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

February 10, 1994

Mr. Scott Seary
Hazardous Materials Program
Department of Environmental Health
80 Swan Way, Room 200
Oakland, Ca. 94621

Regarding: 3495 Castro Valley Blvd. Castro Valley

Dear Mr. Seary,

Please find enclosed the quarterly report for the above location. This report is for the fourth quarter of 1993. If you have any questions feel free to contact us.

Sincerely,

Keith Simas

P & D ENVIRONMENTAL

300 Monte Vista, #101
Oakland, CA 94611
Telephone (510) 658-6916

January 31, 1994
Report No. 0014.R6

Mr. Ted Simas
Mr. Keith Simas
XTRA OIL COMPANY
2307 Pacific Ave.
Alameda, CA 94501

SUBJECT: Quarterly Groundwater Monitoring and Sampling Report
XTRA OIL COMPANY
3495 Castro Valley Blvd.
Castro Valley, CA

Gentlemen:

P&D Environmental (P&D) is pleased to present this report documenting the results of the most recent quarterly monitoring and sampling of the wells at the subject site. This work was performed in accordance with P&D's proposal 112493.P1 dated November 24, 1993. The reporting period is for September through November, 1993. A Site Location Map (Figure 1) and Site Plan (Figure 2) are attached with this report.

BACKGROUND

The site is currently used as a gasoline station. Four 10,000 gallon underground fuel storage tanks are present at the site. Three of the tanks contain gasoline and the fourth tank contains diesel fuel. A 550 gallon waste oil tank was removed from the site in November, 1988. The fuel tanks were replaced during August, 1992.

Three monitoring wells, designated as MW1, MW2 and MW3 were installed at the site on February 15, 1990 by Wedge Western Geo-Engineers. The locations of the monitoring wells are shown in Figure 2. Soil samples collected during drilling of the boreholes for the monitoring wells revealed the presence of total petroleum hydrocarbons as gasoline (TPH-G) and total petroleum hydrocarbons as diesel (TPH-D). TPH-G was encountered in boreholes MW1 and MW3 at depths ranging from 5 to 15 feet below grade and at concentrations ranging from 40 to 1,400 ppm at MW1 and concentrations ranging from 25 to 250 ppm at MW3. In MW2, TPH-G was encountered at depths ranging from 10 to 15 feet below grade and at concentrations ranging from 95 to 230 ppm. In borehole MW3, TPH-D was encountered at concentrations ranging up to 1,200 ppm. Groundwater was encountered in the boreholes at depths of approximately 15 to 16 feet below grade.

On February 15, 1990 Wedge Western Geo-Engineers drilled three exploratory boreholes at the site designated as SB1, SB2 and SB3. Soil samples were collected from the exploratory boreholes at depths of 10 and 12 feet. TPH-G was detected in SB1 at a depth of 10 feet and at a concentration of 1,700 ppm. In SB2 and SB3, TPH-G was detected at depths of 10 and 12 feet. TPH-G concentrations in both boreholes were 800 ppm at a depth of 10 feet and 2,000 ppm at a depth of 12 feet. A groundwater monitoring and sampling program was initiated at the site on February 20, 1990.

During fuel tank replacement activities in August, 1992 soil surrounding the tank pit was removed and disposed of offsite. An extraction well, designated as EW1, was constructed in one corner of the new tank pit at the time of installation for the new tanks. The location of EW1 is shown on Figure 2.

FIELD ACTIVITIES

On November 24, 1993 all of the monitoring wells at the site were monitored and sampled by P&D personnel. Extraction well EW1 was not monitored or sampled during the quarter. The wells were monitored for depth to water and the presence of free product or sheen. Depth to water was measured to the nearest 0.01 foot using an electric water level indicator. The presence of free product or sheen was evaluated using a transparent bailer. No sheen was observed in well MW1. However, a sheen was observed in wells MW2 and MW3. Depth to water level measurements are presented in Table 1.

