Tetra Tech EM Inc.

135 Main Street, Suite 1800 • San Francisco, CA 94105 • (415) 543-4880 • FAX (415) 543-5480

November 7, 2000

2957

J. W. Silveira Company
499 Embarcadero
Oakland, California 94606

Subject: May 2000, Second Quarterly Monitoring Report for the Site Located at 744 E 12th Street, Oakland

INTRODUCTION

The purpose of this report is to provide the results of the quarterly groundwater monitoring conducted in the second quarter of 2000 at 744 East 12th Street. Groundwater samples were collected from the 3 monitoring wells on May 23, 2000. The site is located at the northeast corner of the intersection of East 12th Street and 8th Avenue in Oakland, California (Figure 1).

SITE BACKGROUND

One 500-gallon underground storage tank (UST) was previously located at the site. The UST reportedly contained gasoline and was removed in April 1996. Based on drawings provided in the Tank Closure Report, the approximate size of the former tank was 5 feet long by 4 feet in diameter. The UST had not been in use for 10 years prior to being removed and was reportedly empty at the time of the removal. During removal of the UST, it was noted that the single-walled steel tank had rusted through and had leaked. The approximate surface area of the removal excavation was 11 feet by 6 feet and the UST was located in the southwestern portion of the excavation. Approximately 20 cubic yards of soil was over-excavated and transported off site for disposal. The bottom of the excavation was approximately 8 to 12 feet below the ground surface (bgs). The exact depth to the bottom of the UST was not recorded during the removal activities; the estimated depth to the bottom of the former UST is 6 feet bgs.

During the UST removal activities, five soil samples were collected from the sidewalls and bottom of the removal excavation. The soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH) as gasoline (TPH-g), and total lead. The highest concentrations of BTEX and TPH-g were detected in the southwestern end of the excavation. Lead concentrations in soil samples from the removal excavation were not elevated. Groundwater was not encountered during removal of the UST.

Three monitoring wells, identified on Figure 2 as MW-1, MW-2, and MW-3, were installed at the site during the 1999 additional site characterization. Also 2 soil borings with grab groundwater samples were also completed to help characterize the site. TPH-g and BTEX chemical compounds were not detected in the soil samples. MTBE is the only chemical compound that was detected in soil samples at the site. The highest concentration of MTBE in soil was detected in Monitoring well MW-3 at 10.5-11.0 feet bgs. Soil samples from MW-1, MW-2, and SB-1 had non-detects for MTBE. TPH-g was not detected in groundwater samples from the site. Benzene was only detected from monitoring well MW-3 and the highest concentration of MTBE was also detected in MW-3.

The conclusions and recommendations of the site characterization report recommended that 4 quarters of groundwater sampling be conducted. Results from both analytical sampling and visual observation of the drilling activities show that some contamination is present at the site. Most of the contamination in the soil and groundwater is concentrated around MW-3. No mobile or potentially mobile free product appears to be present at the site.

GROUNDWATER SAMPLING ACTIVITIES

For the second quarterly sampling event in the year 2000, the three monitoring wells at the site were sampled on May 23, 2000. The depth of groundwater was measured at each well with an electronic depth probe. The depth to the monitoring well caps were removed from the tops of the well and the groundwater was allowed to equilibrate before the depth to groundwater was measured. Each well was purged and sampled with a dedicated disposable bailer. During the purging of the monitoring well a Horiba U10 water quality checker was used to measure the following physical parameters of the groundwater: pH, temperature, electrical conductivity, dissolved oxygen, and turbidity. Copies of the groundwater field sampling sheets are provided in Appendix A. These physical parameters

were monitored to determine when the groundwater in the well casing was representative of the groundwater outside of the monitoring well. After the physical parameters of the groundwater had stabilized groundwater samples were collected from the well. The samples were placed in the appropriate sample containers provided by the laboratory. After each sample was labeled the sample was stored in a cooler of ice under a chain-of-custody control. The groundwater samples were sent to Curtis & Tompkins Analytical Laboratories (C&T), in Berkeley, California. C&T is a California state-certified laboratory. The groundwater samples were analyzed for BTEX, methyl tertiary-butyl ether (MTBE), and TPH-g.

GROUNDWATER GRADIENT

The groundwater elevations were calculated for each of the monitoring wells from the measured depth to groundwater at the site. The depth to groundwater is measured from the top of casing at each well, and the groundwater elevations measured at the site are presented in Table 1. The groundwater flow direction and gradient at the site were calculated using these data. The groundwater flow direction is south 61 degrees west (S61W), as shown on Figure 3. MW-3 is downgradient from the location of the former UST, and MW-1 and MW-2 are slightly upgradient to the north and southeast, respectively, of the former UST location. The groundwater gradient was calculated to be 0.0067 feet/foot (ft/ft).

