reviewed SOS
2/11/92

Xtra OIL COMPANY
2307 PACIFIC AVE. ALAMEDA, CA 94501 TEL. (415) 865-9503 FAX (415) 865-1889

January 9, 1992

Alameda County Environmental Health
Hazardous Materials Program
80 Swan Way Room 200
Oakland, CA 94621

Attention: Scott Seery

Regarding: 3495 Castro Valley Blvd.
Castro Valley

Dear Scott,

Please find enclosed Quarterly Report for monitoring and sampling performed at the above location for the months of August, September and October 1991.

Very truly yours,

Keith Simas

Enclosures

K&B Environmental

718 E. Evelyn Avenue
Sunnyvale, CA 94086

Ph. (408) 736-1380
FAX (408) 736-0887

received 2/11/92

October 24, 1991

XCASTQUT.DOC

Mr. Ted Simas
Mr. Keith Simas
Xtra Oil Company
2307 Pacific Ave.
Alameda, California 94501

RE: Quarterly Groundwater Monitoring and Sampling Report, 3495 Castro Valley Blvd. Castro Valley, Ca.

Dear Mr. Simas,

This report describes the monitoring and sampling procedures performed at the subject facility on August 19, September 17 and October 10, 1991 by K&B Environmental.

Background

The site is presently used as an active gasoline station owned and operated by Xtra Oil. The site contains four 10,000 gallon underground fuel storage tanks. 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. An unauthorized release report was filed by the Alameda County Health Department, a copy of this report is attached in the appendix. A site location map (figure 1) and a site vicinity map (figure 2) and site plan (figure 3) are attached to this report.

Three monitoring wells designated as MW-1, MW-2 and MW-3 were installed at the site on 2/15/90 by Wedge Western Geo-Engineers. Soil samples collected during drilling operations revealed Total Petroleum Hydrocarbons (TPH) gasoline and TPH diesel contamination in borings MW-1 and MW-3 at depths ranging from 5 to 15 feet below grade and in boring MW-2 at depths ranging from 10 to 15 feet below grade. The analytical report from Wedge Western Geo-Engineers showed levels of TPH gasoline contamination between 40 and 1400 PPM at MW-1 and 95 to 230 PPM at MW-2. Soil samples from MW-3 showed TPH gasoline contamination levels ranging from 25 to 250 PPM and TPH diesel contamination up to 1200 PPM. Groundwater was encountered in the borings at a depth of 15 feet below grade.

On 2/15/91 Wedge Western Geo-Engineers also drilled three exploratory soil borings, designated as SB1, SB2 and SB3. Soil samples were collected at depths of 10 and 12 feet below grade. Soil samples from borings SB-1, SB-2 and SB-3 were collected on 2/15/91.

Soil sample analytical results from SB-1 indicated levels of TPH gasoline contamination up to 1700 PPM at 10 feet below grade. In boring SB-2 TPH gasoline was detected at concentrations of 800 PPM and 2000 PPM at depths of 10 and 12 feet below grade, respectively. In boring SB-3 identical results of TPH gasoline contamination were encountered at 10 and 12 feet below grade as were encountered in boring SB-2.

A groundwater monitoring and sampling program was implemented on 2/20/90. Review of the previous quarterly monitoring program shows TPH gasoline and TPH diesel contamination at all three wells. The previous quarterly sampling results are summarized in Table 2, attached.

Field Activities

Groundwater sampling and monitoring was performed by K&B Environmental on August 19, September 17, and October 10, 1991. Groundwater depth measurements were taken at each well using an electronic water level indicator. Groundwater monitoring data are summarized in Table 1. Monitoring wells were purged using a rotary pump equipped with a foot-valve attached to a suction hose. Four well volumes were purged from each well prior to sampling. All wells were pumped dry each time during the purge period. After each well was fully purged the pump unit and hose assembly were thoroughly cleaned using an Alconox soap and water mixture. This mixture was pumped through the system. Water temperature, pH and electrical conductivity were measured during the purging period. Field parameter data gathered during monitoring was recorded on K&B Environmental Well Monitoring and Sampling Forms. All three wells reached full recovery and monitoring parameters stabilized prior to sampling, as shown on the K&B Environmental Well Monitoring and Sampling Forms. Copies of the field parameter data forms are attached as appendix A.

Groundwater samples were collected using Teflon bailers. A clean sampling bailer was used at each well. All sampling equipment was cleaned using Alconox soap and water then rinsed with deionized water, and air dried prior to sampling. In order to optimize sample integrity a separate disposable nylon rope was attached to each of the bailers at each sampling point. Samples to be analyzed for TPH gasoline were stored in a zero headspace 40 ml glass VOA. Samples to be analyzed for TPH Diesel were stored in one liter glass amber bottles. Sample containers were provided by Trace Analytical Laboratories. All sample containers were prepared with the appropriate preservatives by Trace Analytical Laboratory. Samples were identified using a standard three part label.

All samples were sealed and stored on ice from the time of collection to the time of delivery to the laboratory. Samples were transported to Trace Analytical Laboratories with standard chain of custody forms maintained throughout transportation.

Hydrogeology

Water levels were measured a total of three times at each well during the quarter. A slight sheen of free product and odor was found at each well during monitoring activities. Groundwater levels have decreased in all of the wells between 0.39 and 0.79 feet during the quarter, with the measured depth to groundwater ranged from 8.95 to 10.39 feet. Groundwater flow direction has remained relatively constant and to the southeast during the quarter, with flow directions on October 10, September 17 and August 19, 1991 of approximately S57E, S66E and S24E respectively and gradients of 0.0055, 0.0061 and 0.0031 respectively. Groundwater monitoring data are summarized in Table 1. The groundwater flow direction and gradient for each month of monitoring are shown on figures 4, 5 and 6. San Lorenzo Creek is located approximately 450 feet east of the site.

Laboratory Results

All groundwater samples were analyzed for TPH gasoline using EPA method 5030 in conjunction with modified EPA method 8015; for TPH diesel using EPA method 3510 in conjunction with modified EPA method 8015, and for benzene, toluene, ethlybenzene and xylenes using EPA method 8020. Well MW-1 showed TPH diesel levels ranging from 19 PPM to 47 PPM and TPH gasoline ranging from 28 PPM to 48 PPM during this quarter. Well MW-2 showed TPH diesel levels ranging from 19 PPM to 360 PPM and TPH gasoline ranging from 69 PPM to 85 PPM. Well MW-3 showed TPH diesel levels ranging from 39 PPM to 150 PPM and TPH gasoline ranging from 140 PPM to 180 PPM. The laboratory analytical results for this quarter are summarized in Table 2.

Discussion and Recommendations

The subject facility is currently under a monthly sampling and monitoring program. Monthly analytical results for this quarter showed a significant increase in TPH diesel levels at well MW-2 on October 10, 1991. Well MW-1 and MW-3 showed a measurable decrease of contaminant levels during the quarter.