Prior to sampling, the monitoring wells were purged of a minimum of three casing volumes of water, or until the wells had been purged dry. During purging operations, the field parameters of electrical conductivity, temperature and pH were monitored. Once the field parameters were observed to stabilize, and a minimum of three casing volumes had been purged or the wells had been purged dry and partially recovered, water samples were collected using a clean Teflon bailer.

The water samples were transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials and 1-liter amber glass bottles which were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to assure that no air bubbles were present.

The VOA vials and bottles were then transferred to a cooler with ice, until they were transported to McCampbell Analytical, Inc. in Pacheco, California. McCampbell Analytical, Inc. is a State-certified hazardous waste testing laboratory. Chain of custody documentation accompanied the samples to the laboratory. Records of the field parameters measured during well purging are attached with this report.

HYDROGEOLOGY

Water levels were measured in the monitoring wells once during the quarter. The measured depth to water at the site on November 24, 1993 ranged from 7.55 to 8.74 feet. Groundwater levels have increased in wells MW1, MW2 and MW3 by 0.04, 0.17 and 0.09 feet, respectively, since the previous monitoring on August 30, 1993. The calculated groundwater flow direction on November 24, 1993 was to the east-northeast with a gradient of 0.016. The groundwater flow direction and the gradient have remained relatively unchanged since the previous monitoring on August 30, 1993.

Groundwater level data collected during the quarter are presented in Table 1. The groundwater flow direction at the site on November 24, 1993 is shown on Figure 2.

LABORATORY RESULTS

All of the groundwater samples collected from the monitoring wells were analyzed for TPH-G using EPA Method 5030 and Modified EPA Method 8015; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8020; and for TPH-D using EPA Method 3510 in conjunction with Modified EPA Method 8015.

The laboratory analytical results for the groundwater samples from MW1, MW2 and MW3 show TPH-G at concentrations of 66, 12 and 160 ppm, respectively; benzene concentrations of 8.3, 13 and 48 ppm, respectively; and TPH-D at concentrations of 8.2, 79 and 24 ppm, respectively. Since the previous quarter, TPH-D concentrations have decreased in all of the wells. TPH-G concentrations have decreased in wells MW1 and MW2, and increased in well MW3 since the previous quarter. Benzene concentrations have increased in all of the wells since the previous quarter. The laboratory analytical results of the groundwater samples

are summarized in Table 2. Copies of the laboratory analytical results and chain of custody documentation are attached with this report.

DISCUSSION AND RECOMMENDATIONS

The groundwater flow direction and gradient have remained relatively unchanged since the previous quarter. Based on the absence of free product in well MW2, it appears that the free product recovery efforts have been successful in reducing the free product to a sheen in this well. P&D recommends that an absorbent sock be maintained in well MW2 for one quarter and the sock periodically checked for evidence of free product. Based on the laboratory analytical results of the water samples collected from the monitoring wells, P&D recommends that the quarterly groundwater monitoring and sampling program be continued.

DISTRIBUTION

Copies of this report should be sent to Mr. Richard Hiett at the Regional Water Quality Control Board, San Francisco Bay Region, and to Mr. Scott Seery at the Alameda County Department of Environmental Health. Copies of the report should be accompanied by a transmittal letter signed by the principal executive officer of the XTRA OIL Company.

LIMITATIONS

This report was prepared solely for the use of XTRA OIL. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgement based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly-revealed conditions must be evaluated and may invalidate the findings of this report.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities which is used in this report. This report presents our professional judgement based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

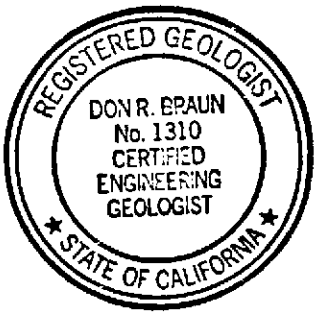
Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental

Paul H. King

Paul H. King
Hydrogeologist



Don R. Braun

Don R. Braun
Certified Engineering Geologist
Registration No. : 1310
Expires: 6/30/94

PHK
0014.R5

Attachments: Tables 1 & 2
Site Location Map (Figure 1)
Site Plan (Figure 2)
Field Parameter Forms
Laboratory Analytical Results
Chain of Custody Documentation

TABLE 1

WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW1	11/24/93	177.43*	8.74	168.69
	8/30/93		8.78	168.65
	5/18/93		8.12	169.31
	2/23/93		7.34	170.09
	11/13/92	200.00**	9.13	190.87
	5/29/92	175.73	8.59	167.14
	1/14/92		8.57	167.16
	12/23/91		9.65	166.08
	11/25/91		9.41	166.32
	10/10/91		9.70	166.03
	9/17/91		9.50	166.23
	8/19/91		9.31	166.42
MW2	11/24/93	176.04*	8.47	167.57
	8/30/93		8.64	167.40
	5/18/93		7.73	168.31
	2/23/93		6.39	169.65
	11/13/92	198.61**	8.70	189.91
	5/29/92	175.45	9.31	166.14
	1/14/92		8.97	166.48
	12/23/91		10.39	165.06
	11/25/91		9.81	165.64
	10/10/91		10.39	165.06
	9/17/91		10.23	165.22
	8/19/91		9.60	165.85
MW3	11/24/93	176.41*	7.55	168.86
	8/30/93		7.64	168.77
	5/18/93		7.12	169.29
	2/23/93		8.01	168.40
	11/13/92	190.97**	7.86	191.12
	5/29/92	175.00	8.45	166.55
	1/14/92		8.24	166.55
	12/23/91		9.37	165.63
	11/25/91		9.19	165.81
	10/10/91		9.43	165.57
	9/17/91		9.20	165.80
	8/19/91		8.95	166.05

NOTES:
* = Surveyed on March 24, 1993
** = Surveyed on December 5, 1992

TABLE 2
SUMMARY OF LABORATORY ANALYTICAL RESULTS

Well No.	TPH-D	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes
			Samples Collected on November 24, 1993			
MW1	8.2	66	8.3	8.9	2.0	11
MW2	79	12	13	17	2.5	17
MW3	24	160	48	26	2.2	12
EW1	Not Sampled.					
			Samples Collected on August 30, 1993			
MW1	9.4	77	6.4	11	2.2	12
MW2	110	110	11	14	1.8	11
MW3	32	130	36	21	1.9	8.2
EW1	Not Sampled.					
			Samples Collected on May 18, 1993			
MW1	30	92	4.0	11	2.5	15
MW2	44	67	9.2	12	1.4	9.3
MW3	7.2	130	36	21	2.1	12
EW1	Not Sampled.					
			Samples Collected on February 23, 1993			
MW1	14	100	4.5	11	2.1	12
MW2	7.0	76	12	17	1.6	9.6
MW3	8.1	110	31	18	1.9	11
EW1	9.6	66	14	8.5	1.4	9.8

TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
Results in parts per million (ppm), unless otherwise indicated.

TABLE 2
SUMMARY OF LABORATORY ANALYTICAL RESULTS
(Continued)

Well No.	TPH-D	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes
			Samples Collected on November 13, 1992			
MW1	4.4	120	5.8	10	2.1	13
MW2	8.2	79	10	13	1.4	8.6
MW3	4.7	140	38	24	2.0	12
EW1	13	62	11	9.2	1.1	9.6
			Samples Collected On May 27, 1992			
MW1	11	120	8.8	16	2.3	15
MW2	130	89	18	19	1.7	14
MW3	27	370	91	57	3.0	21
			Samples Collected On January 14, 1992			
MW1	19	39	7.3	8.7	1.3	8.9
MW2	1600	59	17	14	1.8	15
MW3	270	130	76	30	3.4	21
			Samples Collected On December 23, 1991			
MW1	34	78	9.3	7.3	0.54	13
MW2	700	2100	36	130	79	560
MW3	540	740	30	61	31	180
			Samples Collected On November 25, 1991			
MW1	36	170	5.5	5.6	1.6	8.4
MW2	130	230	11	9.7	1.4	9.7
MW3	74	150	65	31	3.4	18

TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
Results in parts per million (ppm), unless otherwise indicated.

