	03/01/04	<0.50	<0.50	295	<0.50	<0.50	<0.50
MW8	03/01/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50
MW9	03/01/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50
MW10	12/12/97	Well destroyed.					
MW11	03/01/04	<0.50	<0.50	20.9	<0.50	<0.50	<0.50
MW12	Not monitored or sampled 10/15/01 through present.						
EW1	3/1/2004	---	---	---	---	---	---
EW2	Not monitored or sampled 07/09/99 through present.						
EW3	3/1/2004	---	---	---	---	---	---
EW4	Not monitored or sampled 07/09/99 through present.						
EW5	3/1/2004	---	---	---	---	---	---

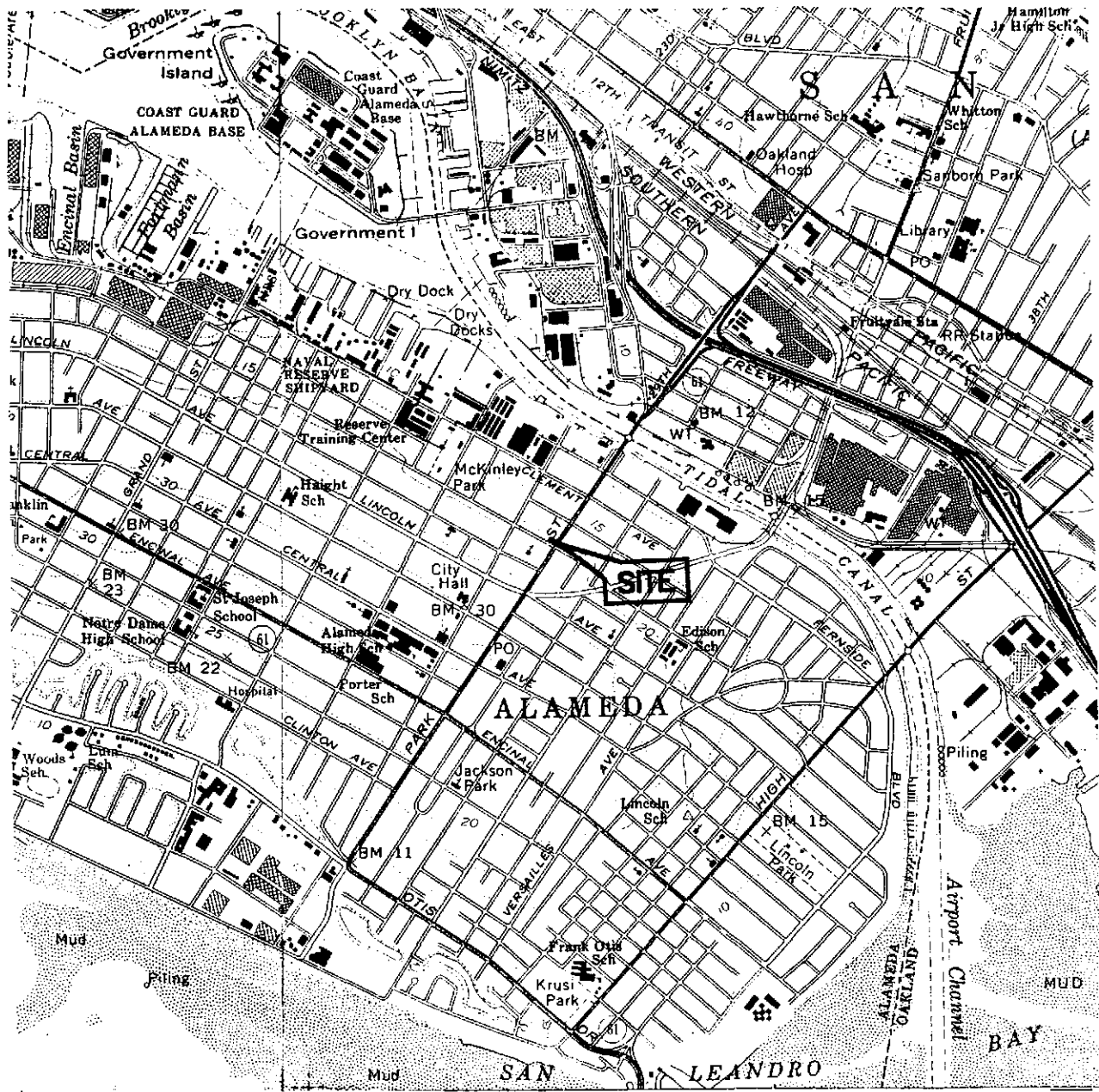
Notes:

- SUBJ = Results of subjective evaluation, liquid-phase hydrocarbon thickness in feet.
- TOC = Elevation of top of well casing; in feet above mean sea level.
- DTW = Depth to water.
- Elev. = Elevation of groundwater in feet above mean sea level.
- TPHg = Total petroleum hydrocarbons as gasoline analyzed using EPA Method 5030/8015 (modified).
- TPHd = Total petroleum hydrocarbons as diesel using EPA Method 5030/8015 (modified).
- MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B.
- BTEX = Benzene; toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.

TABLE 1B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0104
1725 Park Street
Alameda, California

Well ID #	Sampling	ETBE	TAME	TBA	1,2 DCA	1,2 EDB	DIPE
(TOC)	Date	<.....ug/L.....>					
1,2-Dibromoethane	=	1,2-Dibromoethane analyzed using EPA Method 8260B.					
1,2-DCA	=	1,2-Dichloroethane analyzed using EPA Method 8260B.					
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.					
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.					
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.					
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.					
NLPH	=	No liquid-phase hydrocarbons.					
SPL	=	Separate-phase liquids present.					
ND	=	Not detected at or above laboratory reporting limits.					
---	=	Not sampled.					
ug/L	=	Micrograms per liter.					
<	=	Less than the stated laboratory method reporting limit.					
a	=	Total volatile hydrocarbons by DHS /LUFT Manual Method.					
b	=	Results obtained from a 1:10 dilution analyzed on January 17, 1995.					
c	=	Methyl tertiary butyl ether by EPA Method 8260 (GC/MS).					
d	=	Diesel-range hydrocarbons reportedly detected in bailer blank; result is suspect.					
e	=	TPHd was detected in the sample; however, the detections do not resemble the typical diesel p					
f	=	Well inaccessible.					
g	=	MTBE analyzed using EPA Method 8260B.					

Data prior to second Quarter 2000 provided by Delta Environmental Consultants, Inc.