A permit for the removal of all four underground storage tanks has been approved by the Alameda County Health Department. A work plan and proposal for soil and groundwater remediation is currently being reviewed by K&B Environmental. Part of this proposed work plan will address procedures for over-excavation during the tank removal in order to extricate layers of contaminated soil from the surrounding areas of the tank pit. During the tank removal operation, a minimum of 2 feet of the aquifer will be exposed and soil from the saturated zone will be removed. This will present an opportunity to pump a substantial quantity of groundwater and any visible floating product from the tank pit area. The exposed groundwater will be pumped from the excavation pit into a portable storage tank. Prior to closing the excavation pit, a groundwater/vapor extraction well will be installed at the center of the pit for future remediation efforts.

The excavation and groundwater extraction efforts performed during the tank removal operation should demonstrate a significant reduction of contamination levels.

The monthly groundwater sampling and monitoring program that began in February 1990, has accumulated a substantial amount of data pertaining to the impact of groundwater on site. Previous attempts and requests for a quarterly sampling and monitoring program were denied based on fluctuations of contamination levels. The last sampling quarter has demonstrated that levels have stabilized, in comparison to previous quarters. Monthly groundwater sampling data will more than likely continue fluctuating until the plans for the removal of underground storage tanks and contaminated soil and groundwater is emplimented. The installation of the monitoring wells was conducted as part of the initial investigation of contamination impact of soil and groundwater. Reguardless of the fluctuation in sampling data, the groundwater has been impacted. It is the intention of the Xtra Oil Company to initiate remediation efforts immediately following the approval of the plan. The effects of the remediation efforts will be monitored by a quarterly sampling program. It is our opinion that after two years of monthly sampling and analysis, that no new information that would aid in remediation or characterize the site would be generated. We feel that the cost of monthly sampling and analysis could be better spent on continuing remediation efforts and investigating the extent of the contamination plume. Our recommendation is to start a quarterly sampling and analysis program with monthly monitoring, to begin in January 1992

This was approved January 21, 1992

Distribution

Copies of this report should be sent to Mr. Scott Seery at the Alameda County Health Department, Mr. Lester Feldman of the RWQCB and Mr. Bob Bohman of the Castro Valley Fire Department.

A cover letter signed by the principal executive officer of the Xtra Oil Company must be submitted with copies sent to each agency.

Limitations

This report was prepared for the use of Xtra Oil Company. The content and conclusions provided by K&B Environmental in this assessment are based on information collected during our investigation, including, visual site inspections; subsurface exploration and laboratory testing of groundwater samples and professional judgment based on said information at the time of preparation of this document . Any subsurface sample results and observations presented herein are considered 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 conditions are revealed that vary from these encountered during this investigation or included in these findings, the newly revealed conditions must be used to reevaluate, and may invalidate the conclusions 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 potentially hazardous waste materials left on-site, such as groundwater purging and or drill turnings in accordance with existing laws and regulations.

This report has been prepared in according to generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms providing services of similar nature. K&B Environmental is not responsible for the accuracy or completeness of the information provided by other individuals or entities used in this report. The interpretation of this data is based on our experience and training. The conclusions presented are based upon the current regulatory requirements and may require revision if future regulatory changes occur. No warranty expressed or implied, is made.

Should you have any questions please feel free to contact me at your convenience.

Sincerely,

Kip Porter
Project Manager
K&B Environmental

Elyse Heilshorn

Elyse Heilshorn
Registered Civil Engineer
Registration No: 036567
Expiration Date: 6/30/92

Attachments:
Figure 1: Site Location Map
Figure 2: Site Vicinity Map
Figure 3: Site Plan
Figure 4: Site Plan Groundwater Surface Map October.
Figure 5: Site Plan Groundwater Surface Map September.
Figure 6: Site Plan Groundwater Surface Map August.
Table 1: Monitoring Data Summary
Table 2: Summary of Analytical Results
Laboratory Analytical Results
Chain of Custody Documentation
Groundwater Monitoring Data Sheets

Table 1

Monitoring Data Summary

Well No.	Date Monitored	Casing Elev.	Depth to Water	Water Table Elev. MSL
MW-1	8/19/91	175.73	9.31	166.42
	9/17/91		9.50	166.23
	10/10/91		9.70	166.03
MW-2	8/19/91	175.45	9.60	165.85
	9/17/91		10.23	165.22
	10/10/91		10.39	165.06
MW-3	8/19/91	175.00	8.95	166.05
	9/17/91		9.20	165.80
	10/10/91		9.43	165.57

MSL= Mean Sea Level
* Well casing elevations were taken from previous consultants data and the origin of surveying procedures or benchmark reference point cannot be confirmed at this time.

Table 2
Summary of Laboratory Analytical Results

Collected on
October 10, 1991

Well	TPH Diesel	TPH Gas	Benzene	Toluene	Ethyl Benzene	Xylenes
MW-1	19.00	28.00	4.10	4.70	1.00	4.80
MW-2	360	85.00	21.00	25.00	2.10	14.00
MW-3	39.00	140.00	57.00	31.00	2.20	14.00

Collected on
September 17, 1991

Well	TPH Diesel	TPH Gas	Benzene	Toluene	Ethyl Benzene	Xylenes
MW-1	19.00	39.00	4.90	4.10	1.20	5.90
MW-2	56.00	74.00	10.00	11.00	1.40	8.10
MW-3	140.00	180.00	47.00	25.00	2.60	15.00

Collected on
August 19, 1991

Well	TPH Diesel	TPH Gas	Benzene	Toluene	Ethyl Benzene	Xylenes
MW-1	47.00	48.00	13.00	8.40	0.990	29.00
MW-2	19.00	69.00	26.00	22.00	2.10	18.00
MW-3	150.00	170.00	82.00	31.00	4.40	22.00

Detection Limits

Diesel	Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes
0.079	0.48	0.12	0.12	0.14	0.38

Results in Parts Per Million (PPM)

Table 2 Continued
Summary of Laboratory Analytical Results

Well No.	Date	TPH	Benzene	Toluene	Xylenes	E.Benzene
MW-1	2/20/90	7.6	1.6	<0.015	1.3	<0.015
	3/19/90	40.0	3.7	1.1	3.3	<0.060
	7/20/90	44.0(D)	5.1	4.2	9.1	<0.0003
	8/23/90	40.0	5.1	4.9	6.0	0.35
	9/27/90	28.0	3.7	3.5	6.5	0.01
	1/14/91	33.0	3.9	2.9	5.3	0.21
	2/15/91	120.0	7.4	6.6	13.0	<3.0
	3/21/91	36.0	4.5	5.7	7.3	0.087
	4/15/91	56.0	6.5	8.5	9.9	0.41
MW-2	2/20/90	38.0	7.3	3.1	6.8	0.075
	3/19/90	50.0	7.7	8.7	5.6	0.075
	7/20/90	86.0(D)	9.1	14.0	13.0	0.94
	8/23/90	96.0	8.1	8.4	8.6	1.50
	9/27/90	59.0	8.4	12.0	9.0	0.88
	1/14/91	78.0	11.0	8.7	8.0	0.58
	2/15/91	200.0	12.0	12.0	14.0	1.70
	3/21/91	62.0	9.3	11.0	9.7	0.35
	4/15/91	82.0	5.3	7.4	9.4	1.00
MW-3	2/20/90	46.0	20.0	15.0	9.7	1.8
	3/19/90	210.0	38.0	28.0	12.0	1.8
	7/20/90	88.0(D)	25.1	21.2	14.1	0.61
	8/23/90	220.0	67.0	46.0	18.0	27.0
	9/27/90	25.0	7.2	6.4	3.4	0.42
	1/14/91	160.0	48.0	25.0	16.0	1.00
	2/15/91	230.0	44.0	40.0	31.0	<6.0
	3/21/91	87.0	30.0	14.0	5.4	0.69
	4/15/91	110.0	31.0	15.0	7.4	0.88

