

XTRA Oil Company  
2107 Pacific Ave Alameda, Ca. 94501

5-29-92  
Accepted in  
"principle".  
SOS

May 22, 1992

92112798 101 8:00

Environmental Health  
Hazardous Materials Division  
85 Swan Way, Room 200  
Oakland, CA 94611

Attention: Scott Seery

Regarding: 3405 Castro Valley Blvd  
Castro Valley

Dear Mr. Seery,

Please find enclosed Quarterly Report for monitoring and sampling performed at the above location for the first quarter 1992.

Also enclosed is the work plan for remediation efforts during the underground tank removal and replacement. Walter engineering was the contractor selected for the work. All necessary Workmens' Compensation Insurance information will be forthcoming.

Very truly yours,

  
Scott Seery

Enclosures



K & B

ENVIRONMENTAL

309 Laurelwood Ave.  
Suite 4  
Santa Clara, Ca. 95054  
TEL:(408) 988-8346  
FAX:(408) 988-8348

April 3, 1992

JANOUT.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 November 25, December 23, 1991 and January 14, 1992 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 vials. 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. Copies of the Chain of Custody forms are attached as appendix B.

### 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 wells MW-1 and MW-2 1.13 and 1.42 feet, respectively, and well MW-3 0.19 feet since the previous quarter. The measured depth to groundwater at the site on January 14, 1992 ranged from 9.01 to 9.41 feet. The groundwater flow direction remained relatively unchanged and to the southeast during December 1991 and January 1992. However, the water level data for November, 1991 indicated that the groundwater flow direction was to the southwest. This November groundwater flow direction is inconsistent with the groundwater flow directions previously observed at this site and is also inconsistent with the monitoring data for the other two months for this quarter. For these reasons, the November, 1991 groundwater flow direction should be reviewed as potentially spurious data.

The groundwater gradients for monitoring data collected on November 25, 1991, December 23, 1991 and January 14, 1992 are 0.011, 0.0060 and 0.0035, 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.

### 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, ethylbenzene and xylenes using EPA method 8020. Well MW-1 showed TPH diesel levels ranging from 19 PPM to 36 PPM and TPH gasoline ranging from 39 PPM to 170 PPM during this quarter. Well MW-2 showed TPH diesel levels ranging from 130 PPM to 1600 PPM and TPH gasoline ranging from 59 PPM to 2100 PPM. Well MW-3 showed TPH diesel levels ranging from 74 PPM to 540 PPM and TPH gasoline ranging from 130 PPM to 740 PPM. The laboratory analytical results for this quarter are summarized in Table 2. Copies of the laboratory report forms are included in appendix B.

## Discussion and Recommendations

The groundwater monitoring program for the subject facility has been changed from monthly to quarterly, this recommendation was approved by Mr. Scott Seery of the Alameda County Health Department.

A permit for the removal of all four 10,000 gallon underground storage tanks and the installation of four 12,000 gallon 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 developed by K&B Environmental. Part of this proposed work plan will address procedures to extricate layers of contaminated soil from both tank pit areas. The excavation of soil and the extraction of groundwater performed during the tank removal and installation should demonstrate a significant reduction in contamination levels. The future quarterly sampling and analysis of groundwater monitoring wells will indicate the effectiveness of the remediation efforts described in the workplan.

### **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

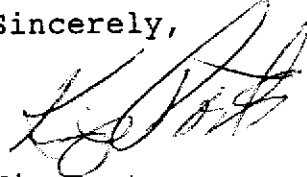
This report was prepared for the use of Xtra Oil Company. The content and conclusions provided by K&B Environmental in this assessment are based on information collected during our investigation, including, visual site inspections; subsurface exploration and laboratory testing of groundwater samples 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.

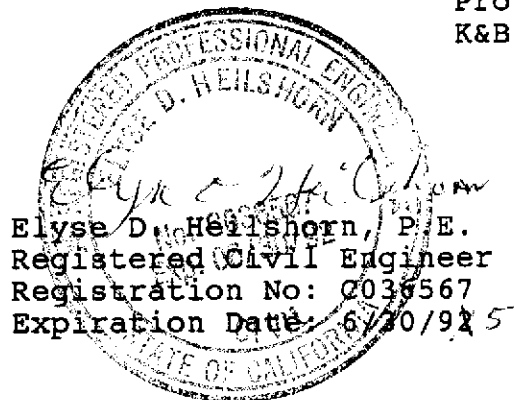
This report has been prepared in according to generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms providing services of similar nature. K&B Environmental is not responsible for the accuracy or completeness of the information provided by 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,