GROUNDWATER ANALYTICAL RESULTS

Benzene and MTBE were the only two compounds detected in groundwater during this round of quarterly sampling. Ethylbenzene, toluene, total xylenes, and TPH-g were not detected in any of the groundwater samples collected from the site. Table 2 presents the analytical results for the May 2000 quarterly sampling event at the site. Benzene and MTBE were only detected in the groundwater sample collected from MW-3 (sample number JW3-16); the detected concentrations of these compounds were 0.59 micrograms per liter (ug/L) and 4.7 ug/L, respectively. The complete laboratory data package and chain-of-custody is attached as Appendix B at the end of this report.

CONCLUSIONS AND RECOMMENDATIONS

This report presents the analytical results of the May 2000 quarterly groundwater monitoring event for the three wells located at the site. The contaminant concentrations in the groundwater at the site continue to range from not detectable to relatively low levels for benzene and MTBE.

TtEMI conducted the first quarterly sampling at the site in February 2000. The fourth quarter of groundwater sampling is scheduled to be completed by the end of this year. Conclusions and recommendations will be made after the last quarter of groundwater sampling data is analyzed. Based on the past analytical sampling data and discussions with the Alameda County Health Care Services Agency, recommendations as to the deposition of the site will be made at that time.

Should you have any questions, please feel free to contact the undersigned project manager, Hal Dawson, at (415) 222-8316.