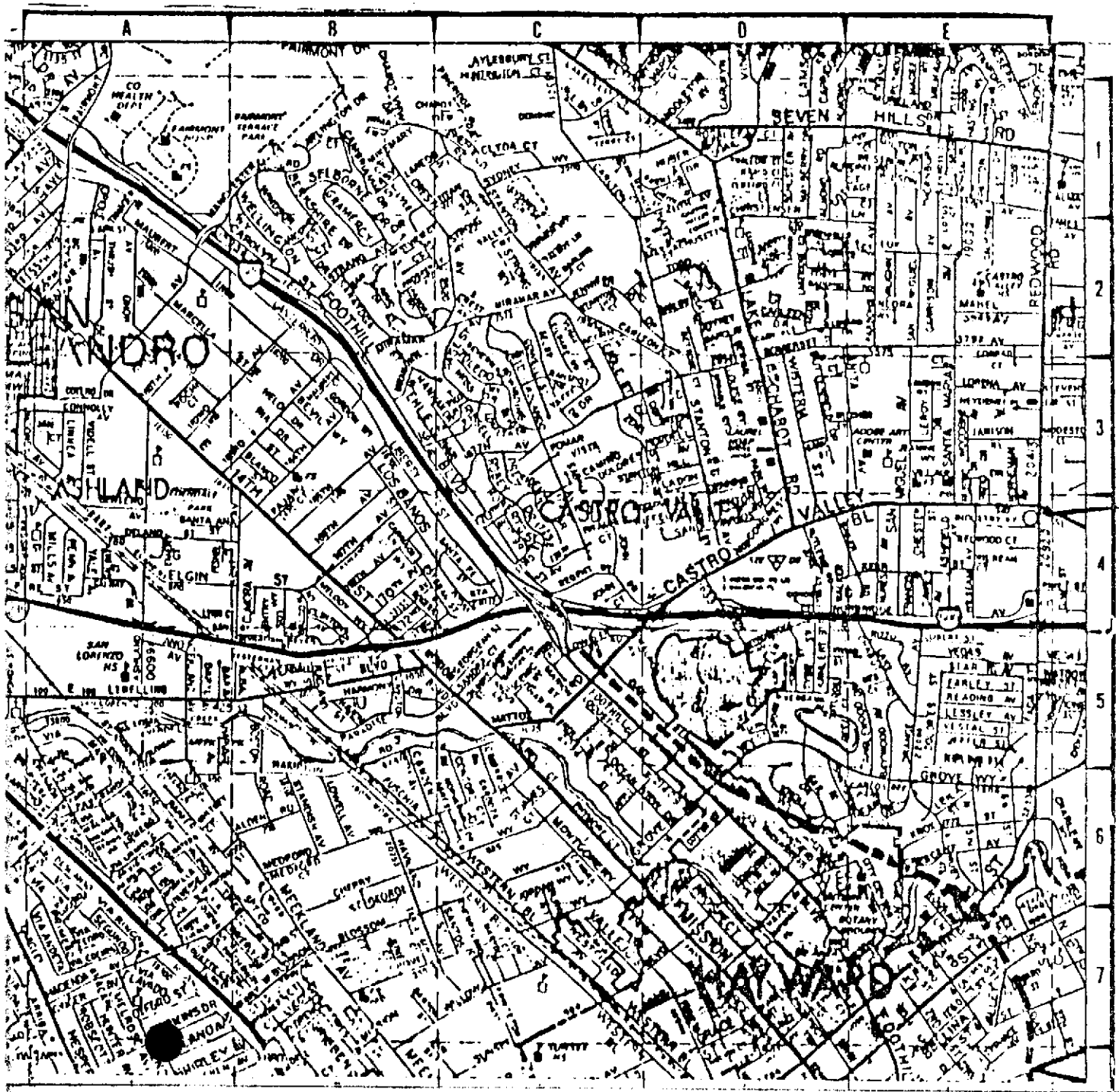
D= TPH High Boiling Hydrocarbons. No mark means TPH low to Medium Boiling Hydrocarbons.

Results in Parts Per Million (PPM)

Table 2 Continued
Summary of Laboratory Analytical Results

WELL NO.	DATE	TPH-G	TPH-D	Benzene	Toluene	Xylenes	E.Benz.
MW-1	5/17/91	72.0	26.0	7.7	9.9	11.0	<0.6
	6/20/91	76.0	42.0	4.7	7.1	9.8	1.5
	7/20/91	100.0	49.0	11.0	14.0	17.0	2.3
MW-2	5/17/91	62.0	33.0	5.9	6.3	9.0	1.2
	6/20/91	87.0	69.0	8.1	8.4	8.9	1.1
	7/10/91	51.0	100.0	9.9	7.7	7.5	1.2
MW-3	5/17/91	170.0	70.0	32.0	22.0	18.0	2.2
	6/20/91	920.0	210.0	39.0	49.0	69.0	13.0
	7/10/91	450.0	270.0	46.0	29.0	21.0	3.5

Results in Parts Per Million (PPM)



SCALE IN MILES
1/4 1/2 3/4

FIGURE 1
SITE LOCATION MAP
XTRA OIL CO.
3495 CASTRO VALLEY BLVD.
CASTRO VALLEY, CA.