TABLE 2
SUMMARY OF LABORATORY ANALYTICAL RESULTS
(Continued)

Well No.	TPH-D	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes
			Samples Collected On October 10, 1991			
MW1	19	28	4.1	4.7	1.0	4.8
MW2	360	85	21	25	2.1	14
MW3	39	140	57	31	2.2	14
			Samples Collected On September 17, 1991			
MW1	19	39	4.9	4.1	1.2	5.9
MW2	56	74	10	11	1.4	8.1
MW3	140	180	47	25	2.6	15
			Samples Collected On August 19, 1991			
MW1	47	48	13	8.4	0.99	29
MW2	19	69	26	22	2.1	18
MW3	150	170	82	31	4.4	22
			Samples Collected On July 20, 1991			
MW1	49	100	11	14	2.3	17
MW2	100	51	9.9	7.7	1.2	7.5
MW3	270	450	46	29	3.5	21
			Samples Collected On June 20, 1991			
MW1	42	76	4.7	7.1	1.5	9.8
MW2	69	87	8.1	8.4	1.1	8.9
MW3	210	920	39	49	13	69

TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
Results in parts per million (ppm), unless otherwise indicated.

TABLE 2
SUMMARY OF LABORATORY ANALYTICAL RESULTS
(Continued)

Well No.	TPH-D	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes
			Samples Collected On May 17, 1991			
MW1	26	72	7.7	9.9	ND	11
MW2	33	62	5.9	6.3	1.2	9.0
MW3	70	170	32	22	2.2	18
			Samples Collected On April 15, 1991			
MW1	NA	56	6.5	8.5	0.41	9.9
MW2	NA	82	5.3	7.4	1.0	9.4
MW3	NA	110	31	15	0.88	7.4
			Samples Collected On March 21, 1991			
MW1	NA	36	4.5	5.7	0.087	7.3
MW2	NA	62	9.3	11	0.35	9.7
MW3	NA	87	30	14	0.69	5.4
			Samples Collected On February 15, 1991			
MW1	NA	120	7.4	6.6	ND	13
MW2	NA	200	12	12	1.7	14
MW3	NA	230	44	40	ND	31
			Samples Collected On January 14, 1991			
MW1	NA	33	3.9	2.9	0.21	5.3
MW2	NA	78	11	8.7	0.58	8.0
MW3	NA	160	48	25	1.0	16