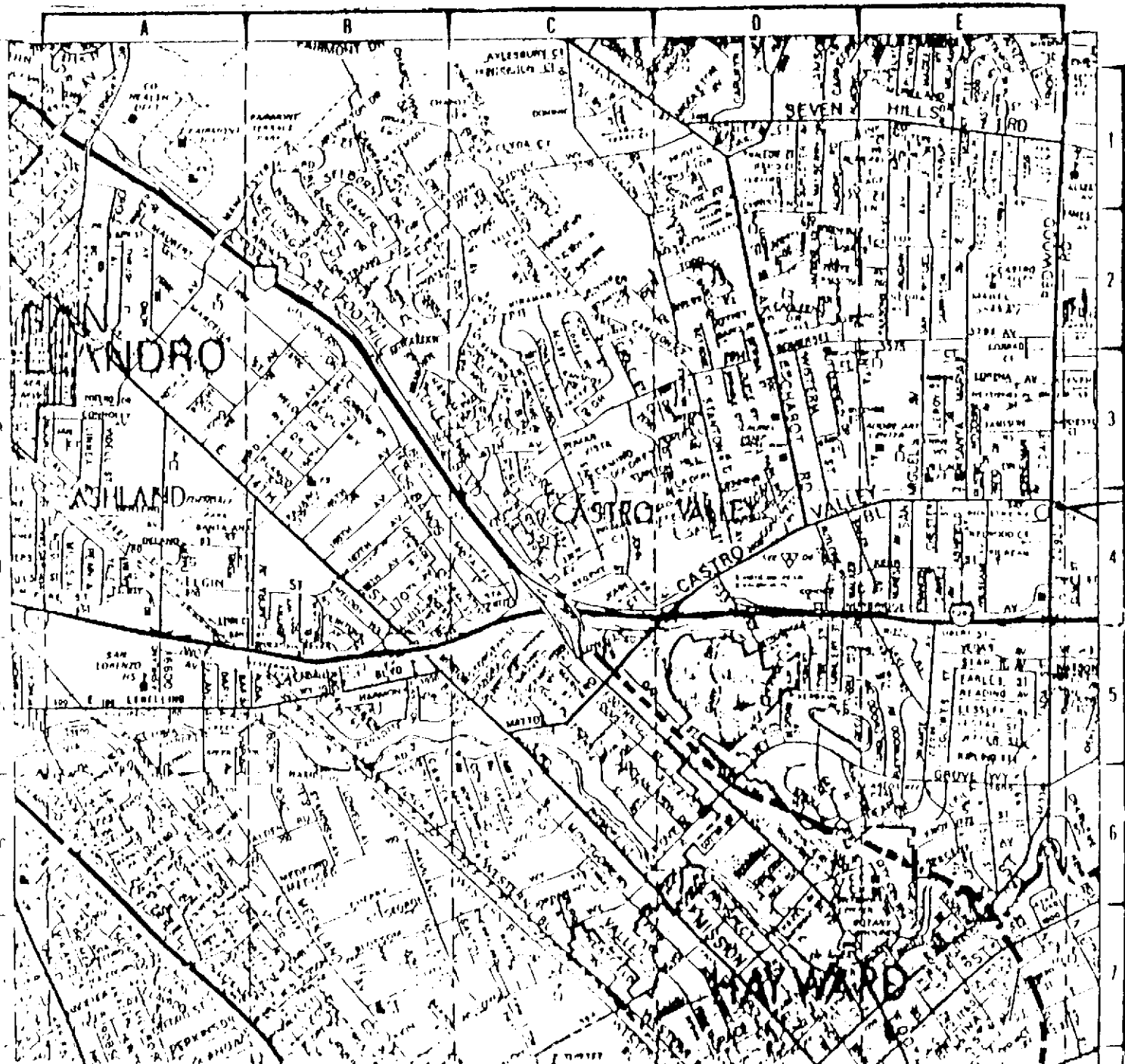
Kip Porter  
Project Manager  
K&B Environmental



**Attachments:**

- Figure 1: Site Location Map
- Figure 2: Site Vicinity Map
- Figure 3: Site Plan
- Figure 4: Site Plan Groundwater Surface Map November.
- Figure 5: Site Plan Groundwater Surface Map December.
- Figure 6: Site Plan Groundwater Surface Map January.
- Table 1: Monitoring Data Summary
- Table 2: Summary of Analytical Results
- Laboratory Analytical Results
- Chain of Custody Documentation
- Groundwater Monitoring Data Sheets