BASE MAP FROM THOMAS BROS
1986 EDITION
ALAMEDA COUNTY

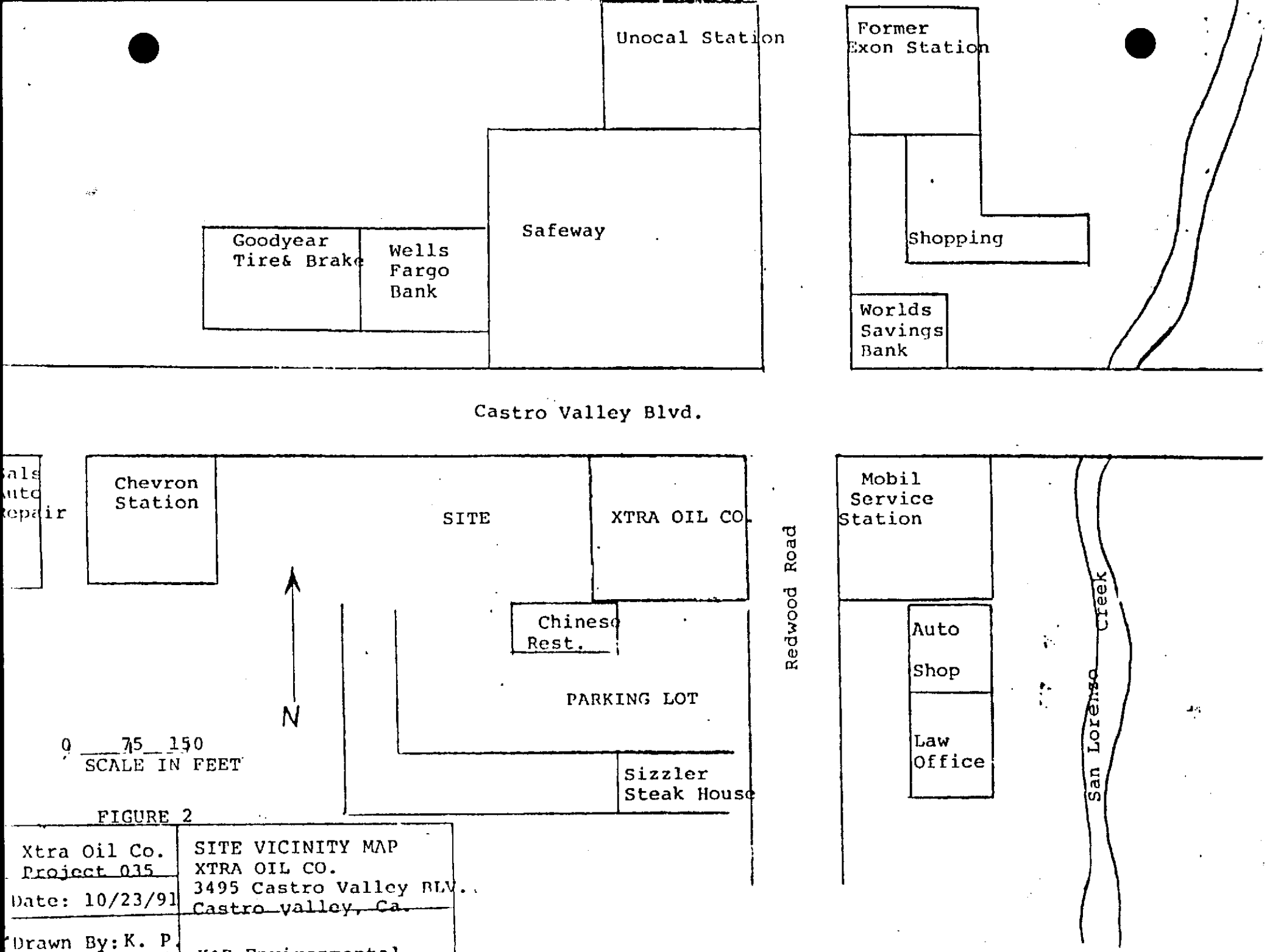


FIGURE 2

Xtra Oil Co. Project 035	SITE VICINITY MAP XTRA OIL CO. 3495 Castro Valley BLV., Castro valley, Ca.
Date: 10/23/91	
Drawn By: K. P.	K&B Environmental

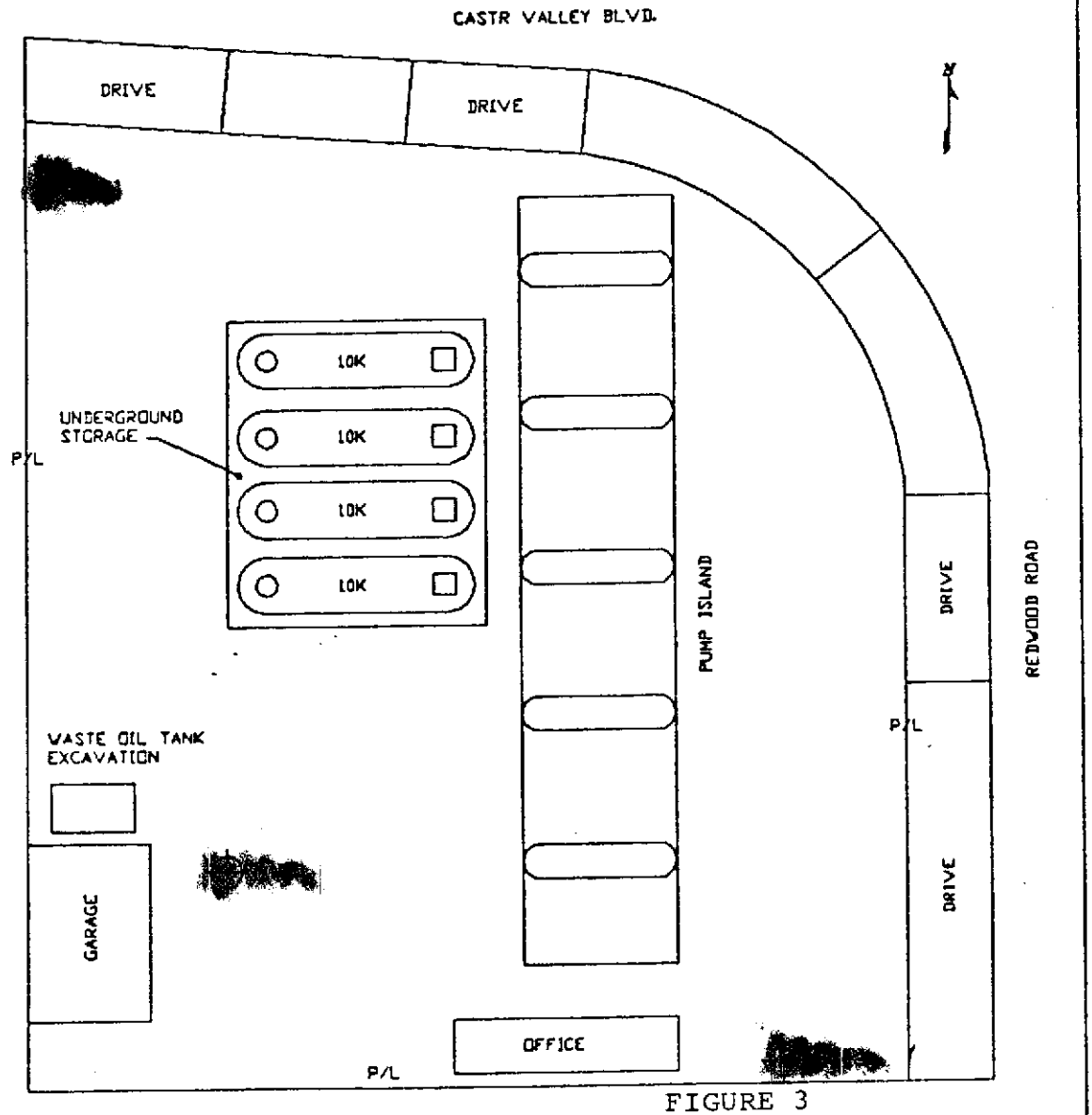


FIGURE 3

SITE PLAN

0 10 20 30 60

SCALE IN FEET

LEGEND:

MONITORING WELL

P/L PROPERTY LINE

PROJECT NO. 035	
DRAWN	DATE
C.CATALANO	12/3/91
REV NO.	

K&B ENVIROMENTAL

XTRA OIL COMPANY
3495 CASTRO VALLEY BLVD.
CASTRO VALLEY, CA.