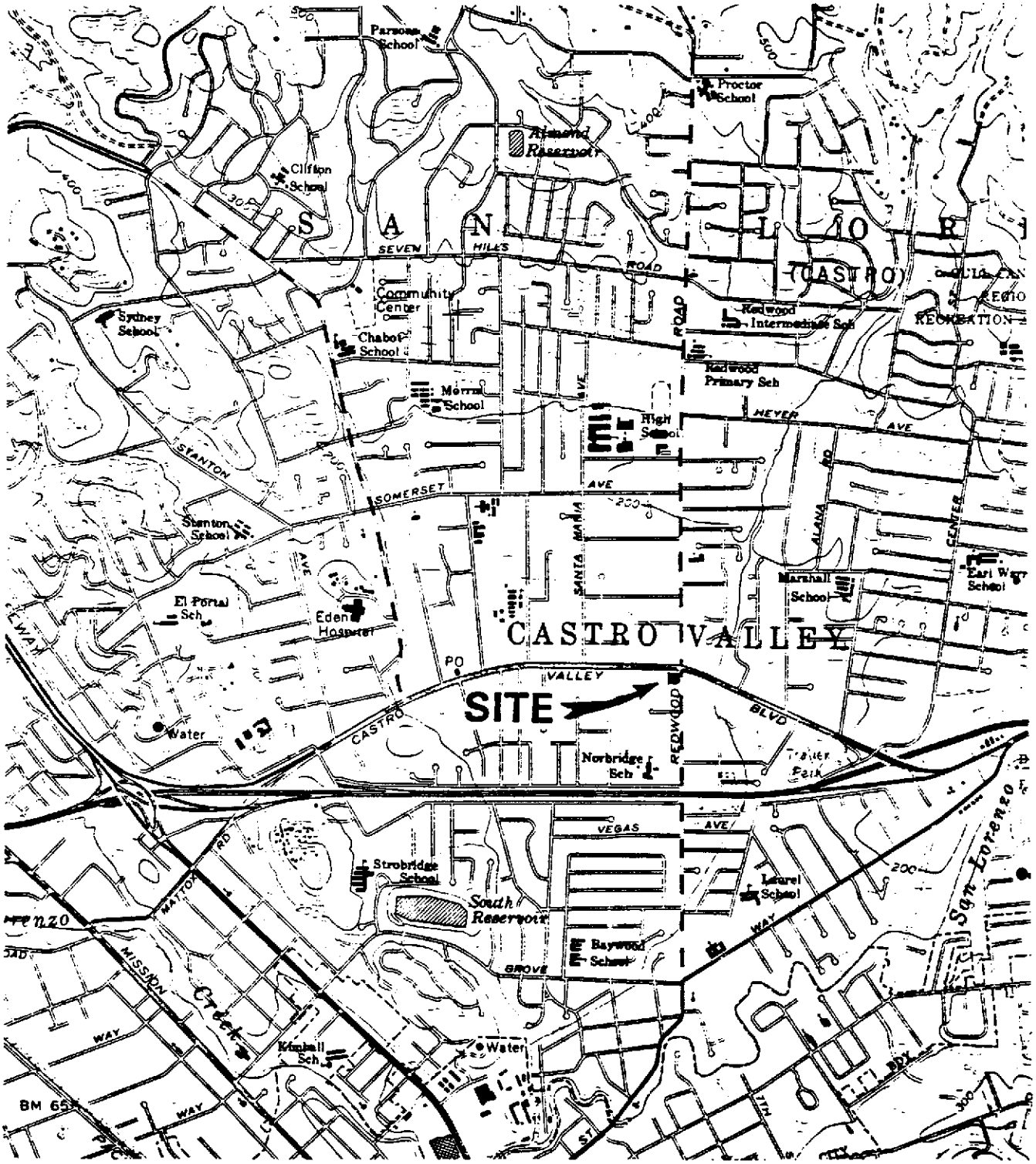
TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
ND = Not Detected.
NA = Not Analyzed.
Results in parts per million (ppm), unless otherwise indicated.

TABLE 2
SUMMARY OF LABORATORY ANALYTICAL RESULTS
(Continued)

Well No.	TPH-D	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes
			Samples Collected On September 27, 1990			
MW1	NA	28	3.7	3.5	0.01	6.5
MW2	NA	59	8.4	12	0.88	9.0
MW3	NA	25	7.2	6.4	0.42	3.4
			Samples Collected On August 23, 1990			
MW1	NA	40	5.1	4.9	0.35	6.0
MW2	NA	96	8.1	8.4	1.5	8.6
MW3	NA	220	67	46	27	18
			Samples Collected On July 20, 1990			
MW1	44	NA	5.1	4.2	ND	9.1
MW2	86	NA	9.1	14	0.94	13
MW3	88	NA	25.1	21.1	0.61	14.1
			Samples Collected On March 19, 1990			
MW1	NA	40	3.7	1.1	ND	3.3
MW2	NA	50	7.7	8.7	0.075	5.6
MW3	NA	210	38	28	1.8	12
			Samples Collected On February 20, 1990			
MW1*	NA	7.6	1.6	ND	ND	1.3
MW2*	NA	38	7.3	3.1	0.075	6.8
MW3*	NA	46	20	15	1.8	9.7

TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
ND = Not Detected.
NA = Not Analyzed.
* Indicates Organic Lead was not detected.
Results in parts per million (ppm), unless otherwise indicated.