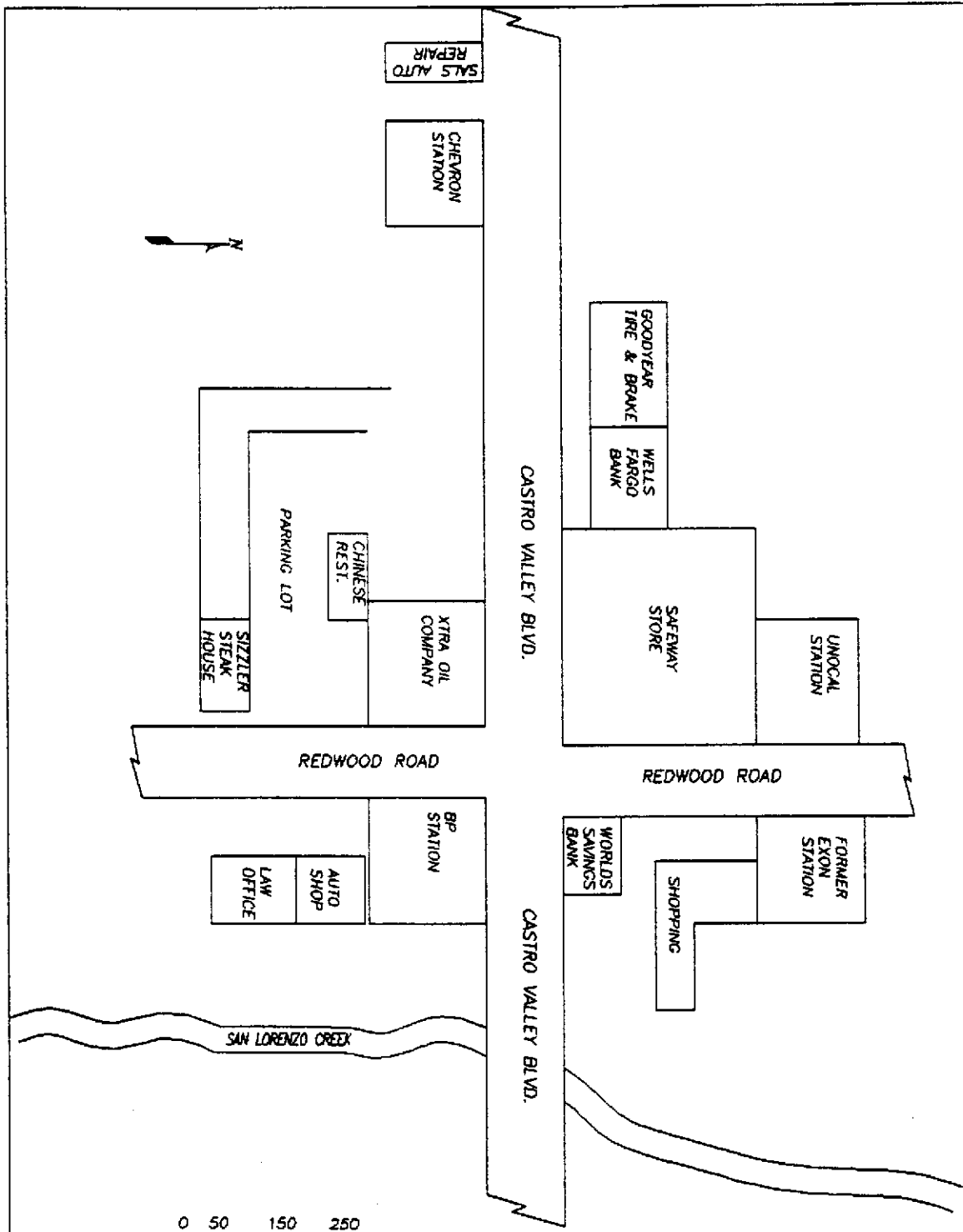


SCALE IN MILES  
 1/4 1/2 3/4

LOCATION OF SITE


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

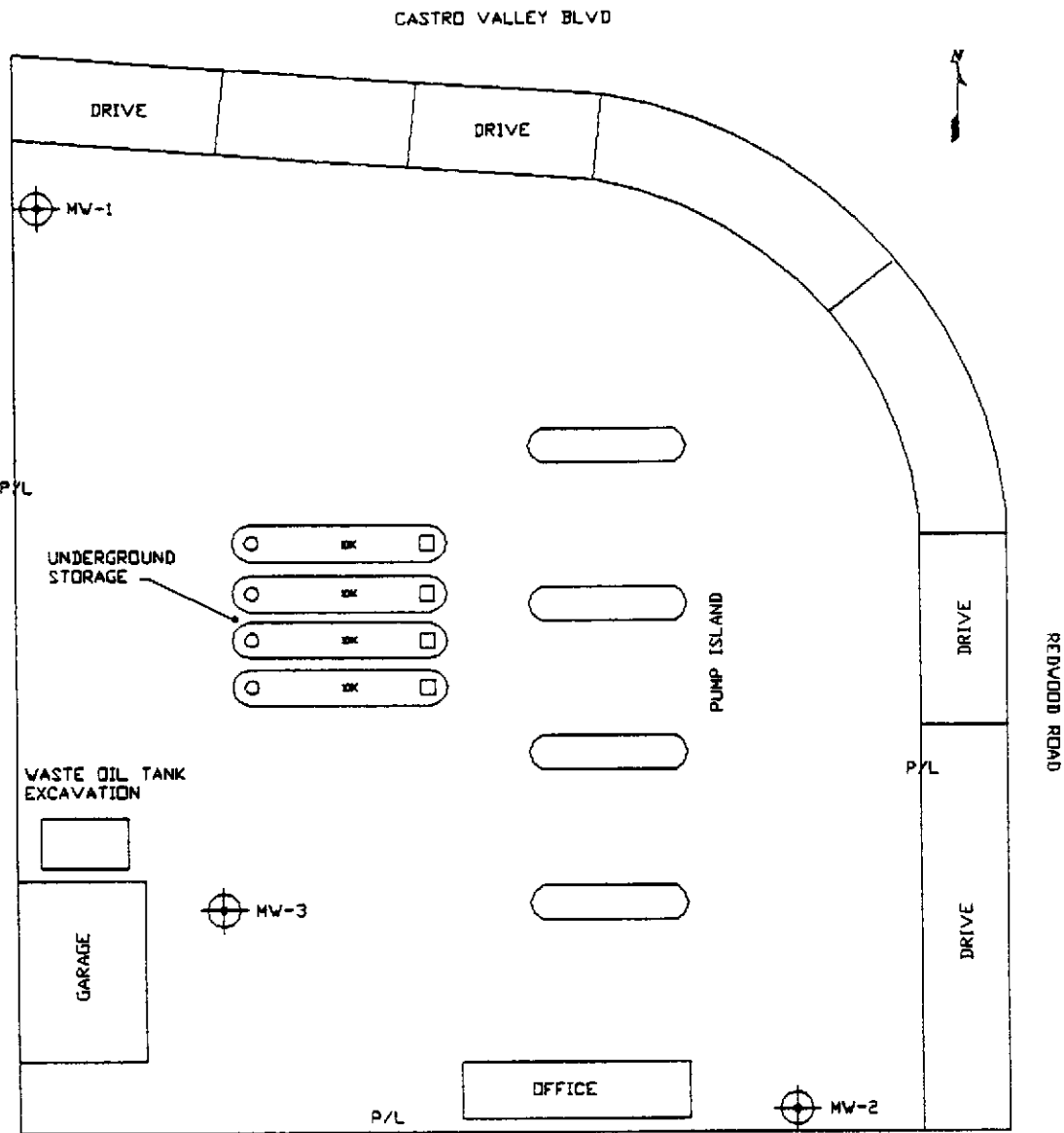
BASE MAP FROM THOMAS B.P.  
 1986 EDITION  
 ALAMEDA COUNTY



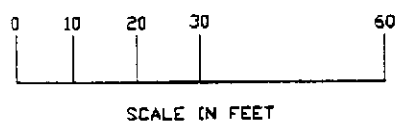
0 50 150 250  
 SCALE: 1" = 250'

SITE VICINITY MAP

PROJECT NO. 035		 <b>K&amp;B</b> ENVIROMENTAL
DRAWN C. CATALANO	DATE 1/15/92	
REV. NO.		XTRA OIL COMPANY 3495 CASTRO VALLEY BLVD. CASTRO VALLEY, CA.