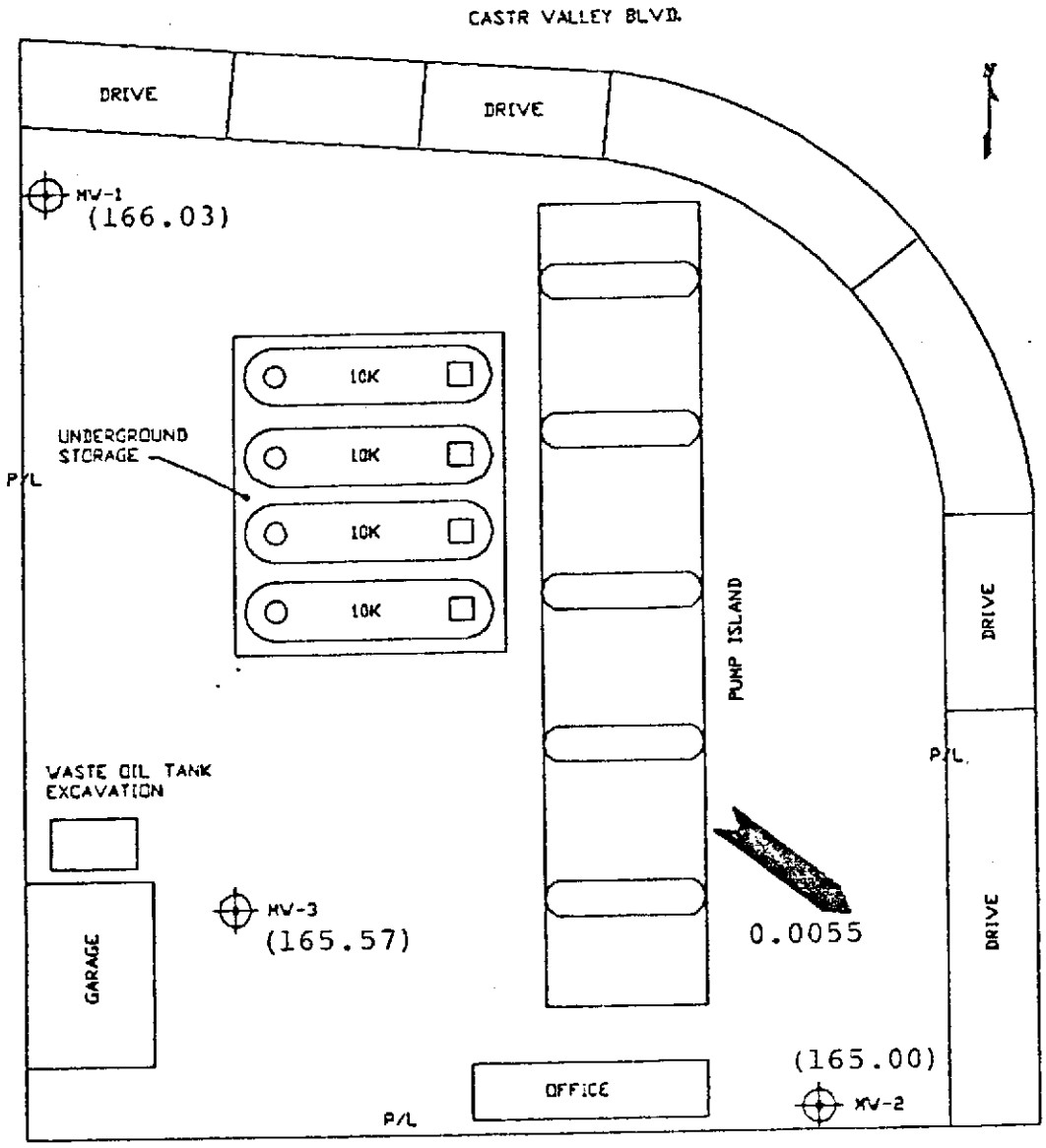


Figure 4
Groundwater Surface Map
10/10/91

SITE PLAN

0 10 20 30 60

SCALE IN FEET

LEGEND

MONITORING WELL

P/L PROPERTY LINE

Groundwater Flow Direction

PROJECT NO. 035	
DRAWN	DATE
C.CATALANO	12/3/91
REV NO.	

K&B ENVIROMENTAL

XTRA OIL COMPANY
3495 CASTRO VALLEY BLVD.
CASTRO VALLEY, CA.