P & D ENVIRONMENTAL
300 Monte Vista, #101
Oakland, CA 94611
Telephone (510) 658-6916

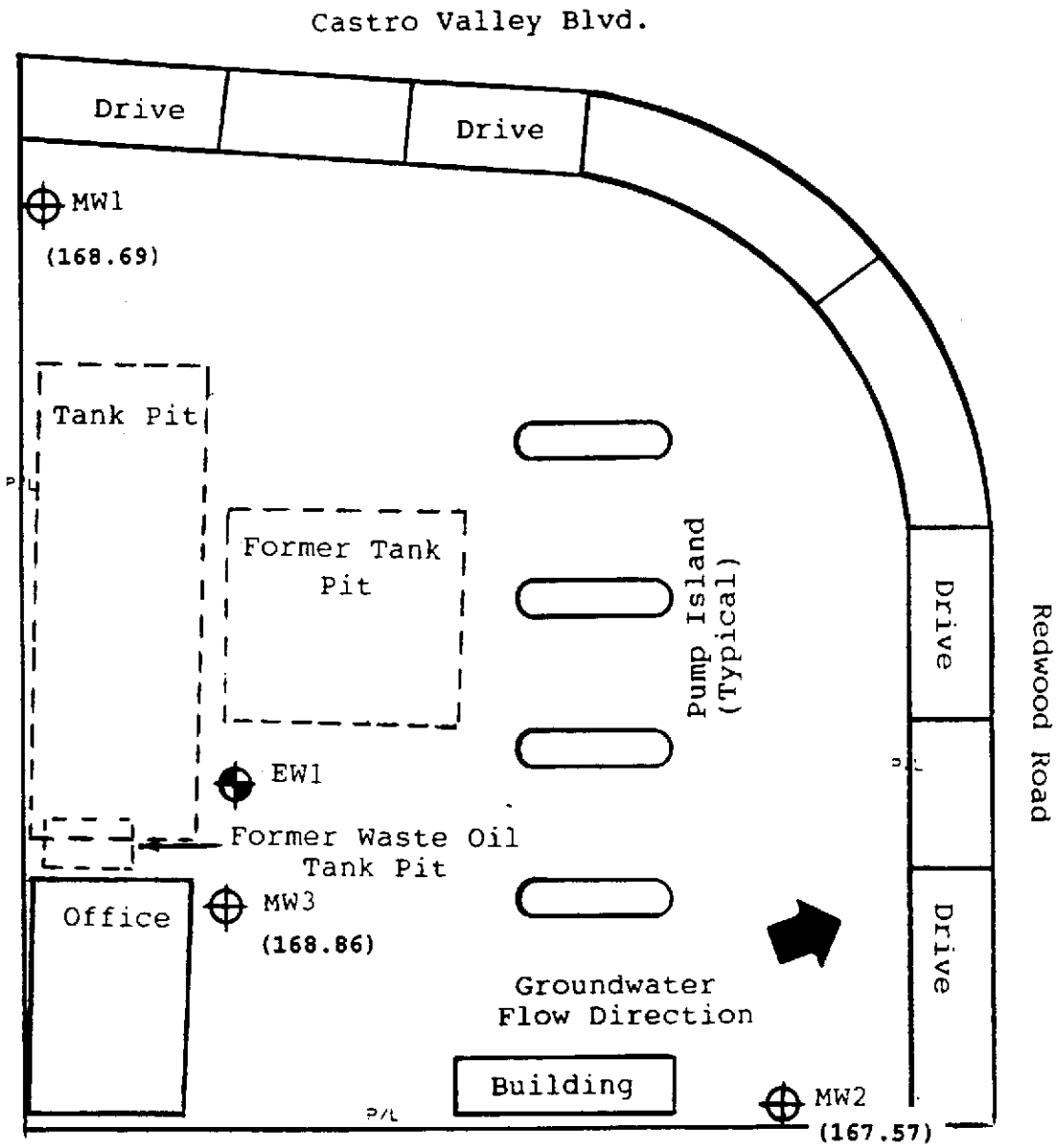


Scale in Feet
0 1000 2000 3000

Base Map from:
U.S. Geological Survey
Hayward, Calif.
7.5 Minute Quadrangle
Photorevised 1980

Figure 1
SITE LOCATION MAP
XTRA OIL Company
3495 Castro Valley Blvd.
Alameda, California

P & D ENVIRONMENTAL
300 Monte Vista, #101
Oakland, CA 94611
Telephone (510) 658-6916



LEGEND

- Extraction Well Location
- Monitoring Well Location
- Groundwater Flow Direction
- ( ) Groundwater Surface Elevation on **November 24, 1993**

P/L Proprety Line

Base Map From:
K&B Environmental
Dated 9/14/92

N

0 10 20 30 60

Scale in Feet

Figure 2
SITE PLAN
XTRA OIL Company
3495 Castro Valley Blvd.
Castro Valley, CA

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name XTRA OIL - Castro Valley
Well No. MW1
Job No. 0014
Date 11/24/93
TOC to Water (ft.) 8.74 9.35 AM
Sheen No Sheen
Well Depth (ft.) 20.2
Free Product Thickness 0
Well Diameter ≥ 4"
Sample Collection Method
Gal./Casing Vol. 7.4
Teflon Bailer

TIME	GAL. PURGED	pH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
10:12	4.0	6.16	64.2	11.96 X100
10:14	6.0	6.98	66.0	12.33
10:18	10.0	6.30	65.3	12.50
10:21	14.0	6.33	66.2	12.45
10:24	16.0	6.40	65.0	12.80
10:29	18.0	6.28	65.0	13.65
10:32	20.0	6.37	65.0	14.45