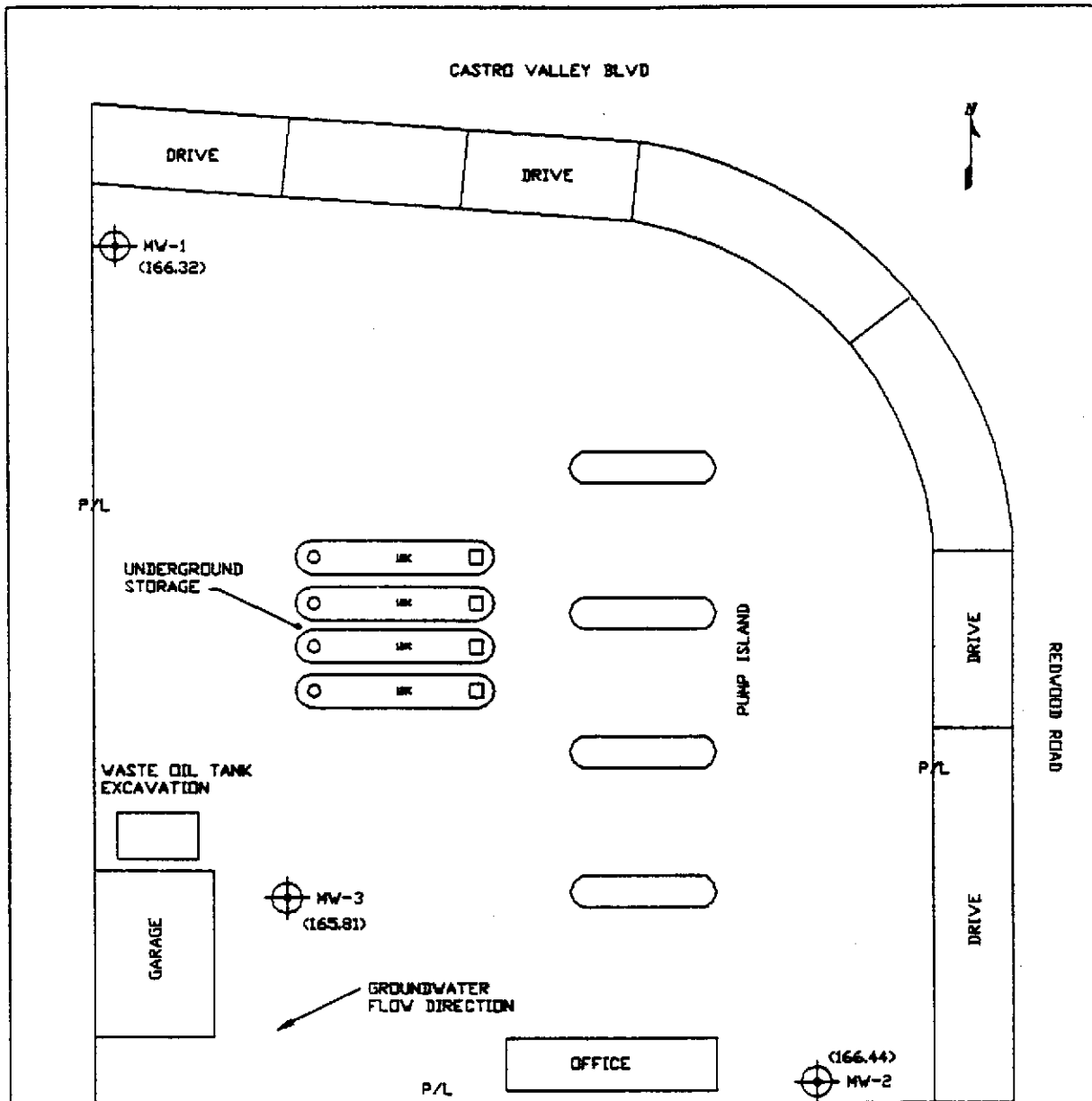


SITE PLAN



- LEGEND:
- MONITORING WELL
  - EXTRACTION WELL
  - P/L PROPERTY LINE

PROJECT NO. 035		<b>K*B ENVIRONMENTAL</b>
DRAWN	DATE	
C.CATALANO 1/24/92		EXTRA OIL COMPANY 3495 CASTRO VALLEY BLVD. CASTRO VALLEY, CA.
REV. NO.		
1		



**FIGURE 4**

GROUNDWATER FLOW DIRECTION  
FOR THE MONTH OF NOVEMBER '91

LEGEND:

MONITORING WELL

EXTRACTION WELL

P/L PROPERTY LINE



SCALE IN FEET

PROJECT NO. 035

**K&B ENVIRONMENTAL**

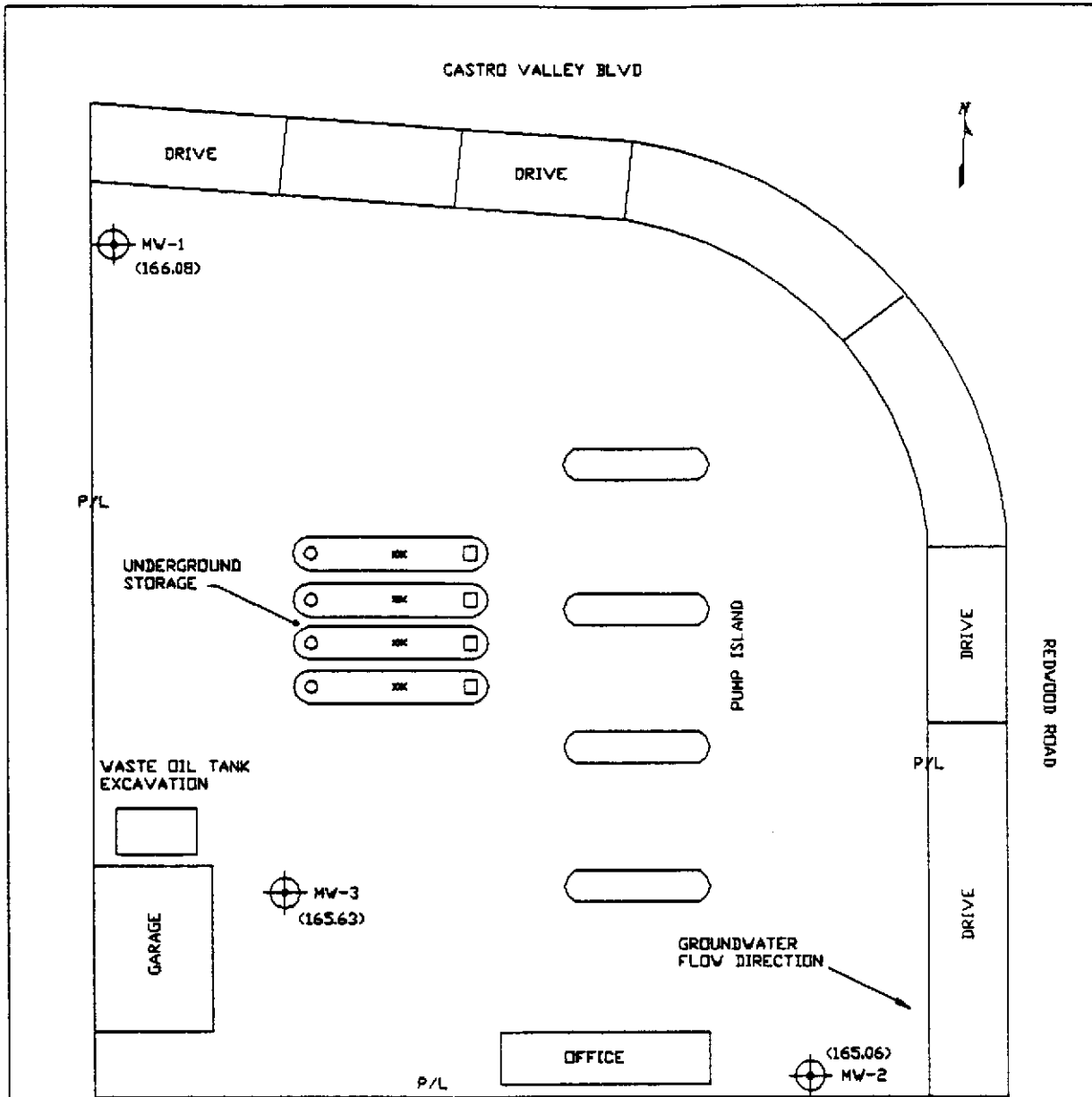
DRAWN DATE

C. CATALANO 3/5/92

REV NO.