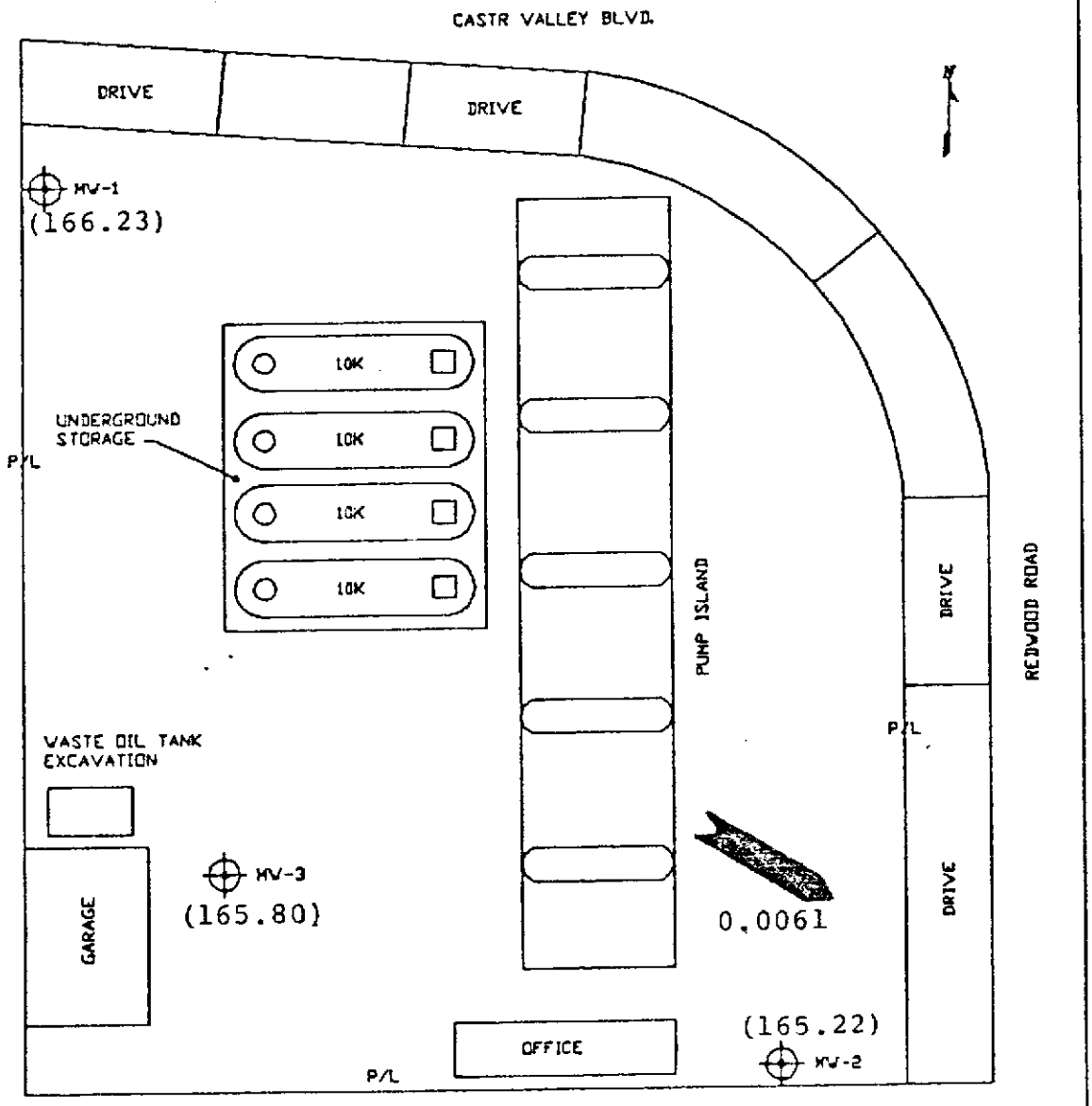


Figure 5
SITE PLAN Groundwater Surface Map
9/17/91

0 10 20 30 60
SCALE IN FEET

LEGEND
MONITORING WELL
P/L PROPERTY LINE
Groundwater Flow Direction

PROJECT NO. 035	
DRAWN	DATE
C.CATALANO	12/3/91
REV NO.	

K&B ENVIROMENTAL

XTRA OIL COMPANY
3495 CASTRO VALLEY BLVD.
CASTRO VALLEY, CA.

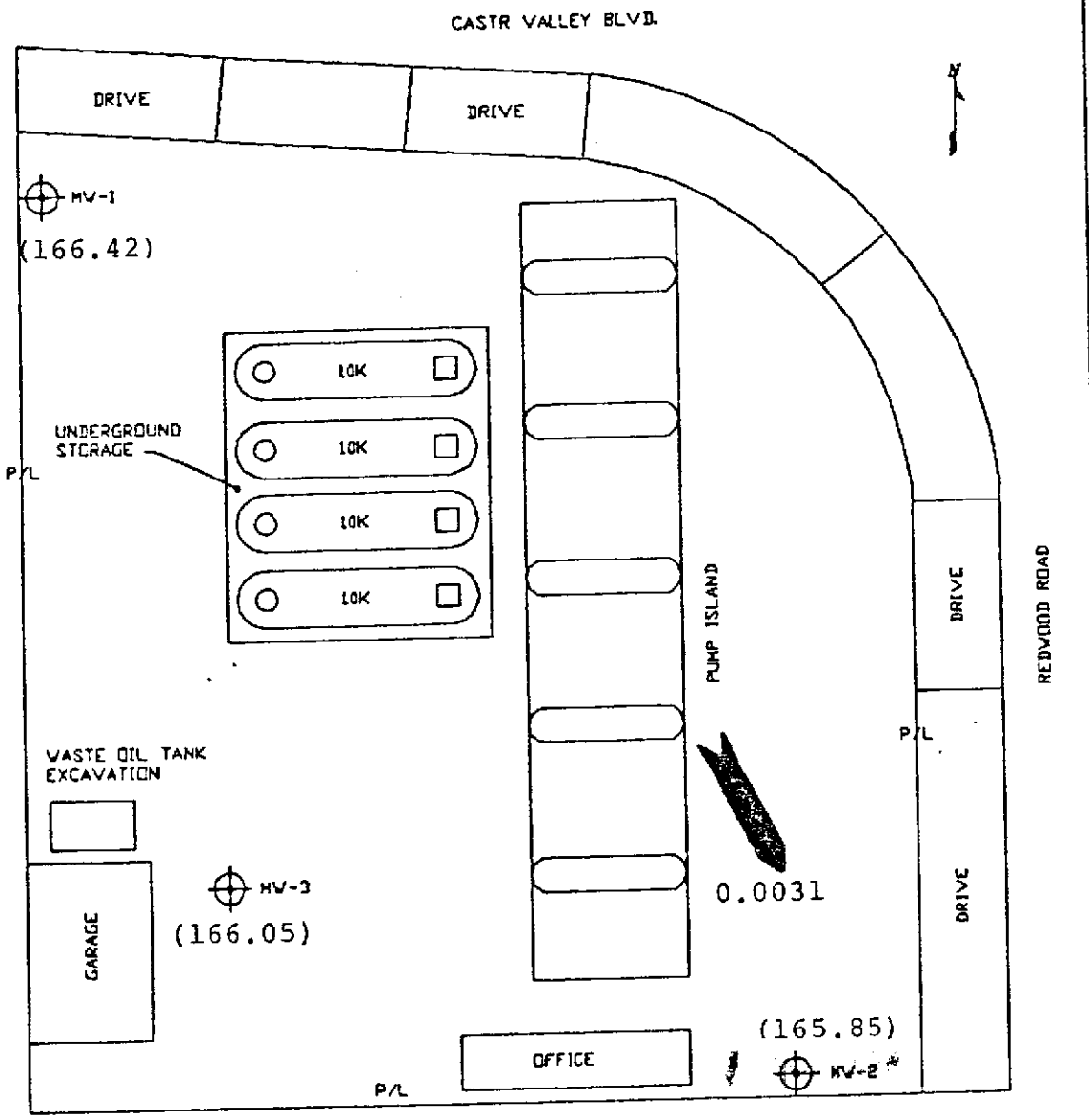


Figure 6
SITE PLAN Groundwater Surface Map
8/19/91

0 10 20 30 60

SCALE IN FEET

LEGEND

MONITORING WELL

P/L PROPERTY LINE

Groundwater Flow Direction

PROJECT NO. 035	K&B ENVIROMENTAL
DRAWN: C.CATALANO	DATE: 12/3/91
REV NO.	XTRA OIL COMPANY 3495 CASTRO VALLEY BLVD. CASTRO VALLEY, CA.

TAL Trace Analysis Laboratory, Inc.

LOG NUMBER: 1410
DATE SAMPLED: 10/10/91
DATE RECEIVED: 10/10/91
DATE ANALYZED: 10/17/91
DATE REPORTED: 10/29/91
PAGE: Two

Sample Type: Water

Method and Constituent:	Units	MW-1 Concentration	MW-1 Reporting Limit	MW-2 Concentration	MW-2 Reporting Limit	MW-3 Concentration	MW-3 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	28,000	77	85,000	380	140,000	380
EPA Method 8020 for:							
Benzene	ug/l	4,100	37	21,000	180	57,000	180
Toluene	ug/l	4,700	35	25,000	180	31,000	180
Ethylbenzene	ug/l	1,000	37	2,100	180	2,200	180
Xylenes	ug/l	4,800	100	14,000	500	14,000	500

Method and Constituent:	Units	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:			
Total Petroleum Hydrocarbons as Gasoline	ug/l	ND	50
EPA Method 8020 for:			
Benzene	ug/l	ND	0.50
Toluene	ug/l	ND	0.50
Ethylbenzene	ug/l	ND	0.50
Xylenes	ug/l	ND	1.5

QC Summary:

% Recovery: 92
% RPD: 12

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/Quality Control Manager

TAL: Trace Analysis Laboratory, Inc.