Sincerely,

Hal Dawson
TtEMI Project Manager

Jerry Wickham
Registered Geologist #3766

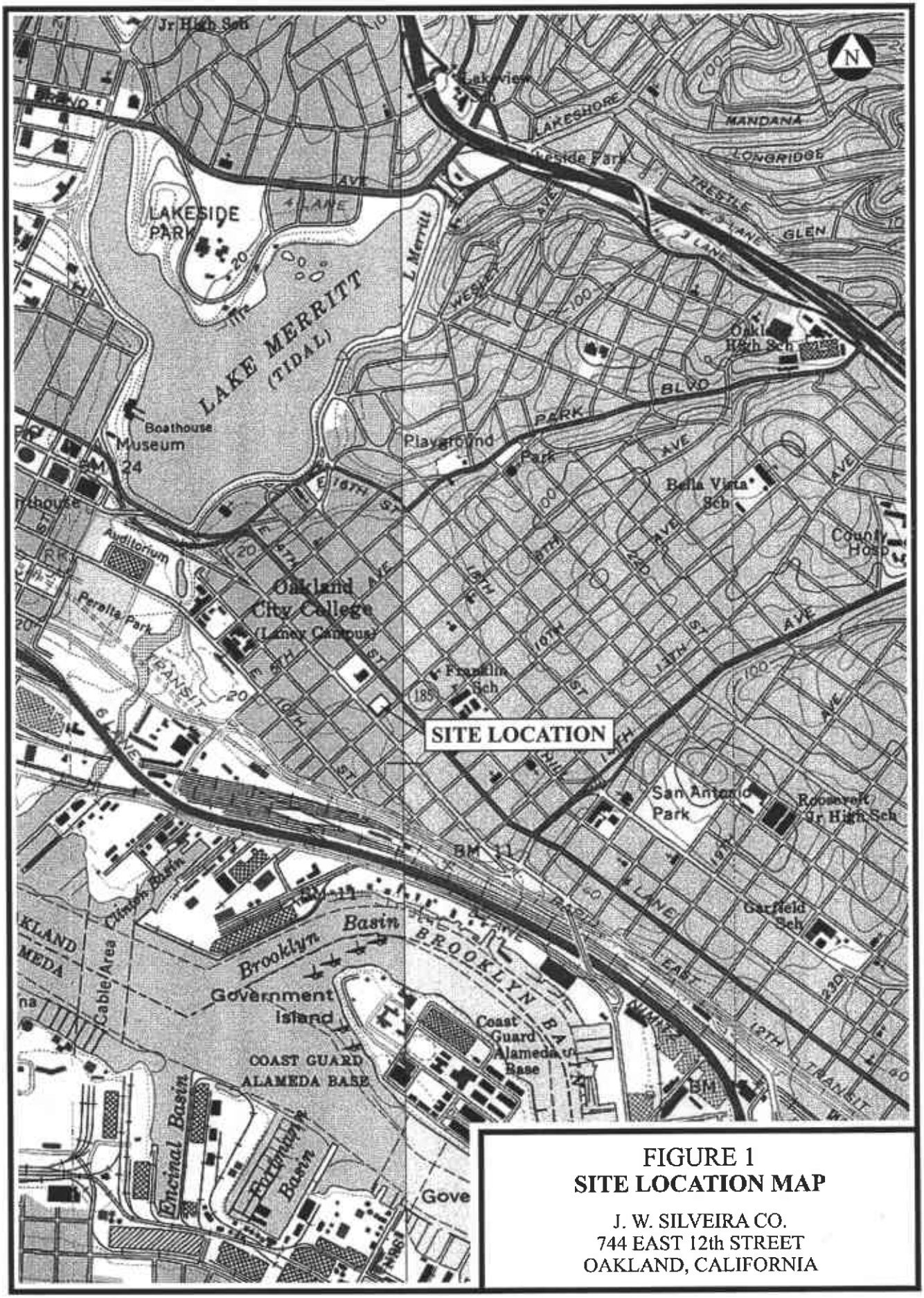
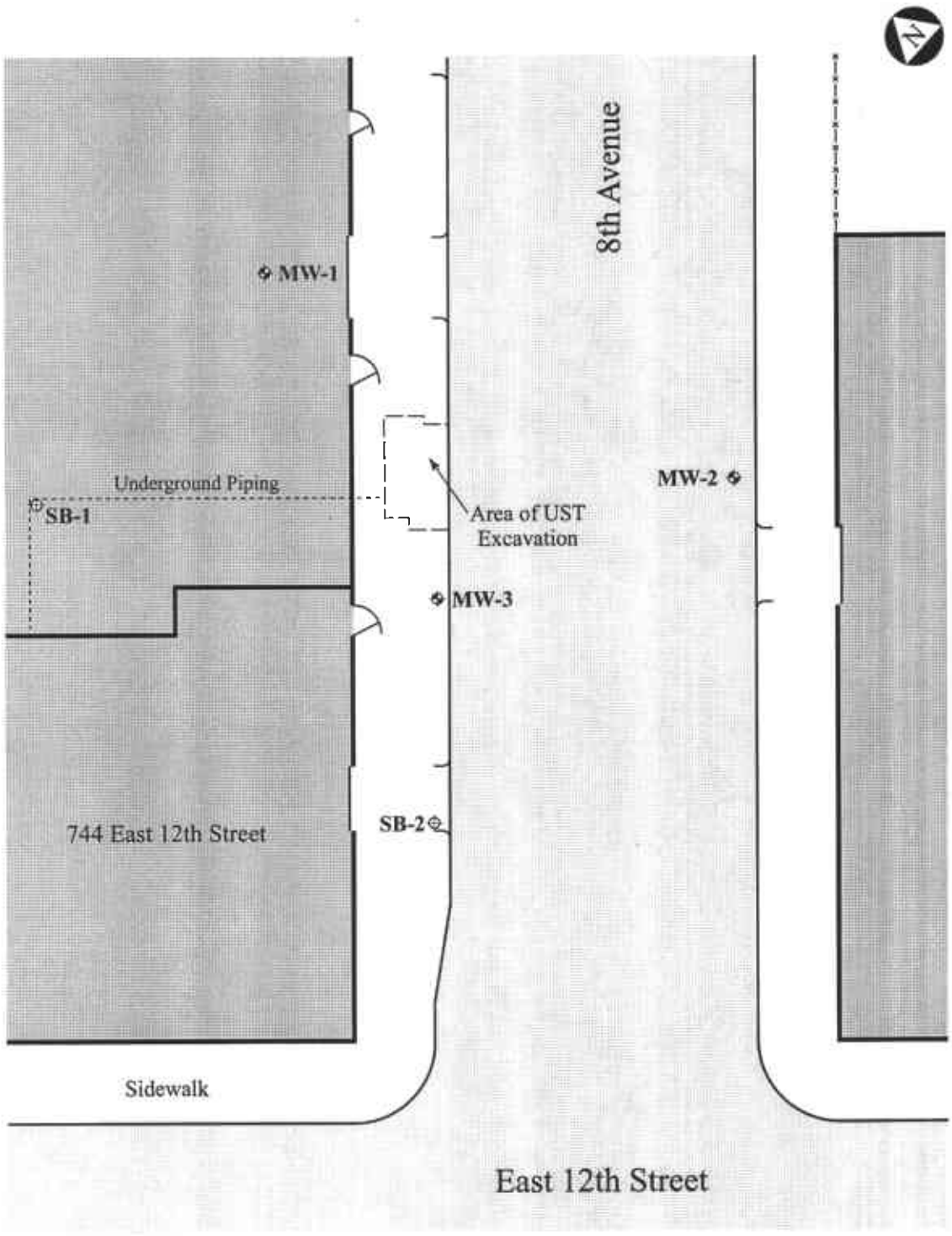


FIGURE 1
SITE LOCATION MAP

J. W. SILVEIRA CO.
744 EAST 12th STREET
OAKLAND, CALIFORNIA



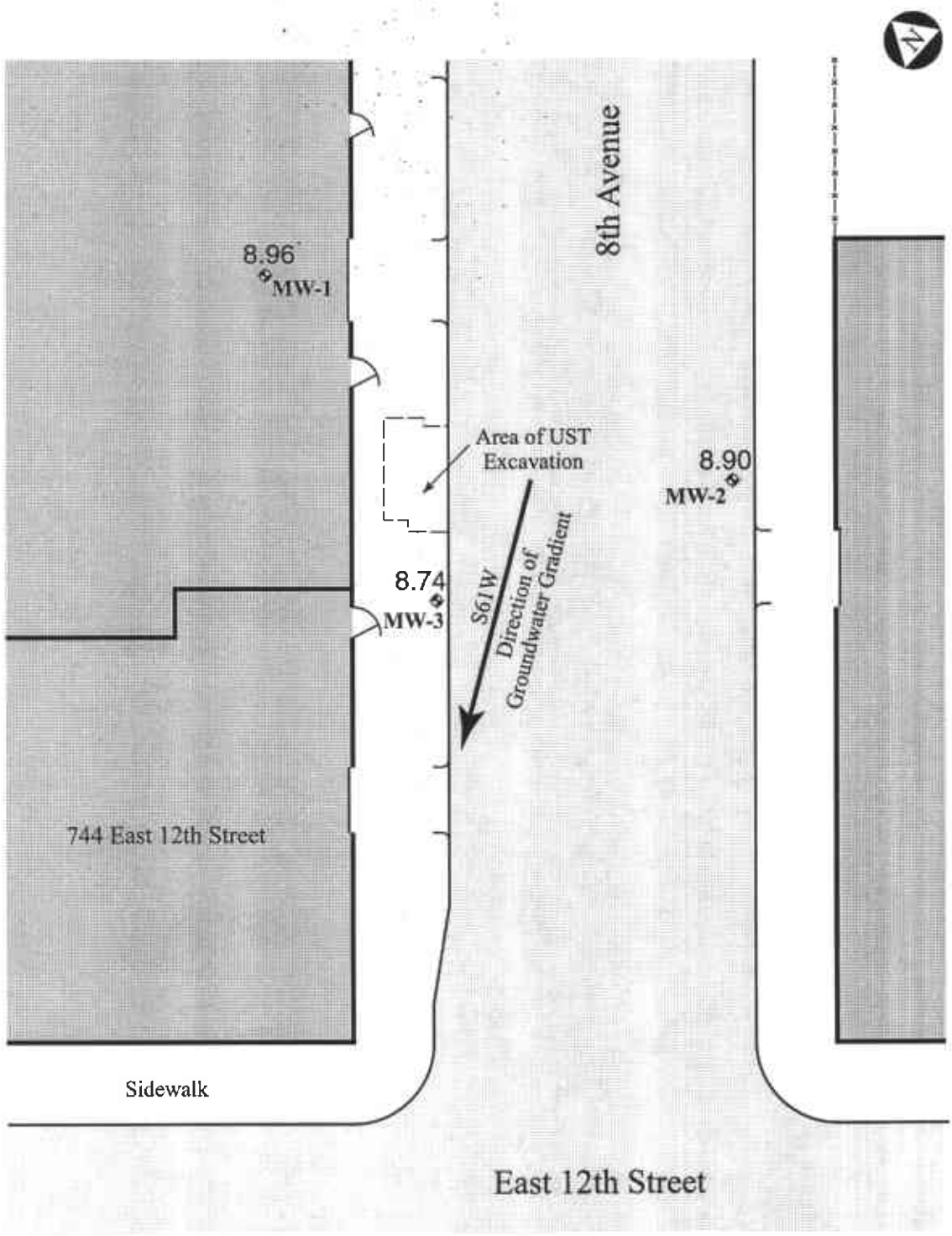
Notes:

- Monitoring Well (MW)
- Soil Boring (SB)

Scale: 1 inch = 20 feet

0 10 20 30 40

FIGURE 2
MONITORING WELL AND SOIL BORING LOCATIONS
J. W. SILVEIRA CO.
744 EAST 12th STREET
OAKLAND, CALIFORNIA



Notes:

◆ Monitoring Well (MW)

8.74 Groundwater elevation in feet above mean seal level

Scale: 1 inch = 20 feet

0 10 20 30 40

FIGURE 3
GROUNDWATER GRADIENT

J. W. SILVEIRA CO.
744 EAST 12th STREET
OAKLAND, CALIFORNIA

TABLE 1

GROUNDWATER ELEVATIONS
744 EAST 12TH STREET

Date	Groundwater Elevations from TOC		
	MW-1	MW-2	MW-3
5/23/00	8.96	8.9	8.74

Notes:

ft feet

MW-1 TOC Elevation: 18.17 ft

MW-2 TOC Elevation: 16.71 ft

MW-3 TOC Elevation: 16.35 ft

TOC Top of Casing

TABLE 2

SECOND QUARTER GROUNDWATER RESULTS
VOC AND TPH COMPOUNDS
744 EAST 12TH STREET

Analyte	Monitoring Well		
VOC (µg/L)	**MW-1**	**MW-2**	**MW-3**
Benzene	*ND*	*ND*	0.59
Ethylbenzene	*ND*	*ND*	*ND*
Toluene	*ND*	*ND*	*ND*
m,p-Xylenes	*ND*	*ND*	*ND*
o-Xylene	*ND*	*ND*	*ND*
MTBE	*ND*	*ND*	4.7
TPH (µg/L)	**MW-1**	**MW-2**	**MW-3**
Gasoline	*ND*	*ND*	*ND*

Notes:

µg/L	micrograms per Liter
ND	Not Detected
TPH	Total Petroleum Hydrocarbons
VOC	Volitile Organic Compound

MW-1 is water sample JW-17
MW-2 is water sample JW-15
MW-3 is water sample JW-16

APPENDIX A
GROUNDWATER SAMPLING DATA SHEETS

GROUNDWATER SAMPLING RECORD

DATE 5/23/00 PAGE 1 OF 2

MONITORING WELL NO. 1

PROJECT JW Silveira

SITE 3744 E. 12th St.

PROJECT NO. P110604

TOTAL GALLONS TO BE PURGED

PURGING METHOD

SAMPLING METHOD

Time	Volume of Water Removed (gallons)	Discharge Rate (gal/min)	Field Parameters Measured: pH	Specific Conductivity (ms/cm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Temp. (°C)			Water Level (feet)	Comments
1015	Initial		6.51	0.580	999	1.33	19.1°				
1024	3 gal		6.48	0.583	999	1.16	18.8°				
1028	6 gal		6.50	0.582	999	1.70	18.8°				
1036	9 gal		6.48	0.582	999	1.47	18.8°				
1044	12 gal		6.50	0.582	999	1.86	18.8°				
1047	15 gal		6.49	0.582	999	1.96	18.8°				Parameters Stable
		2.4 casing volumes									Sample @ 1100

FIELD EQUIPMENT	SERIAL NUMBER	RENTAL COMPANY

SAMPLE ID: JW3-17 @1100

ANALYSIS:

COC NUMBER:

SAMPLING PERSONNEL:

TETRA TECH EM INC.
• SAN FRANCISCO •

GROUNDWATER SAMPLING RECORD

DATE 5/23/00 PAGE 2 OF 2

MONITORING WELL NO. 1

PROJECT JW Silveira

SITE 3-744 E 12th St.

PROJECT NO. P110604

CASING DIAMETER 2 inches

BOREHOLE DIAMETER 8.25 inches

TOP OF CASING ELEVATION 18.17 feet

WATER LEVEL 9.21 feet bgs @ _____

WATER LEVEL ELEVATION 8.96 feet msl

STANDING WATER COLUMN 7.92 feet

WELL VOLUMES TO BE PURGED _____

MINUMUM PURGE VOLUME _____ gallons

ACTUAL VOLUME PURGED _____ gallons

VOLUME CALCULATED BY:
HWD

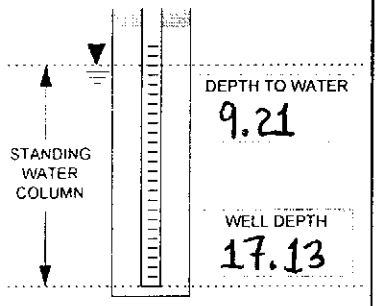
JW3-17 e 11th

PURGE VOLUME CALCULATION

One Well Volume = Casing Volume + Annulus Volume

One Well Volume = 1.35 gal + 6.2 gal

One Well Volume = 7.55 gallons



Casing Volume = Standing Water Column (ft) x Pipe Volume (gal/linear ft)[a]

Casing Volume = 7.92 ft x 0.17 gal/linear ft

Casing Volume = 1.35 gallons

NOTE
a Refer to Table 1
b Refer to Table 2
c Assuming Sand Pack Porosity of 30%

Annulus Volume = [(Standing Water Column (ft) x Borehole Volume (gal/linear ft)[b]) - Casing Volume] x 0.3[c]

Annulus Volume = [(7.92 ft x 2.78 gal/linear ft) - 1.35 gal] x 0.3

Annulus Volume = 6.2 gallons 6.2 ✓

Table 1
Pipe Volume of Schedule 40 PVC Casing

Diameter (inches)	OD (inches)	ID (inches)	Volume (gal/linear ft)	Diameter (inches)	OD (inches)	ID (inches)	Volume (gal/linear ft)
1.25	1.660	1.380	0.08	4	4.500	4.026	0.66
2	2.375	2.067	0.17	6	6.625	6.065	1.50
3	3.500	3.068	0.38	8	8.625	7.981	2.60

Table 2
Volume of Borehole

Diameter (inches)	Volume (gal/linear ft)	Diameter (inches)	Volume (gal/linear ft)	Diameter (inches)	Volume (gal/linear ft)
7.25	2.14	8.25	2.78	9.25	3.52
7.75	2.45	8.75	3.12	10.25	4.29

GROUNDWATER SAMPLING RECORD

DATE 5/23/00 PAGE 1 OF 2

MONITORING WELL NO. 2

PROJECT JW Silveira

SITE 3 - 744 E 12th St.

PROJECT NO. P110604

TOTAL GALLONS TO BE PURGED _____

PURGING METHOD _____

SAMPLING METHOD _____

Time	Volume of Water Removed (gallons)	Discharge Rate (gal/min)	Field Parameters Measured: pH	Specific Conductivity (ms/cm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Temp. (°C)			Water Level (feet)	Comments
0835	Initial		6.34	0.549	646	0.42	19.1°				
0840	3 gal		6.51	0.554	999	0.52	18.5°				
0844	6 gal		6.55	0.559	999	0.64	18.4°				
0849	9 gal		6.54	0.560	983	0.66	18.3°				
0854	12 gal		6.54	0.564	999	0.86	18.3°				
0859	15 gal		6.55	0.563	999	0.95	18.2°				
0903	18 gal		6.57	0.566	999	0.99	18.2°				Parameters Stable. Sample @ 0910 a.m. 5/23/00
		2.3 Casing Volumes									

FIELD EQUIPMENT	SERIAL NUMBER	RENTAL COMPANY

SAMPLE ID: JW3-15 @0910

ANALYSIS: _____

COC NUMBER: _____

SAMPLING PERSONNEL:

_____

_____

_____

TETRA TECH EM INC.
• SAN FRANCISCO •

GROUNDWATER SAMPLING RECORD

DATE 5/23/00 PAGE 2 OF 2

MONITORING WELL NO. 2

PROJECT JW Silveira

SITE 3 - 741 E. 12th

PROJECT NO. P1106Ø4

CASING DIAMETER 2 inches

BOREHOLE DIAMETER 8.25 inches

TOP OF CASING ELEVATION 16.71 feet

WATER LEVEL 7.81 feet bgs @ _____

WATER LEVEL ELEVATION 8.9 feet msl

STANDING WATER COLUMN 1Ø.14 feet

WELL VOLUMES TO BE PURGED _____

MINUMUM PURGE VOLUME _____ gallons

ACTUAL VOLUME PURGED _____ gallons

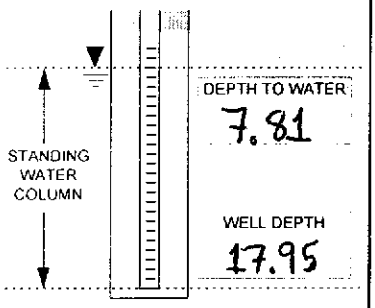
VOLUME CALCULATED BY: HWD

PURGE VOLUME CALCULATION

One Well Volume = Casing Volume + Annulus Volume

One Well Volume = 1.72 gal + 7.94 gal

One Well Volume = 9.66 gallons



Casing Volume = Standing Water Column (ft) x Pipe Volume (gal/linear ft)[a]

Casing Volume = 1Ø.11 ft x Ø.17 gal/linear ft

Casing Volume = 1.72 gallons

NOTE
a Refer to Table 1
b Refer to Table 2
c Assuming Sand Pack Porosity of 30%

Annulus Volume = [(Standing Water Column (ft) x Borehole Volume (gal/linear ft)[b]) - Casing Volume] x 0.3[c]

Annulus Volume = [(1Ø.14 ft x 2.78 gal/linear ft) - 1.72 gal] x 0.3

Annulus Volume = 7.94 gallons

Table 1
Pipe Volume of Schedule 40 PVC Casing

Diameter (inches)	OD (inches)	ID (inches)	Volume (gal/linear ft)	Diameter (inches)	OD (inches)	ID (inches)	Volume (gal/linear ft)
1.25	1.660	1.380	0.08	4	4.500	4.026	0.66
2	2.375	2.067	0.17	6	6.625	6.065	1.50
3	3.500	3.068	0.38	8	8.625	7.981	2.60

Table 2
Volume of Borehole

Diameter (inches)	Volume (gal/linear ft)	Diameter (inches)	Volume (gal/linear ft)	Diameter (inches)	Volume (gal/linear ft)
7.25	2.14	8.25	2.78	9.25	3.52
7.75	2.45	8.75	3.12	10.25	4.29

GROUNDWATER SAMPLING RECORD

DATE 5/23/00 PAGE 1 OF 2

MONITORING WELL NO. 3

PROJECT JW Silveira

SITE 3 - 744 E. 12th St.

PROJECT NO. P110604

TOTAL GALLONS TO BE PURGED _____

PURGING METHOD _____

SAMPLING METHOD _____

Time	Volume of Water Removed (gallons)	Discharge Rate (gal/min)	Field Parameters Measured: pH	Specific Conductivity (ms/cm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Temp. (°C)			Water Level (feet)	Comments
0930	Initial		6.54	0.594	999	2.01	19.5°				
0934	3 gal		6.54	0.596	999	2.35	19.5°				
0939	6 gal		6.49	0.596	999	1.84	19.5°				
0942	9 gal		6.50	0.595	999	1.89	19.5°				
0947	12 gal		6.49	0.595	999	2.03	19.5°				
0951	15 gal		6.49	0.596	777	1.94	19.5°				Parameters Stable Sample @ 1000 on 5/23/00
		2 gpm 3 gal.									*Well needs new expandable well cap.

FIELD EQUIPMENT	SERIAL NUMBER	RENTAL COMPANY

SAMPLE ID: JW3-16 @1000

ANALYSIS: _____

COC NUMBER: _____

SAMPLING PERSONNEL:

_____

_____

_____

TETRA TECH EM INC.
• SAN FRANCISCO •

GROUNDWATER SAMPLING RECORD

DATE 5/23/00 PAGE 2 OF 2

MONITORING WELL NO. 3

PROJECT JW Silveira

SITE 3 - 744 E 12th St.

PROJECT NO. P110604

CASING DIAMETER 2 inches

BOREHOLE DIAMETER 8.25 inches

TOP OF CASING ELEVATION 16.35 feet

WATER LEVEL 7.61 feet bgs @ _____

WATER LEVEL ELEVATION 8.74 feet msl

STANDING WATER COLUMN 9.59 feet

WELL VOLUMES TO BE PURGED _____

MINUMUM PURGE VOLUME _____ gallons

ACTUAL VOLUME PURGED _____ gallons

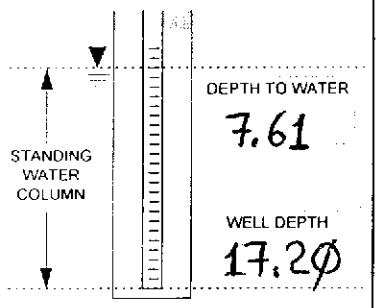
VOLUME CALCULATED BY: HWD

PURGE VOLUME CALCULATION

One Well Volume = Casing Volume + Annulus Volume

One Well Volume = 1.63 gal + 7.51 gal

One Well Volume = 9.14 gallons



Casing Volume = [Standing Water Column (ft)] x [Pipe Volume (gal/linear ft)[a]]

Casing Volume = 9.59 ft x 0.17 gal/linear ft

Casing Volume = 1.63 gallons

Annulus Volume = [([Standing Water Column (ft)] x [Borehole Volume (gal/linear ft)[b]]) - [Casing Volume]] x 0.3[c]

Annulus Volume = [(9.59 ft x 2.78 gal/linear ft) - 1.63 gal] x 0.3

Annulus Volume = 7.51 gallons

NOTE
a Refer to Table 1
b Refer to Table 2
c Assuming Sand Pack Porosity of 30%

Table 1
Pipe Volume of Schedule 40 PVC Casing

Diameter (inches)	OD (inches)	ID (inches)	Volume (gal/linear ft)	Diameter (inches)	OD (inches)	ID (inches)	Volume (gal/linear ft)
1.25	1.660	1.380	0.08	4	4.500	4.026	0.66
2	2.375	2.067	0.17	6	6.625	6.065	1.50
3	3.500	3.068	0.38	8	8.625	7.981	2.60

Table 2
Volume of Borehole

Diameter (inches)	Volume (gal/linear ft)	Diameter (inches)	Volume (gal/linear ft)	Diameter (inches)	Volume (gal/linear ft)
7.25	2.14	8.25	2.78	9.25	3.52
7.75	2.45	8.75	3.12	10.25	4.29

APPENDIX B
ANALYTICAL DATA PACKAGE

Curtis & Tompkins, Ltd., Analytical Laboratories. Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

RECEIVED

Laboratory Number 145791

TETRA TECH EM INC.

Tetra Tech EMI
135 Main Street
Suite 1800
San Francisco, CA 94105

Project#: P1106.05
Location: JW Silveria UST,Oak.

Sample ID	Lab ID
JW3-15	145791-001
JW3-16	145791-002
JW3-17	145791-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 6/23/00
Operations Manager

Signature: Carol Whitham Date: 6/23/00
Project Manager

CA ELAP # 1459

Curtis & Tompkins, Ltd.

Laboratory Number: 145791 **Receipt Date:** 05/23/00
Client: Tetra Tech EMI
Location: JW Silveria UST,Oak.
Project#: P1106.05

TPH-PURGEABLE HYDROCARBONS AND BTXE CASE NARRATIVE

This hardcopy data package contains sample and QC results for three water samples that were received on May 23, 2000.

The surrogate recoveries in the gasoline continuing calibration verifications were flagged but the recoveries were within the laboratory's statistically derived limits.

No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8015M
Field ID:	JW3-15	Batch#:	56307
Lab ID:	145791-001	Sampled:	05/23/00
Matrix:	Water	Received:	05/23/00
Units:	ug/L	Analyzed:	06/05/00
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	59-135
Bromofluorobenzene (FID)	104	60-140

ND = Not Detected
RL = Reporting Limit

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8021B
Field ID:	JW3-15	Batch#:	56307
Lab ID:	145791-001	Sampled:	05/23/00
Matrix:	Water	Received:	05/23/00
Units:	ug/L	Analyzed:	06/05/00
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	95	56-142
Bromofluorobenzene (PID)	93	55-149

ND = Not Detected
RL = Reporting Limit

005

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8015M
Field ID:	JW3-16	Batch#:	56307
Lab ID:	145791-002	Sampled:	05/23/00
Matrix:	Water	Received:	05/23/00
Units:	ug/L	Analyzed:	06/05/00
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	59-135
Bromofluorobenzene (FID)	106	60-140

ND = Not Detected
RL = Reporting Limit

006

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8021B
Field ID:	JW3-16	Batch#:	56307
Lab ID:	145791-002	Sampled:	05/23/00
Matrix:	Water	Received:	05/23/00
Units:	ug/L	Analyzed:	06/05/00
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	4.7	2.0
Benzene	0.59	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	98	56-142
Bromofluorobenzene (PID)	94	55-149

ND = Not Detected
RL = Reporting Limit

007

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8015M
Field ID:	JW3-17	Batch#:	56307
Lab ID:	145791-003	Sampled:	05/23/00
Matrix:	Water	Received:	05/23/00
Units:	ug/L	Analyzed:	06/06/00
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	59-135
Bromofluorobenzene (FID)	110	60-140

ND = Not Detected
RL = Reporting Limit

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8021B
Field ID:	JW3-17	Batch#:	56307
Lab ID:	145791-003	Sampled:	05/23/00
Matrix:	Water	Received:	05/23/00
Units:	ug/L	Analyzed:	06/06/00
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	98	56-142
Bromofluorobenzene (PID)	97	55-149

ND = Not Detected
RL = Reporting Limit

009

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Gasoline by GC/FID CA LUFT

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Batch#:	56307
MSS Lab ID:	145802-003	Sampled:	05/24/00
Matrix:	Water	Received:	05/24/00
Units:	ug/L	Analyzed:	06/06/00
Diln Fac:	1.000		

Type: MS Lab ID: QC117469

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	43.89	2,000	2,006	98	65-131

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	59-135
Bromofluorobenzene (FID)	121	60-140

Type: MSD Lab ID: QC117470

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,977	97	65-131	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	59-135
Bromofluorobenzene (FID)	123	60-140

010

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC117466	Batch#:	56307
Matrix:	Water	Analyzed:	06/05/00
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,951	98	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	124	59-135
Bromofluorobenzene (FID)	123	60-140

011

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC117467	Batch#:	56307
Matrix:	Water	Analyzed:	06/05/00
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.94	95	66-126
Benzene	20.00	18.09	90	67-117
Toluene	20.00	18.89	94	69-117
Ethylbenzene	20.00	19.47	97	68-124
m,p-Xylenes	40.00	40.22	101	70-125
o-Xylene	20.00	19.21	96	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	95	56-142
Bromofluorobenzene (PID)	92	55-149

012

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Gasoline by GC/FID CA LUFT

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8015M
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC117468	Batch#:	56307
Matrix:	Water	Analyzed:	06/05/00
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	59-135
Bromofluorobenzene (FID)	109	60-140

ND = Not Detected
RL = Reporting Limit

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	145791	Location:	JW Silveria UST,Oak.
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P1106.05	Analysis:	EPA 8021B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC117468	Batch#:	56307
Matrix:	Water	Analyzed:	06/05/00
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	97	56-142
Bromofluorobenzene (PID)	93	55-149

ND = Not Detected
RL = Reporting Limit