1

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



**FIGURE 5**

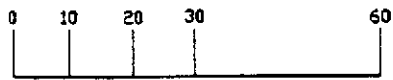
GROUNDWATER FLOW DIRECTION  
FOR THE MONTH OF DECEMBER '91

LEGEND:

 MONITORING WELL

 EXTRACTION WELL

P/L PROPERTY LINE

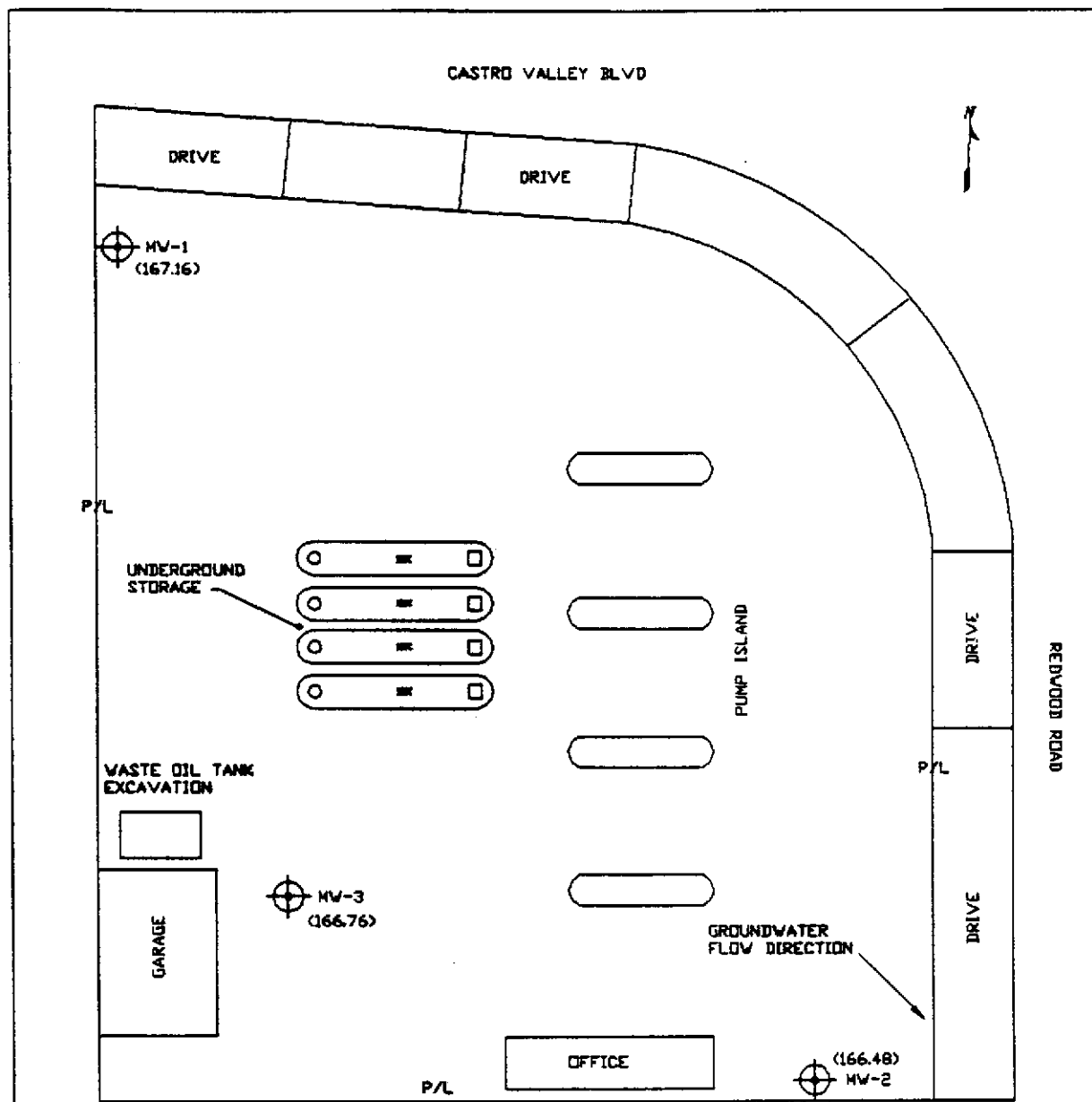


SCALE IN FEET

PROJECT NO. 035	
DRAWN	DATE
C. CATALANO	3/5/92
REV NO.	
1	

 **K\*B ENVIRONMENTAL**

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



**FIGURE 6**

GROUNDWATER FLOW DIRECTION  
FOR THE MONTH OF JANUARY '92



SCALE IN FEET

LEGEND:



MONITORING WELL



EXTRACTION WELL

P/L PROPERTY LINE


PROJECT NO. 035		
DRAWN	DATE	
C.CATALANO	3/5/92	EXTRA OIL COMPANY 3495 CASTRO VALLEY BLVD. CASTRO VALLEY, CA.
REV NO. 1		

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
	11/25/91		9.41	166.32
	12/23/91		9.65	166.08
	1/14/92		8.57	167.16
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
	11/25/91		9.81	165.64
	12/23/91		10.39	165.06
	1/14/92		8.97	166.48
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
	11/25/91		9.19	165.81
	12/23/91		9.37	165.63
	1/14/92		8.24	166.76

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 January 14, 1992						
Well	TPH Diesel	TPH Gas	Benzene	Toluene	Ethyl Benzene	Xylenes
MW-1	19.00	39.00	7.30 <i>7300 ppb</i>	8.70	1.30	8.90
MW-2	1600.00	59.00	17.00	14.00	1.80	15.00
MW-3	270.00	130.00	76.00 <i>76000 ppb</i>	30.00	3.40	21.00
Collected on December 23, 1991						
Well	TPH Diesel	TPH Gas	Benzene	Toluene	Ethyl Benzene	Xylenes
MW-1	34.00	78.00	9.30	7.30	0.54	13.00
MW-2	700.00	2100.00	36.00	130.00	79.00	560.00
MW-3	540.00	740.00	30.00	61.00	31.00	180.00
Collected on November 25, 1991						
Well	TPH Diesel	TPH Gas	Benzene	Toluene	Ethyl Benzene	Xylenes
MW-1	36.00	170.00	5.50	5.60	1.60	8.40
MW-2	130.00	230.00	11.00	9.70	1.40	9.70
MW-3	74.00	150.00	65.00	31.00	3.40	18.00