LOG NUMBER: 1307
DATE SAMPLED: 09/17/91
DATE RECEIVED: 09/17/91
DATE ANALYZED: 09/19/91
DATE REPORTED: 10/07/91
PAGE: Three

Sample Type: Water

Method and Constituent:	Units	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:			
Total Petroleum Hydrocarbons as Gasoline	ug/l	ND	50
EPA Method 8020 for:			
Benzene	ug/l	ND	0.50
Toluene	ug/l	ND	0.50
Ethylbenzene	ug/l	ND	0.50
Xylenes	ug/l	ND	1.5

QC Summary:

% Recovery: 62
% RPD: 6.5

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/ Quality Control Manager

Environmental

CHAIN OF CUSTODY

Sunnyvale, CA 94086
(408) 736-1[illegible]

project#	project name	project site address
035	Mtn Oil	Castro Valley Shell

sampler: K. Porter

sample type: gas bag - A; water - W; soil - S

analysis: Gas Diesel BTEX

1307

date	time	grab	comp	sample ID number							remarks
9/16/91		X		035MW1	W	X					noticible sheen/no odor
9/16/91		X		035MW2	W	X					slight sheen odor
9/16/91		X		035MW3	W	X					sheen.

Walk in
Normal TAT
came in ice chest - on ice
water
8 - 40 ml each
on ice
white
9/21

relinquished by:	received by:	relinquished by:	received by:
[signature]	9/17/91 3:30 pm Jennifer Peled		

page___

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (415) 783-6960
Facsimile (415) 783-1512

LOG NUMBER: 1242
DATE SAMPLED: 8/16/91
DATE RECEIVED: 8/19/91
DATE EXTRACTED: 8/20/91
DATE ANALYZED: 8/22/91
DATE REPORTED: 9/09/91

CUSTOMER: Extra Oil Company

REQUESTER: Keith Simas

PROJECT: No. 034, Extra Oil, Castro Valley

Sample Type: Water

Method and Constituent:	Units	MW-1 Concentration	MW-1 Reporting Limit	MW-2 Concentration	MW-2 Reporting Limit	MW-3 Concentration	MW-3 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Diesel	ug/l	47,000	57	19,000	50	150,000	57

Method and Constituent:	Units	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:			
Total Petroleum Hydrocarbons as Diesel	ug/l	ND	50

QC Summary:

% Recovery: 88
% RPD: 1.1

Concentrations reported as ND were not detected at or above reporting limit.

LOG NUMBER: 1242
DATE SAMPLED: 8/16/91
DATE RECEIVED: 8/19/91
DATE ANALYZED: 8/28/91
DATE REPORTED: 9/09/91
PAGE: Two

Sample Type: Water

Method and Constituent:	Units	MW-1 Concentration	MW-1 Reporting Limit	MW-2 Concentration	MW-2 Reporting Limit	MW-3 Concentration	MW-3 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	48,000	1,000	69,000	1,000	170,000	11,000
EPA Method 8020 for:							
Benzene	ug/l	13,000	64	26,000	64	82,000	700
Toluene	ug/l	8,400	48	22,000	48	31,000	530
Ethylbenzene	ug/l	990	80	2,100	80	4,400	880
Xylenes	ug/l	29,000	200	18,000	200	22,000	2,200

Concentrations reported as ND were not detected at or above reporting limit.

LOG NUMBER: 1242
DATE SAMPLED: 8/16/91
DATE RECEIVED: 8/19/91
DATE ANALYZED: 8/28/91
DATE REPORTED: 9/09/91
PAGE: Three

Sample Type: Water

Method and Constituent:	Units	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:			
Total Petroleum Hydrocarbons as Gasoline	ug/l	ND	50
EPA Method 8020 for:			
Benzene	ug/l	ND	0.50
Toluene	ug/l	ND	0.50
Ethylbenzene	ug/l	ND	0.50
Xylenes	ug/l	ND	1.5

QC Summary:

% Recovery: 130
% RPD: 2.4

Concentrations reported as ND were not detected at or above reporting limit.

Louis W. DuPuis
Quality Assurance/ Quality Control Manager

~~Clint~~ ENVIRONMENTAL ~~CONSULTANTS INC.~~
718 E. Evelyn Ave.
Sunnyvale, CA. 94086 (408) 736-1380 CHAIN OF CUSTODY

PROJECT#	PROJECT NAME	PROJECT SITE ADRESS
034	Xtra Oil	3475 Castro Valley Blvd. Castro Valley

SAMPLER: Kip Porter

Billed to Xtra Oil Inc.

1242

DATE	TIME	GRAB	COMP.	SAMPLE ID NUMBER		ANALYSIS REQ.	TPH/BTEX	TPHD			REMARKS
8/14/91	11:20	X		~~4847~~	MW1	W	X	X			WM-1 3 VOAs 1-Liter Bottle, 9'1 1/16" to water
		X		4848	MW2	W	X	X			MW-3 3 VOAs 1-Liter Bottle 8'10 1/4" to water
8/14/91	11:20	X		4849	MW3	W	X	X			MW2 3 VOAs 1 Liter Bottle 9'-5 7/8" to water
											Normal TAT Per Kip Porter's Inst. gp 8/19/91
											1-liter; 3-40ml ea amb / water walk-in Green
											gp

Relinquished by:	Recieved by Date Time	Relinquished by:	Recieved by: Date Time	Page
8/19/91 5:06	TAL 8/14/91 3:16			

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K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K. Porter Sample Number 4960

Date Collected 10/1/91 Sample Container 3-40ml VOA 1 Liter

Time Collected 16:45 Analysis Required TPH Gas
D. Used 12TEX

Date Shipped 10/1/91 Sample Preservation Ice

Observations Cloudy, Brown & Reddish in color, purged
dry, odorable shen.

Field Parameters

Well Number MW-1 Purge Method Rotary Pump

Collection Method Teflon Bail Well Diameter 4 IN.

Well Depth 20 FT. Depth To Water 9.7 FT.

Well Purge Volume 50 (6.7gal) FT³ Total Volume Purged 20 Ext.F or 26.88 gallons to 27 gallons

Volume Purged	Temp.(°C)	PH	Conductivity
(1)	21°	5.4	.37mS
(1)	21°	5.4	.34mS
(1)	21°	5.3	.33mS
(1)	21°	5.3	.34mS

total 4 volumes for each line of Data, Stabalized before sampling

K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K. Porter Sample Number 4961

Date Collected 10/10/91 Sample Container 3-40ml VOA/1-Liter

Time Collected 1530 Analysis Required TPH Gas Diesel BTEX

Date Shipped 10/10/91 Sample Preservation HCl

Observations Slight odor visible sheen, purged dry for 4 well volumes

Field Perameters

Well Number MW-3 Purge Method Rotary Pump

Collection Method Teflon Bailer Well Diameter 4 IN.

Well Depth 18 FT. Depth To Water 9.93 FT.

Well Purge Volume 4 (5.60 gal) FT³ Total Volume Purged 22 gallons to 23 gallons (16 ft³)

Volume Purged	Temp. (° C)	PH	Conductivity
(1)	20°	5.4	.34 ms
(1)	20°	5.3	.40 ms
(1)	20°	5.3	.37 ms
(1)	20°	5.3	.37 ms

total 4 volumes for each data was stabilized before sampling

K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K. Porter Sample Number 4962

Date Collected 10/4/91 Sample Container 3-40ml VOA Vials

Time Collected 12:30 Analysis Required TPH as Gas (Purgeable)
BTEX

Date Shipped 10/4/91 Sample Preservation HCl

Observations Hydrocarbon sheen, slight odor, purged three well volumes until Dry

Field Perameters

Well Number MW-2 Purge Method Rotary Pump

Collection Method Top Bailer Well Diameter 4 IN.

Well Depth 18' FT. Depth To Water 10.39 FT.

Well Purge Volume 0.96 gal 3.20 FT³ Total Volume Purged 19.8 gals to 21 gals 1.45 cu ft.

Volume Purged	Temp.(°C)	PH	Conductivity
(1)	21°	5.7	.41mS
(1)	20°	5.5	.37mS
(1)	20°	5.3	.36mS
(1)	20°	5.3	.36mS

Total four well volumes, one volume for each data line stabilized before Sampling

K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K Burton Sample Number 035MW3

Date Collected 9/17/91 Sample Container 8-40mL VOAs

Time Collected 12:45 Analysis Required TPH as Gas
Diesel, BTEX

Date Shipped 9/17/91 Sample Preservation NO

Observations Sheen, Odor, pumped dry 4 well volumes

Field Perameters

Well Number MW-3 Purge Method Rotary Pump

Collection Method Teflon Bailer Well Diameter 4 IN.

Well Depth 12' FT. Depth To Water 9.20 FT.

Well Purge Volume 5.7gal FT³ Total Volume Purged 22&23gal

Volume Purged	Temp.(°C)	PH	Conductivity
(1)	21°	5.3	.40mS
(1)	21°	5.3	.40mS
(1)	20°	5.3	.37mS
(1)	21°	5.3	.36mS

Total four volumes 1volume for each line of Data recorded. Stabilized before sampling

K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K. Rutter Sample Number 035MW-2

Date Collected 9/17/91 Sample Container 8-4 oz. VOAs

Time Collected 11:25 Analysis Required TPH as Gas
Diesel BTEX

Date Shipped 9/17/91 Sample Preservation HCl

Observations Noticable sheen, slight odor, clear to cloudy
purged 4 well volumes until dry

Field Perameters

Well Number MW-2 Purge Method Rotary Pump

Collection Method Teflon Bailer Well Diameter 4 IN.

Well Depth 18' FT. Depth To Water 12.23 FT.

Well Purge Volume 5.9 gal 37.99 FT³ Total Volume Purged 23 gals ≈ 3 gals

Volume Purged	Temp.(°C)	PH	Conductivity
(1)	20°	5.4	.37 m S
(1)	19°	5.3	.36 m S
(1)	20°	5.4	.37 m S
(1)	20°	5.4	.55 m S

total four well volumes 1 for each line of Data recorded. Stabilized before sampling.

K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K. Porter Sample Number 035MW1

Date Collected 9/17/91 Sample Container 2-40mL VOA Vials

Time Collected 10:30 Analysis Required TPH as Gas Diesel
BTEX

Date Shipped 9/17/91 Sample Preservation NO

Observations Slight odor, Cloudy, Brown to Red-d, purged
Dry for 4 well volumes

Field Perameters

Well Number MW-1 Purge Method Rotary pump

Collection Method Teflon Bailer Well Diameter 4 IN.

Well Depth 20' FT. Depth To Water 9.5 FT.

Well Purge Volume 6.8 gals FT³ Total Volume Purged 27 ½ gals

Volume Purged	Temp.(°C)	PH	Conductivity
(1)	21°	5.4	.40 m S
(1)	21°	5.3	.36 m S
(1)	21°	5.3	.31 m S
(1)	21°	5.3	.33 m S

total 4 well volumes for each line of Data recorded. Stabilized before Sampling.

K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K. Porter Sample Number 4347

Date Collected 9/19/91 Sample Container 3-40ml VOAS 1-liter

Time Collected 11:00 Analysis Required TPH Gas Diesel
BTEX

Date Shipped 9/19/91 Sample Preservation Ice

Observations Cloudy, Brown to Red in color, Slight Silver
Purged Dry for 4 well volumes

Field Perameters

Well Number MW-1 Purge Method Rotary Pump

Collection Method Teflon Bailer Well Diameter 4 IN.

Well Depth 30' FT. Depth To Water 9.31 FT.

Well Purge Volume 7.0 gal 22.15 FT³ Total Volume Purged 28 gal 4 cu ft

Volume Purged	Temp.(°C)	PH	Conductivity
(1)	20°	5.6	.40mS
(1)	19°	5.3	.40mS
(1)	19°	5.3	.32mS
(1)	19°	5.3	.34mS

Total of 4 well volumes / for each volume listed each data line
Stabilized before sampling

K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K. Porter Sample Number 4848

Date Collected 8/19/91 Sample Container 2-40ml VOA/1-1Hor

Time Collected 11:21 Analysis Required TPH Gas Diesel BTEX

Date Shipped 8/19/91 Sample Preservation HCl

Observations Clear-Colorless, visible Sheen, Diesel Odor Purged dry for 4 well volumes

Field Perameters

Well Number MW-3 Purge Method Rotary Pump

Collection Method Teflon Bailer Well Diameter 4 IN.

Well Depth 18' FT. Depth To Water 8.95 FT.

Well Purge Volume 60 gal FT³ Total Volume Purged 24 gal

Volume Purged	Temp.(°C)	PH	Conductivity
10	19°	5.8	.43mS
(1)	19°	5.4	.37mS
(1)	19°	5.4	.34mS
(1)	19°	5.4	.34mS

Four well volumes total / Volume for each line of Data. Stabelized before sampling.

K&B Environmental
Groundwater Sample Collection
Data Sheet

Collected By K. Porter Sample Number 4849

Date Collected 8/19/91 Sample Container 2 40mL VOA/1 1-Liter

Time Collected 11:55 Analysis Required TPH Gas Diesel / BTEX

Date Shipped 8/19/91 Sample Preservation Yes

Observations Cloudy, Visible Sheen, Diesel Odor. Purged Dry for 4 well volumes

Field Perameters

Well Number MW-2 Purge Method Rotary Pump

Collection Method Teflon Bailer Well Diameter 4 IN.

Well Depth 18 FT. Depth To Water 9.6 FT.

Well Purge Volume 5.4 gal FT' Total Volume Purged ~22 gal & ~23 gal

Volume Purged	Temp.(°C)	PH	Conductivity
(1)	19°	5.3	.37mS
(1)	19°	5.3	.37mS
(1)	19°	5.3	.38mS
(1)	19°	5.3	.37mS

*Total one volume for each line of data Stabilized before sampling