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

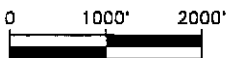


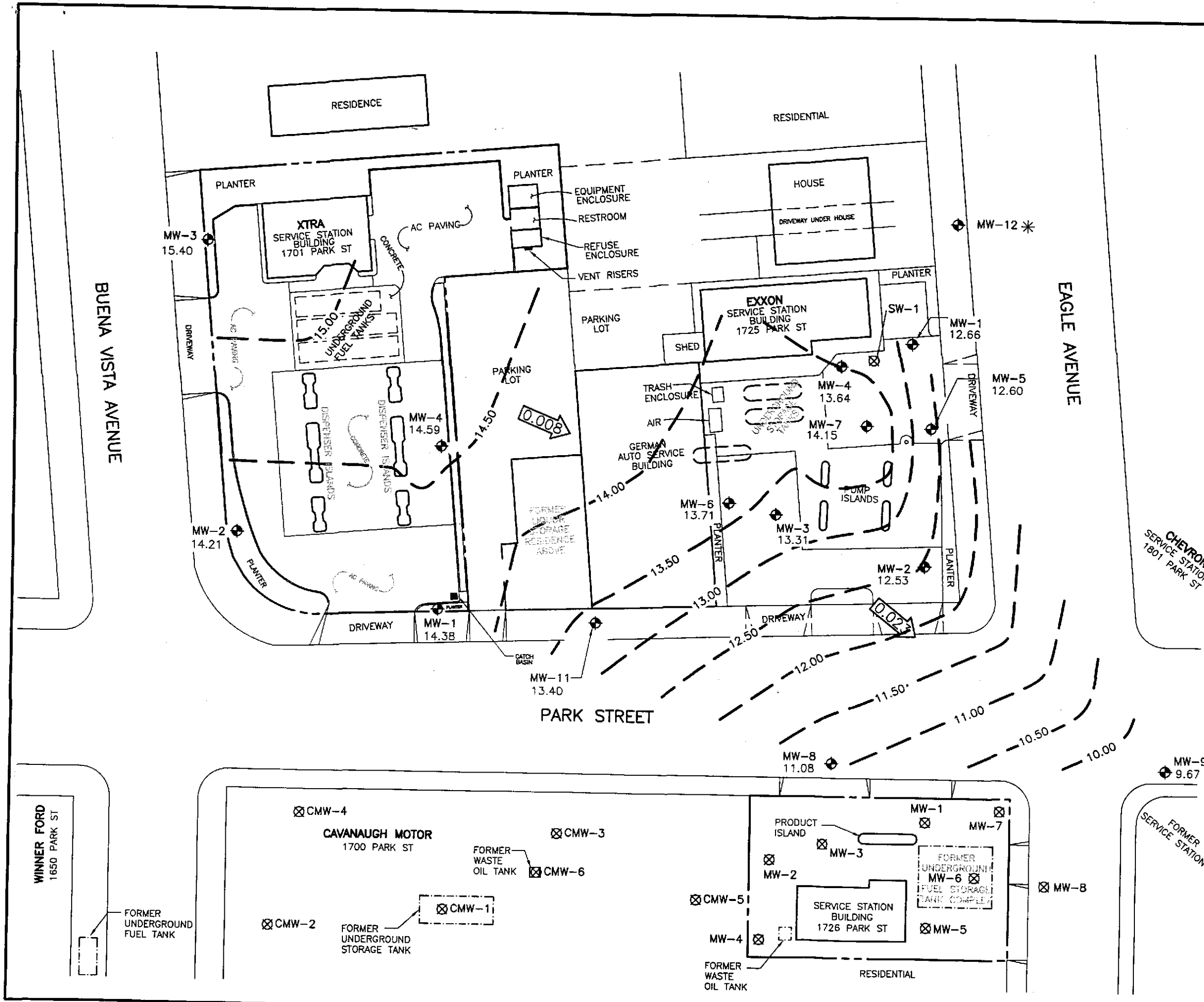
FIGURE 1 SITE VICINITY MAP

XTRA OIL COMPANY SERVICE STATION
 1701 PARK STREET
 ALAMEDA, CALIFORNIA

PROJECT NO. 10-210



ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA



LEGEND

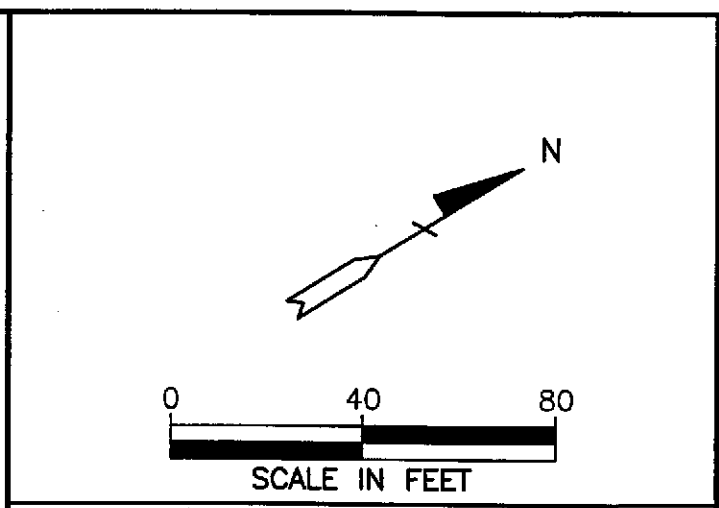
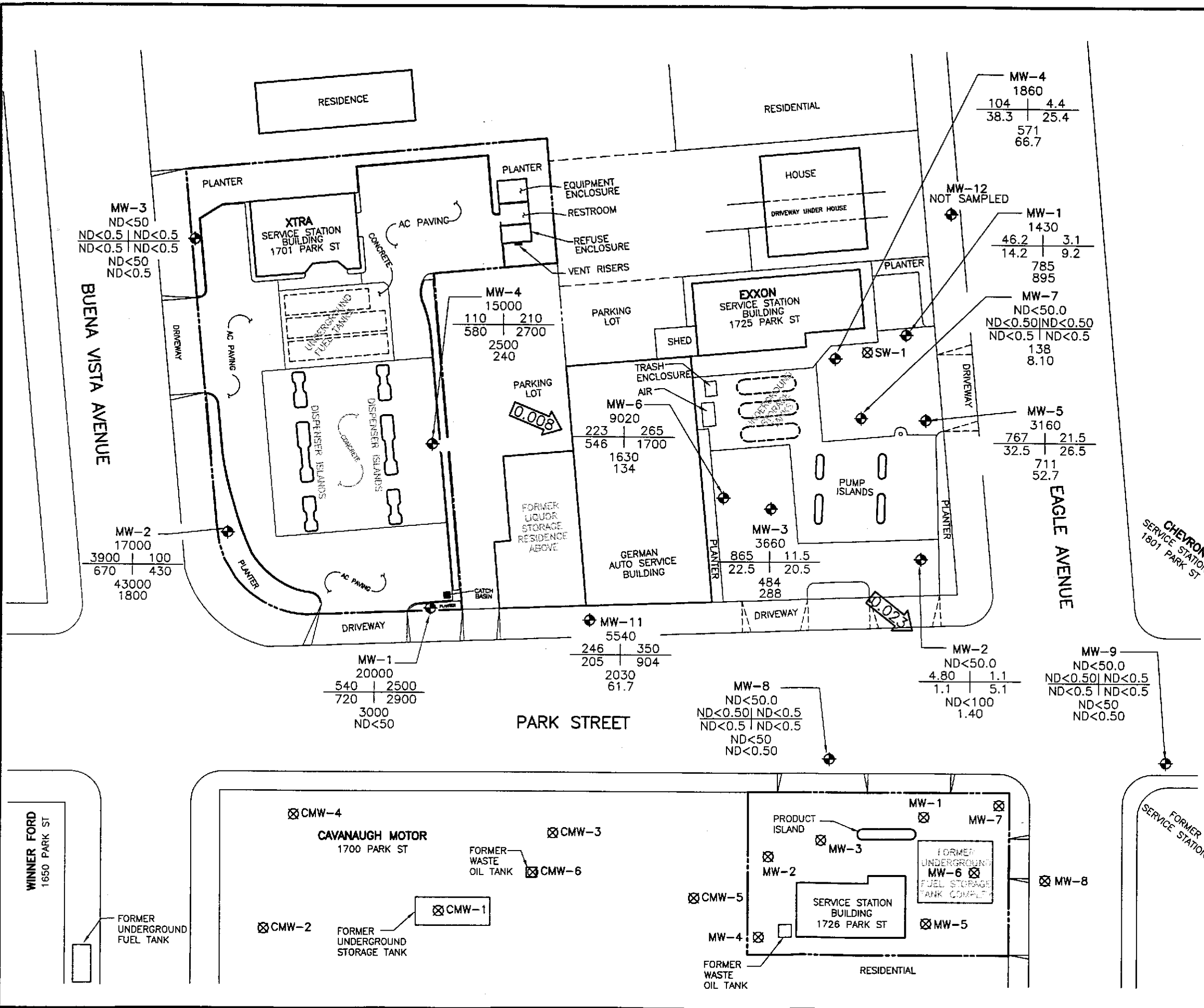
- ◆ GROUNDWATER MONITORING WELL
- ⊗ DESTROYED WELL
- - - PROPERTY LINE
- 12.60 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- - - 12.50 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL-0.50 FOOT)
- ← 0.008 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT
- * NOT MONITORED

NOTE:
 Potentiometric groundwater elevation contours were generated with Quicksurf using the Kriging method with a piece-wise variogram on a triangulated grid surface.

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
 MARCH 1, 2004
 XTRA OIL COMPANY SERVICE STATION
 1701 PARK STREET
 ALAMEDA, CALIFORNIA
 PROJECT NO. 10-210



10210d-23_03-1-04.DWG 03-19-04 ONE 1-40



- LEGEND**
- ◆ GROUNDWATER MONITORING WELL
 - ⊗ DESTROYED WELL
 - PROPERTY LINE
 - 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
 - NA
NOT APPLICABLE
 - ◀0.008
CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3
CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER
MARCH 1, 2004
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET
ALAMEDA, CALIFORNIA
PROJECT NO. 10-210

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

Well Sampling Data Sheet

ENGINEERING GROUP
2737 N. Main ST., STE 100
Walnut Creek, CA 94597
PHONE (925) 952-8978 FAX (925) 952-6971

Site: **Xtra Oil Company**
Address: **1701 Park St Alameda**
California
Project No. **10-210-20-001**

Date: **3-1-04** 38047.0
Day: **MTWTHF**
Page **1** of **1**

Well ID	DTW	Diameter	Lab / Field Filtered	Cap / Lock	Gal	Time	Temp	pH	E.C.	D.O.	Eh	Turbidity
							F or C		umhos/cm	mg/l	Millivolts	NTU
14W3	5.17	2"		AL								
TD-WL = ___ X well vol factor = ___ X # vol. to purge = Purge Vol.												
					3	1500	16.3	7.42	2421	1.12	N/A	N/A
					5		16.0	8.00	291	0.96		
					7	1515	16.0	8.02	280	0.92		
Purge Method: ___ Ded. Pump ___ Disp. Tubel ___ Disp. Bailer(s) ___ Sys. Port												
Comments:												

Well Depth to Water

MW-1 **5.22** @ **1455**
MW-2 **6.10** @ **1451**
MW-3 **5.17** @ **1447**
MW-4 **5.10** @ **1457**
MW-3 / 1515

Well ID	DTW	Diameter	Lab / Field Filtered	Cap / Lock	Gal	Time	Temp	pH	E.C.	D.O.	Eh	Turbidity
							F or C		umhos/cm	mg/l	Millivolts	NTU
MW2	6.10	2"		AL								
TD-WL = ___ X well vol factor = ___ X # vol. to purge = Purge Vol.												
					2	1521	17.1	8.10	2840	0.55		
					4	1527	16.9	8.07	291	0.41		
					5	1535	16.8	8.06	2866	0.42		
Purge Method: ___ Ded. Pump ___ Disp. Tubel ___ Disp. Bailer(s) ___ Sys. Port												
Comments: Sheen												

MW-2 / 1535

Well ID	DTW	Diameter	Lab / Field Filtered	Cap / Lock	Gal	Time	Temp	pH	E.C.	D.O.	Eh	Turbidity
							F or C		umhos/cm	mg/l	Millivolts	NTU
MW-1	5.22											
TD-WL = ___ X well vol factor = ___ X # vol. to purge = Purge Vol.												
					2		17.2	8.07	2884	0.7		
					4		16.9	8.27	291	0.6		
					5	1556	16.9	8.26	296	0.01		
Purge Method: ___ Ded. Pump ___ Disp. Tubel ___ Disp. Bailer(s) ___ Sys. Port												
Comments: Sheen												

MW-1 / 1556

Well ID	DTW	Diameter	Lab / Field Filtered	Cap / Lock	Gal	Time	Temp	pH	E.C.	D.O.	Eh	Turbidity
							F or C		umhos/cm	mg/l	Millivolts	NTU
MW-4	5.10	2"										
TD-WL = ___ X well vol factor = ___ X # vol. to purge = Purge Vol.												
					1/2	1606	15.1	8.61	2427	0.71		
					1	1611	15.0	7.99	2421	0.61		
					1 1/2	1616	15.0	7.87	2324	0.61		
Purge Method: ___ Ded. Pump ___ Disp. Tubel ___ Disp. Bailer(s) ___ Sys. Port												
Comments:												

MW-4 / 1616
QC-1 / 1621

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

Alisto Engineering Grp. 2737 North Main Street, Ste 100 Walnut Creek, CA 94597	Client Project ID: #10-210-19-1; Groundwater Sampling 1701 Park St	Date Sampled: 03/01/04
		Date Received: 03/03/04
	Client Contact: Chris Reinheimer	Date Reported: 03/09/04
	Client P.O.:	Date Completed: 03/09/04

WorkOrder: 0403030

March 09, 2004

Dear Chris:

Enclosed are:

- 1). the results of 5 analyzed samples from your #10-210-19-1; Groundwater Sampling 1701 Park St 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. McC Campbell 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,

Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Alisto Engineering Grp. 2737 North Main Street, Ste 100 Walnut Creek, CA 94597	Client Project ID: #10-210-19-1; Groundwater Sampling 1701 Park St	Date Sampled: 03/01/04
	Client Contact: Chris Reinheimer	Date Received: 03/03/04
	Client P.O.:	Date Extracted: 03/03/04-03/05/04
		Date Analyzed: 03/03/04-03/05/04

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline *

Extraction method: SW5030B

Analytical methods: SW8015Cm

Work Order: 0403030

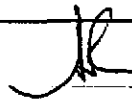
Lab ID	Client ID	Matrix	TPH(g)	DF	% SS
001A	MW-1	W	20,000,a,h	100	106
002A	MW-2	W	17,000,a,h	33	93.5
003A	MW-3	W	ND	1	99.1
004A	MW-4	W	15,000,a	100	96.6
005A	QC-1	W	15,000,a	100	98.8

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

 Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Alisto Engineering Grp. 2737 North Main Street, Ste 100 Walnut Creek, CA 94597	Client Project ID: #10-210-19-1; Groundwater Sampling 1701 Park St	Date Sampled: 03/01/04
	Client Contact: Chris Reinheimer	Date Received: 03/03/04
	Client P.O.:	Date Extracted: 03/03/04
		Date Analyzed: 03/03/04

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

Extraction method: SW3510C

Analytical methods: SW8015C

Work Order: 0403030


Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0403030-001A	MW-1	W	3000,d,a,h	10	95.9
0403030-002A	MW-2	W	43,000,a,d,h	10	112
0403030-003A	MW-3	W	ND	1	88.1
0403030-004A	MW-4	W	2500,d	1	94.3

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; k) kerosene/kerosene range/jet fuel range; t) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

 Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Alisto Engineering Grp. 2737 North Main Street, Ste 100 Walnut Creek, CA 94597	Client Project ID: #10-210-19-1; Groundwater Sampling 1701 Park St	Date Sampled: 03/01/04
	Client Contact: Chris Reinheimer	Date Received: 03/03/04
	Client P.O.:	Date Extracted: 03/03/04-03/04/04
		Date Analyzed: 03/03/04-03/04/04

MTBE and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0403030

Lab ID	0403030-001B	0403030-002B	0403030-003B	0403030-004B	Reporting Limit for DF = 1	
Client ID	MW-1	MW-2	MW-3	MW-4		
Matrix	W	W	W	W		
DF	100	100	1	33	S	W

Compound	Concentration				ug/kg	ug/L
Benzene	540	3900	ND	110	NA	0.5
Ethylbenzene	720	670	ND	580	NA	0.5
Methyl-t-butyl ether (MTBE)	ND<50	1800	ND	240	NA	0.5
Toluene	2500	100	ND	210	NA	0.5
Xylenes	2900	430	ND	2700	NA	0.5

Surrogate Recoveries (%)

%SS1:	104	103	103	105	
%SS2:	101	101	101	99.8	
%SS3:	105	103	104	103	

Comments h h

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in µg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Alisto Engineering Grp. 2737 North Main Street, Ste 100 Walnut Creek, CA 94597	Client Project ID: #10-210-19-1; Groundwater Sampling 1701 Park St	Date Sampled: 03/01/04
	Client Contact: Chris Reinheimer	Date Received: 03/03/04
	Client P.O.:	Date Extracted: 03/03/04-03/04/04
		Date Analyzed: 03/03/04-03/04/04

MTBE and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0403030

Lab ID	0403030-005B	Reporting Limit for DF =1	S	W
Client ID	QC-1			
Matrix	W			
DF	33			

Compound	Concentration	ug/kg	ug/L
Benzene	110	NA	0.5
Ethylbenzene	610	NA	0.5
Methyl-t-butyl ether (MTBE)	250	NA	0.5
Toluene	220	NA	0.5
Xylenes	2800	NA	0.5

Surrogate Recoveries (%)

%SS1:	104			
%SS2:	100			
%SS3:	102			

Comments

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in µg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0403030

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 10570		Spiked Sample ID: 0403035-002A				
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) [£]	ND	60	106	106	0	104	104	0	70	130
MTBE	145.70	10	NR	NR	NR	93.6	102	8.60	70	130
Benzene	ND	10	109	112	2.12	105	105	0	70	130
Toluene	ND	10	103	104	0.430	99.3	99	0.355	70	130
Ethylbenzene	ND	10	111	112	1.37	111	106	4.34	70	130
Xylenes	ND	30	100	100	0	100	100	0	70	130
%SS:	103	10	103	103	0	104	97.6	5.97	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW8260B

Matrix: W

WorkOrder: 0403030

EPA Method: SW8260B		Extraction: SW5030B		BatchID: 10573			Spiked Sample ID: 0403035-005B			
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	108	112	3.34	109	108	1.24	70	130
Benzene	ND	10	116	123	5.69	116	114	1.76	70	130
t-Butyl alcohol (TBA)	ND	50	96.6	98.2	1.61	106	102	4.42	70	130
Chlorobenzene	ND	10	101	106	4.21	105	102	3.13	70	130
1,2-Dibromoethane (EDB)	ND	10	104	108	3.92	104	102	2.89	70	130
1,2-Dichloroethane (1,2-DCA)	ND	10	119	121	2.06	126	123	2.08	70	130
1,1-Dichloroethene	ND	10	85.2	86.1	1.07	94	90.6	3.70	70	130
Diisopropyl ether (DIPE)	ND	10	107	112	3.78	112	109	2.71	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	103	107	3.31	108	104	3.30	70	130
Methyl-t-butyl ether (MTBE)	ND	10	102	105	2.92	106	103	3.13	70	130
Toluene	ND	10	99.2	104	4.30	101	97	4.09	70	130
Trichloroethene	ND	10	80.4	83.6	3.90	84.4	83	1.70	70	130
%SS1:	105	10	95.9	94.7	1.23	103	104	0.0814	70	130
%SS2:	96.6	10	97	96.7	0.259	97.7	97.3	0.437	70	130
%SS3:	106	10	105	102	2.88	103	104	0.802	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8015C

Matrix: W

WorkOrder: 0403030

EPA Method: SW8015C		Extraction: SW3510C		BatchID: 10555		Spiked Sample ID: N/A				
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	97.4	98.3	0.917	70	130
%SS:	N/A	2500	N/A	N/A	N/A	93.9	95.2	1.34	70	130
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE										

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

McC Campbell Analytical, Inc.



110 Second Avenue South, #D7
 Pacheco, CA 94553-5560
 (925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0403030

Report to:
 Chris Reinheimer
 Alisto Engineering Grp.
 2737 North Main Street, Ste 100
 Walnut Creek, CA 94597

TEL: (925) 279-5000
 FAX: (925) 279-5001
 ProjectNo: #10-210-19-1; Groundwater Sampling 1
 PO:

Bill to:
 Accounts Payable
 Alisto Engineering Grp.
 2737 North Main Street, Suite 100
 Walnut Creek, CA 94597

Requested TAT: 5 days
 Date Received: 3/3/04
 Date Printed: 3/3/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0403030-001	MW-1	Water	3/1/04 3:56:00 PM	<input type="checkbox"/>	A	B													
0403030-002	MW-2	Water	3/1/04 3:35:00 PM	<input type="checkbox"/>	A	B													
0403030-003	MW-3	Water	3/1/04 3:15:00 PM	<input type="checkbox"/>	A	B													
0403030-004	MW-4	Water	3/1/04 4:16:00 PM	<input type="checkbox"/>	A	B													
0403030-005	QC-1	Water	3/1/04 4:21:00 PM	<input type="checkbox"/>	A	B													

Test Legend:

1	G-MBTEX_W	2	MBTEX-8260B_W	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Maria Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

REGOL

0403030

ALISTO ENGINEERING GROUP CHAIN OF CUSTODY

Project Information:					Report To:					Samples Submitted To:							
Project No: 10-210-19-1 Project Title: Groundwater Sampling Location: 1701 Park St Alameda					Consultant: Alisto Engineering Group Address: 2737 N. Main St., Ste 100 Walnut Creek CA 94597 Contact: Chris Reinheimer Phone: (925) 962-6970 Fax: (925) 962-6971					Laboratory: McCampbell Address: 119 2nd ave Pacheco Contact: ed hamilton Phone: 925-798-1628 Fax:							
Sampler's Name: Dan Birch (print) Sampler's Signature:					Bill To:					Date Results Required:							
					Client:					Date Report Required:							
					Client Address:												
TURN AROUND TIME					ANALYSIS												
RUSH	24 Hour	48 Hour	5 Day	Standard (10-14 days)													
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<div style="display: flex; justify-content: space-between; font-size: small;"> T44-GAS STC/MTRC MTRC DAPP ETSP ITRM TBA </div> <div style="display: flex; justify-content: space-between; font-size: x-small;"> 8260 B 8260 B 8260 B 8260 B 8260 B </div>												
					Aurel												
Sample ID.	Date	Time	# Containers	Matrix	HCl											Preservative	COMMENTS
+ Mw-1	3-1-04	1556	2	W	X	X	X										
+ Mw-2	↓	1535	6	W	X	X	X										
+ Mw-3	↓	1515	6	W	X	X	X										
+ Mw-4	↓	1616	4	W	X	X	X										
+ QC-1	↓	1621	2	W	X	X											
Relinquished By:					Date: 3/2/04 Time: 1435		Received By:					Date: 3/2/04 Time: 830 am		SPECIAL INSTRUCTIONS:			
Relinquished By:					Date: Time:		Received By:					Date: Time:					
Relinquished By:					Date: Time:		Received By:					Date: Time:					

ICE/C **GOOD CONDITION**
 HEAD SPACE ABSENT **APPROPRIATE CONTAINERS**
 DECHLORINATED IN LAB **PRESERVED IN LAB**

PRESERVATION: VOAS O&G METALS OTHER

REC'D SEALED & INTACT VIA FedEx