10:46	24.0	6.57	65.0	14.78
10:55	Collected Samples			

NOTES:

PURGE10.92

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name XTRA Oil - Castro Valley
Well No. MW2
Job No. 0014
Date 11/24/93
TOC to Water (ft.) ~~8.47~~ 8.51 9:44 AM 8.47 12:33
Sheen Yes
Well Depth (ft.) 18.4'
Free Product Thickness 0
Well Diameter 4"
Sample Collection Method
Gal./Casing Vol. ~~6.0~~ 6.5
Teflon Bailer

TIME	GAL. PURGED	pH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
1:01	3.0	6.6	66.5	1.51 x 1000
1:03	6.0	6.45	69.4	1.59
1:06	9.0	6.41	69.1	1.57
1:08	12.0	6.36	70.0	1.68
1:10	15.0	6.35	69.7	1.68
1:12	18.0	well dewater		
1:20	18.0	6.42	70.2	1.70
1:21	22.0	6.45	70.0	1.66

NOTES:

PURGE10.92

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name Atlas Oil - Castro Valley
Well No. MW3
Job No. 0014
Date 11/24/93
TOC to Water (ft.) 7.55 9.39 AM
Sheen Yes
Well Depth (ft.) 18.3
Free Product Thickness 0
Well Diameter 4"
Sample Collection Method
Gal./Casing Vol. 7.0
Teflon Bailer

TIME	GAL. PURGED	pH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
11:46	3.0	6.45	67.3	2.76 X 1000
11:50	6.0	6.49	67.4	1.59
11:53	9.0	6.52	68.2	1.95
11:57	12.0 dewatered	6.42	68.0	3.08
12:29	15.0 dewatered	6.71	68.0	2.62
11:57	12.2 well dewatered			
12:29	15.0	6.71	68.0	2.62
12:29	15.1 well dewatered			
12:40	Collected Sample			