*data in parts per million (ppm)*



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

Results in Parts Per Million (PPM)

APPENDIX A  
FIELD PARAMETER DATA FORMS

**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By K. R. K Sample Number CAO MW-3  
 Date Collected 1/14/92 Sample Container 20 ML VOA 1-L Ba Bottle  
 Time Collected 16:50 Analysis Required Gas Pencil BTEX  
 Date Shipped 1/14/92 Sample Preservation None  
 Observations Free floating product, as seen,  
definite gasoline odor.

**Field Parameters**

Well Number MW-3 Purge Method Ration Pump  
 Collection Method Bailer Well Diameter 4" IN.  
 Well Depth 18' FT. Depth To Water 8.2' FT.  
 Well Purge Volume 5.8 Gal. Total Volume Purged 30 gal

	Volume Purged	Temp. (°C)	PH	Conductivity
1		16°	5.8	~ 500 µS
2		15°	5.8	NH
3		15°	5.8	NH
4		15°	5.8	NH

**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By L. Pate Sample Number 20 MW 2  
 Date Collected 1/14/92 Sample Container 40 ML VOA-Filter  
 Time Collected 17:20 Analysis Required Geo/Diss/ISTEX  
 Date Shipped 1/14/92 Sample Preservation None  
 Observations Twisting, slight odor.

**Field Parameters**

Well Number MW-2 Purge Method Rotary Pump  
 Collection Method Batch Well Diameter 4" IN.  
 Well Depth 15' FT. Depth To Water 8.97 FT.  
 Well Purge Volume 6.0 Gal. Total Volume Purged 25 gal

Volume Purged	Temp. (°C)	PH	Conductivity
1	17°	5.8	.31 mS
2	17°	5.8	.31 mS
3	16°	5.9	.31 mS
4	16°	5.9	.31 mS

**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By K. Porter Sample Number Con MW-1  
 Date Collected 1/14/92 Sample Container 30ML / 200ml 1-Liter Amber  
 Time Collected 15:30 Analysis Required Co/Cd/As/3E2  
 Date Shipped 1/14/92 Sample Preservation None  
 Observations Tracer - light color

**Field Parameters**

Well Number MW-1 Purge Method 20' Pump  
 Collection Method Bailer Well Diameter 4" IN.  
 Well Depth 20' FT. Depth To Water 8.57 FT.  
 Well Purge Volume 27 Gal. Total Volume Purged 28 gal

Volume Purged	Temp. (°C)	PH	Conductivity
1	17	5.8	430 $\mu$ S
2	17	5.8	
3	17	5.8	
4	17	5.8	420 $\mu$ S

**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By K. Porto Sample Number 4946  
 Date Collected 12/23/91 Sample Container 40 ML VOA/1-Ltr  
 Time Collected 14:07 Analysis Required Gospinel BTE 11  
 Date Shipped 12/23/91 Sample Preservation none  
 Observations odor, definite smell of diesel

**Field Parameters**

Well Number MW-3 Purge Method Rotary Pump  
 Collection Method Bailer Well Diameter 4" IN.  
 Well Depth 14' FT. Depth To Water 9.57 FT.  
 Well Purge Volume 58 Gal. Total Volume Purged 30 gal

	Volume Purged	Temp. (°C)	PH	Conductivity
1		14	6.0	NA
2		14	5.9	NA
3		14	5.9	NA
4		14	5.9	NA

**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By B. Porter Sample Number 432  
 Date Collected 12/23/91 Sample Container 40 ml plastic  
 Time Collected 11:23 Analysis Required see label (TCE)  
 Date Shipped 12/24/91 Sample Preservation ref.  
 Observations Free floating particles / silt, definite color

**Field Parameters**

Well Number MW-2 Purge Method Rotary Pump  
 Collection Method Bailer Well Diameter 4" IN.  
 Well Depth 18' FT. Depth To Water 10.39 FT.  
 Well Purge Volume 6.0 Gal. Total Volume Purged 30 gal

Volume Purged	Temp. (°C)	PH	Conductivity
1	14°	6.0	.30 MS
2	14°	6.1	.36 MS
3	14°	5.8	.30 MS
4	14°	5.8	.30 MS

**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By Porter Sample Number 4945  
 Date Collected 12-23-91 Sample Container 40ml vial 1-1/4 liter  
 Time Collected 11:59 Analysis Required Gas/Diss  
BTEX  
 Date Shipped 12/23/91 Sample Preservation None  
 Observations Slightly turbid a bit odor

**Field Parameters**

Well Number M-1-1 Purge Method Rotary pump  
 Collection Method Bailer Well Diameter 4" IN.  
 Well Depth 30 FT. Depth To Water 9.65 FT.  
 Well Purge Volume 7 Gal. Total Volume Purged 28 gal

Volume Purged	Temp. (°C)	PH	Conductivity
1	17°	5.8	.37 mS
2	17°	5.7	.30 mS
3	17°	5.7	.32 mS
4	17	5.7	.35 mS



**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By K. Fort Sample Number 9942  
 Date Collected 11/23/91 Sample Container 40ML VOA Vial  
 Time Collected 14:00 Analysis Required Fast/Presel 5150  
 Date Shipped 11/25/91 Sample Preservation \_\_\_\_\_  
 Observations Color when present

**Field Parameters**

Well Number MW-3 Purge Method Rotary Pump  
 Collection Method Bottle Well Diameter 4" IN.  
 Well Depth 19' FT. Depth To Water 7.19 FT.  
 Well Purge Volume 5.3 Gal. Total Volume Purged 3.3 gal

Volume Purged	Temp. (°C)	PH	Conductivity
1	14.0	6.1	120
2	14.0	6.1	120
3	14.0	6.1	120
4	14.0	6.1	120

**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By R. P. [unclear] Sample Number 4943  
 Date Collected 11/23/91 Sample Container 40ML VOA Vial  
 Time Collected 15:30 Analysis Required Gas Panel BTEX  
 Date Shipped 11/23/91 Sample Preservation None  
 Observations Color definite yellow

**Field Parameters**

Well Number M10-2 Purge Method Rotary Pump  
 Collection Method Bailer Well Diameter 4" IN.  
 Well Depth 18 FT. Depth To Water 9.81 FT.  
 Well Purge Volume 6.2 Gal. Total Volume Purged 5.2

Volume Purged	Temp. (°C)	PH	Conductivity
	14°	6.0	NA
2	14°	6.0	NA
3	14°	6.1	NA
4	14°	6.0	NA

**K&B Environmental  
Groundwater Sample Collection  
Data Sheet**

Collected By K. B. E. Sample Number 4725  
 Date Collected 11-25-91 Sample Container 2-ML metal can  
 Time Collected 12:21 Analysis Required see Diesel Spill  
 Date Shipped 11/25/91 Sample Preservation none  
 Observations 5 min tested, about 10% of gasoline.

**Field Parameters**

Well Number MW-1 Purge Method Flowing  
 Collection Method Flowing Well Diameter 4 IN.  
 Well Depth 20 FT. Depth To Water 4.41 FT.  
 Well Purge Volume 5 Gal. Total Volume Purged 20 Gal.

Volume Purged	Temp. (°C)	PH	Conductivity
1	15	5.9	NA
2	15	5.9	NA
3	15	5.9	NA
4	15	5.9	NA

APPENDIX B

CHAIN OF CUSTODY FORMS AND  
LABORATORY DATA REPORTS

**CHAIN OF CUSTODY**

project # <b>035</b>	project name <b>XTRA OIL</b>	project site address <b>3495 Castro Valley Blvd. Castro Valley, Ca</b>	sample type gas bag - A water - W soil - S	analysis
sampler <b>K. Forte</b>			<b>GCs BTEX</b> <b>Dred</b>	<b>1673</b>

date	time	grab	comp	sample ID number	W	X		remarks
1/14/92	15:30	X		CAS-MW-1	W	X	X	2-40ml VOA 1-liter bottle, odor present, slightly cloudy
1/14/92	16:50	X		CAS-MW-3	W	X	X	2-40ml VOA 1-liter bottle, odor, present slightly cloudy
1/14/92	17:20	X		CAS-MW-2	W	X	X	2-40ml VOA 1-liter bottle, free floating product - high odor

bill to Extra

relinquished by: 1/14/92 <b>K. Forte</b>	received by:	relinquished by:	received by: For TAL: <b>Louis Dupuis</b>	1/14/92 5:55PM page	1-liter, 2-40ml VOA ice pack - included in box on 1/14/92
------------------------------------------------	--------------	------------------	-------------------------------------------------	---------------------------	-----------------------------------------------------------



LOG NUMBER: 1673  
DATE SAMPLED: 01/14/92  
DATE RECEIVED: 01/14/92  
DATE ANALYZED: 01/23/92  
DATE REPORTED: 02/06/92  
PAGE: Three

Sample Type: Water


Method and Constituent:	Units	Method Blank	
		Concen- tration	Reporting Limit
DHS Method:			
Total Petroleum Hydro- carbons 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

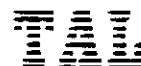
QC Summary:

% Recovery: 86\*  
% RPD: 1.8

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

\* The Recovery is for the Laboratory Control Sample, due to the high concentration in the spiked sample.

  
\_\_\_\_\_  
Louis W. DuPuis  
Quality Assurance/Quality Control Manager

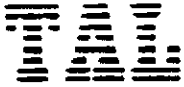


LOG NUMBER: 1673  
DATE SAMPLED: 01/14/92  
DATE RECEIVED: 01/14/92  
DATE ANALYZED: 01/23/92  
DATE REPORTED: 02/06/92  
PAGE: Two

Sample Type: Water

<u>Method and Constituent:</u>	<u>Units</u>	<u>CAS-MW-1</u>		<u>CAS-MW-2</u>		<u>CAS-MW-3</u>	
		<u>Concen- tration</u>	<u>Reporting Limit</u>	<u>Concen- tration</u>	<u>Reporting Limit</u>	<u>Concen- tration</u>	<u>Reporting Limit</u>
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	39,000	1,400	59,000	2,700	130,000	2,700
EPA Method 8020 for:							
Benzene	ug/l	7,300	120	17,000	240	76,000	240
Toluene	ug/l	8,700	80	14,000	160	30,000	160
Ethylbenzene	ug/l	1,300	140	1,800	280	3,400	280
Xylenes	ug/l	8,900	370	15,000	740	21,000	740

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



LOG NUMBER: 1673  
 DATE SAMPLED: 01/14/92  
 DATE RECEIVED: 01/14/92  
 DATE EXTRACTED: 01/17/92  
 DATE ANALYZED: 01/28/92  
 DATE REPORTED: 02/06/92

CUSTOMER: Xtra Oil Company

REQUESTER: Keith Simas

PROJECT: No. 035, Xtra Oil, 3495 Castro Valley Boulevard, Castro Valley

Sample Type: Water

Method and Constituent:	Units	CAS-MW-1		CAS-MW-2		CAS-MW-3	
		Concen- tration	Reporting Limit	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit
DHS Method:							
Total Petroleum Hydro- carbons as Diesel	ug/l	19,000	50	1,600,00	530	270,000	530

Method and Constituent:	Units	Method Blank	
		Concen- tration	Reporting Limit
DHS Method:			
Total Petroleum Hydro- carbons as Diesel	ug/l	ND	50

QC Summary:

% Recovery: 159  
 % RPD: 6.9

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

These samples contain compounds eluting earlier than the diesel standard.





LOG NUMBER: 1616  
 DATE SAMPLED: 12/23/91  
 DATE RECEIVED: 12/23/91  
 DATE ANALYZED: 01/06/92 and 01/08/92  
 DATE REPORTED: 01/10/92  
 PAGE: Two

Sample Type: Water

Method and Constituent:	Units	MW-1, 4945		MW-2, 4947		MW-3, 4946	
		Concen- tration	Reporting Limit	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	78,000	160	2,100,000	7,900	740,000	35,000
EPA Method 8020 for:							
Benzene	ug/l	9,300	33	36,000	3,700	30,000	7,300
Toluene	ug/l	7,300	28	130,000	3,500	61,000	6,200
Ethylbenzene	ug/l	540	35	79,000	4,400	31,000	7,700
Xylenes	ug/l	13,000	88	560,000	13,000	180,000	19,000


Method and Constituent:	Units	Method Blank	
		Concen- tration	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: 102\* and 76  
 % RPD: 6.1 and 1.3

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

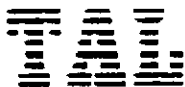
\* The Recovery is for the Laboratory Control Sample, due to interference in the spiked sample. Sample MW2 was analyzed 2 days beyond the 14-day holding time for this analysis.

  
 Louis W. DuPuis  
 Quality Assurance/Quality Control Manager

**Trace Analysis Laboratory, Inc.**

3423 Investment Boulevard, #8 • Hayward, California 94545

Telephone (510) 783-6960  
Facsimile (510) 783-1512



LOG NUMBER: 1616  
DATE SAMPLED: 12/23/91  
DATE RECEIVED: 12/23/91  
DATE EXTRACTED: 12/30/91  
DATE ANALYZED: 01/01/92 and 01/02/92  
DATE REPORTED: 01/10/92

CUSTOMER: Extra Oil Company  
REQUESTER: Kip Porter  
PROJECT: No. 035, Xtra Oil, 3495 Castro Valley Boulevard, Castro Valley

Sample Type: Water

Method and Constituent:	Units	MW-1, 4945		MW-2, 4947		MW-3, 4946	
		Concentration	Reporting Limit	Concentration	Reporting Limit	Concentration	Reporting Limit
DHS Method: Total Petroleum Hydrocarbons as Diesel	ug/l	34,000	50	700,000	780	540,000	780

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

QC Summary:

% Recovery: 94 and 98  
% RPD: 0.0 and 9.1

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

Samples MW1, MW2 and MW3 contain compounds eluting earlier than the diesel standard.

Dill to Xtra Oil

718 E. Evelyn Ave.  
Sunnyvale, CA 94086  
(408)736-1380



### CHAIN OF CUSTODY

project# 035	project name Xtra Oil	project site address 3495 Castro Valley Blvd. Castro Valley, Ca.	sample type gas bag - A water - W soil - S	analysis
sampler K. Porth			Gas BTEX Leak	N.T.

date	time	grab	comp	sample ID number				remarks
11/25/91	12:21	X		MW-4 4951	W	X	X	MW-1 slightly turbid, slight odor
11/25/91	14:00	X		MW-3 4942	W	X	X	MW-3 odor of gasoline clear, slight shimmer of paint
11/25/91	15:30	X		MW-2 4943	W	X	X	MW-2 odor of shimmer sample clear
								Reg-TAT

relinquished by: K. Porth 11/25/91 16:30	received by:	relinquished by:	received by: John Kong 11/25/91 16:30	page —
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LOG NUMBER: 1557  
 DATE SAMPLED: 11/25/91  
 DATE RECEIVED: 11/25/91  
 DATE ANALYZED: 11/30/91 and 12/03/91  
 DATE REPORTED: 12/12/91  
 PAGE: Two

Sample Type: Water

Method and Constituent:	Units	MW-1		MW-2		MW-3	
		Concen- tration	Reporting Limit	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit
DHS Method:							
Total Petroleum Hydro- carbons as Gasoline	ug/l	170,000	550	230,000	1,100	150,000	1,500
EPA Method 8020 for:							
Benzene	ug/l	5,500	140	11,000	270	65,000	270
Toluene	ug/l	5,600	120	9,700	230	31,000	230
Ethylbenzene	ug/l	1,600	160	1,400	320	3,400	320
Xylenes	ug/l	8,400	420	9,700	830	18,000	830

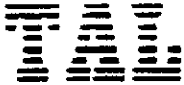
Concentrations reported as ND were not detected at or above the reporting limit.

**Trace Analysis Laboratory, Inc.**

3423 Investment Boulevard, #8 • Hayward, California 94545

Telephone (510) 783-6960

Facsimile (510) 783-1512



LOG NUMBER: 1557  
 DATE SAMPLED: 11/25/91  
 DATE RECEIVED: 11/25/91  
 DATE EXTRACTED: 11/26/91  
 DATE ANALYZED: 12/04/91  
 DATE REPORTED: 12/12/91

CUSTOMER: Extra Oil Company

REQUESTER: Kip Porter

PROJECT: No. 035, Xtra Oil, 3495 Castro Valley Boulevard, Castro Valley, CA

Sample Type: Water

Method and Constituent:	Units	MW-1		MW-2		MW-3	
		Concentration	Reporting Limit	Concentration	Reporting Limit	Concentration	Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Diesel	ug/l	36,000	50	130,000	570	74,000	430

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

QC Summary:

% Recovery: 89  
 % RPD: 4.4

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

Sample MW-1 contains compounds eluting earlier than the diesel standard.  
 Samples MW-2 and MW-3 contain compounds eluting later than the diesel standard.



Bill to: 7 3 Oil

718 E. Evelyn e.  
Sunnyvale, CA 94086  
(408) 736-1380

**CHAIN OF CUSTODY**

project #		project name		project site address		sample type		analysis	
035		Kraut		3495 Castro Valley Blvd. Castro Valley, CA		gas bag - A water - W soil - S		1557	
sampler		K. Potts				Gas BTLE Drum			
date	time	grab	comp	sample ID number					remarks
11/25/91	12:00	X		MW-4 4951		W	X	X	MW-4 slightly turbid, slight odor.
11/25/91	14:00	X		MW-3 4942		W	X	X	MW-3 over of gasoline clean, slight odor of fuel.
11/25/91	15:30	X		MW-2 4943		W	X	X	MW-2 over of gasoline sample ok.
									Reg-TAT wak-in water on ice 3-va & 1-liter white g?

relinquished by:  11/25/91 16:30	received by:	relinquished by:	received by:  John Kong 11/25/91 16:30	page ____
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LOG NUMBER: 1557  
DATE SAMPLED: 11/25/91  
DATE RECEIVED: 11/25/91  
DATE ANALYZED: 11/30/91 and 12/03/91  
DATE REPORTED: 12/12/91  
PAGE: Three


Sample Type: Water

Method and Constituent:	Units	Method Blank	
		Concen- tration	Reporting Limit
DHS Method:			
Total Petroleum Hydro- carbons 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: 98 and 95  
% RPD: 8.2 and 4.2

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

  
\_\_\_\_\_  
Louis W. DuPuis  
Quality Assurance/Quality Control Manager