NOTES:

PURGE10.92

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

P & D Environmental 300 Monte Vista, # 101 Oakland, CA 94611	Client Project ID: # 0014; Xtra Oil- Castro Valley	Date Sampled: 11/24/93
		Date Received: 11/26/93
	Client Contact: Paul King	Date Extracted: 11/26/93
	Client P.O:	Date Analyzed: 11/26/93

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

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

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
33343	MW1	W	66,000,a,h	8300	8900	2000	11,000	92
33344	MW2	W	120,000,a,h	13,000	17,000	2500	17,000	91
33345	MW3	W	160,000,a,h	48,000	26,000	2200	12,000	92
Detection Limit unless other-wise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

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

cluttered chromatogram; sample peak co-elutes 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 are significant; no recognizable pattern; 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.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

P & D Environmental 300 Monte Vista, # 101 Oakland, CA 94611	Client Project ID: # 0014; Xtra Oil- Castro Valley	Date Sampled: 11/24/93
		Date Received: 11/26/93
	Client Contact: Paul King	Date Extracted: 12/06/93
	Client P.O:	Date Analyzed: 12/06/93

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)+
33343	MW1	W	8200,d,b,h
33344	MW2	W	79,000,a,d,h
33345	MW3	W	24,000,a,d,h
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L
		S	10 mg/kg

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

cluttered chromatogram; surrogate and sample peaks co-elute or surrogate peak is on elevated baseline

+ 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) modified diesel?; light(c_L) or heavy(c_H) diesel compounds are 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.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

QC REPORT FOR HYDROCARBON ANALYSES

Date: 11/25-11/26/93 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	110.5	121.4	100	110.5	121.4	9.4
Benzene	0	10.8	10.9	10	108.0	109.0	0.9
Toluene	0	10.6	10.7	10	106.0	107.0	0.9
Ethyl Benzene	0	10.7	10.9	10	107.0	109.0	1.9
Xylenes	0	32.6	33.2	30	108.7	110.7	1.8
TPH (diesel)	0	143	137	150	95	92	3.8
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

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
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QC REPORT FOR HYDROCARBON ANALYSES

Date: 12/06-12/08/93 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	109.0	112.4	100	109.0	112.4	3.0
Benzene	0	9.9	9.9	10	99.0	99.0	0.0
Toluene	0	10	9.9	10	100.0	99.0	1.0
Ethyl Benzene	0	10.1	9.7	10	101.0	97.0	4.0
Xylenes	0	30.5	30.1	30	101.7	100.3	1.3
TPH (diesel)	0	172	161	150	115	107	6.5
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

P & D ENVIRONMENTAL
300 Monte Vista, #101
Oakland, CA 94611
Telephone (510) 658-6916

9AM 1860 APDHO

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0014	XTRA OIL - Castro Valley

SAMPLED BY: (PRINTED AND SIGNATURE) Paul H. King Paul H. King

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-Gas, BTEX	TPH-Diesel					PRESERVATIVE	REMARKS
MW1	11/21/95		Water		4	X	X					ICE	Normal Turn Around
MW2	"		"		4	X	X					"	" " "
MW3	"		"		4	X	X					"	" " "

33343
33344
33345

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATIVE ✓ VOAS | O & G | METALS | OTHER
APPROPRIATE
CONTAINERS ✓

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	TOTAL NO. OF SAMPLES (THIS SHIPMENT)	3	LABORATORY:
Paul H. King	11/21/95	6:35 PM	J. Hamilton	TOTAL NO. OF CONTAINERS (THIS SHIPMENT)	12	McCampbell Analytical
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT:		LABORATORY PHONE NUMBER:
J. Hamilton	11/22/95	10:30 AM		Ed Hamilton		(510) 798-1620
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO		

REMARKS: