



Tetra Tech EM Inc.

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

May 30, 2000

Barney Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**Subject: Submittal of February 2000 Quarterly Groundwater Monitoring Reports for
J. W. Silveira Company Sites at
1200 20th Avenue and 744 East 12th Street, Oakland, California**

Dear Mr.Chan:

Enclosed please find one copy each of the February 2000 quarterly groundwater monitoring reports for the sites at 1200 20th Avenue and 744 East 12th Street in Oakland, California. Tetra Tech EM Inc. (TtEMI) conducted the first round of quarterly sampling in the year 2000 at your request for J.W. Silveira Company.

Thank you for your assistance. Please call me at (415) 222-8316 with any questions.

Sincerely,

Hal Dawson
Project Manager/Geologist

cc: J.W. Silveira Company
Shapiro Buchman Provine & Patton LLP
File

00 MAY 31 AM 9:01
ENVIRONMENTAL
PROTECTION



Tetra Tech EM Inc.

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

2957

May 30, 2000
J. W. Silveira Company
499 Embarcadero
Oakland, California 94606

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

INTRODUCTION

The site is located at the northeast corner of the intersection of East 12th Street and 8th Avenue in Oakland, California (Figure 1). 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. The location of MW-3 was moved northeast (closer to the former location of the UST) from the proposed location in the Work Plan. The change in the location of MW-3 was due to the presence of underground and overhead utility lines in the vicinity of the proposed location for MW-3. This report discusses the February 2000 quarterly groundwater sampling of the three groundwater monitoring wells at the site.

GROUNDWATER GRADIENT

Groundwater elevations were measured in each of the monitoring wells at the site during the quarterly sampling event that was conducted on February 9, 2000. The depth to groundwater from the top of casing at each well, the top of casing elevations for 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 70 degrees west (S70W), as shown on Figure 3; this flow direction follows the site topography. 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 0.005 feet/foot (ft/ft).

GROUNDWATER SAMPLING ACTIVITIES

For the first quarterly sampling event in the year 2000, the three monitoring wells at the site were sampled on February 9, 2000. Each well was purged with a dedicated disposable teflon bailer. The well volume was calculated and a minimum of 1 to 2 well volumes was removed from each well prior to sampling. During removal of the 1 to 2 well volumes from each well, the following physical parameters of the groundwater being removed from the well were monitored: pH, temperature, electrical conductivity, dissolved oxygen, and turbidity. These physical parameters were monitored to determine when the groundwater entering the well casing had stabilized. After the physical parameters of the groundwater had stabilized and a minimum of 1 to 2 well volumes had been removed from each well, groundwater samples were collected from each well. The groundwater samples were sent to an analytical laboratory to be analyzed for BTEX, methyl tertiary-butyl ether (MTBE), and TPH-g.

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 February 2000 quarterly sampling event at the site. Benzene and MTBE were only detected in the groundwater sample collected from MW-3 (sample number JW3-14); the detected concentrations of these compounds were 2.4 micrograms per liter (ug/L) and 29 ug/L, respectively.

CONCLUSIONS AND RECOMMENDATIONS

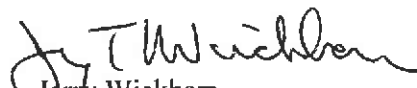
This report presents the analytical results of the February 2000 quarterly groundwater monitoring event for the three wells located at the site. The contaminant concentrations in the groundwater at the site continue to range from not detectable to relatively low levels.

TtEMI commenced quarterly sampling at the site in February 2000. Based on discussions with the Alameda County Health Care Services Agency, if four quarters of analytical groundwater data show that the contaminant concentrations are at acceptable concentrations and/or are decreasing over time, site closure will be attainable. Thus, TtEMI recommends completion of four quarters of groundwater monitoring at this site.

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

Sincerely,


Hal Dawson
TtEMI Project Manager


Jerry Wickham
Registered Geologist #3766



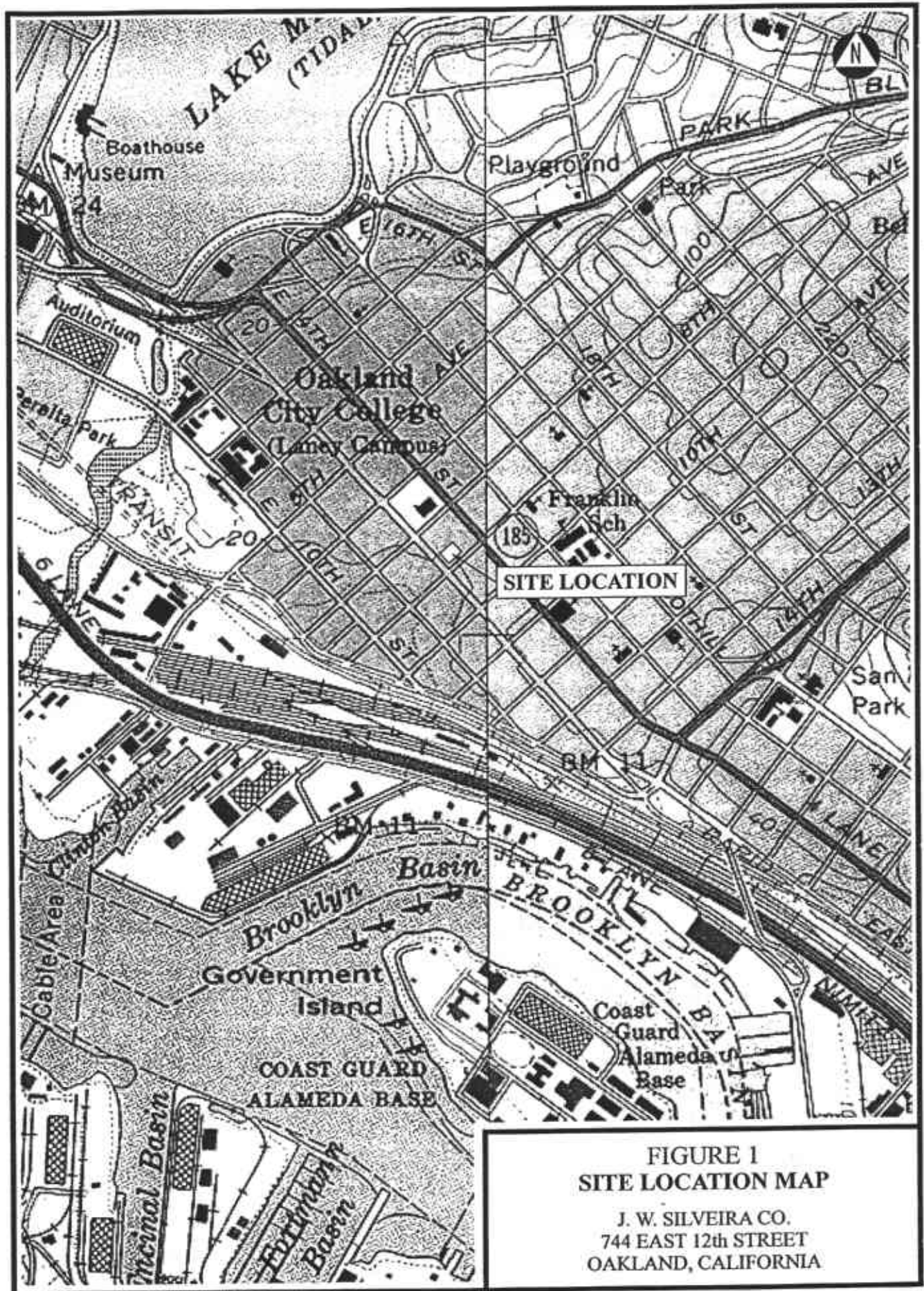


FIGURE 1
SITE LOCATION MAP
 J. W. SILVEIRA CO.
 744 EAST 12th STREET
 OAKLAND, CALIFORNIA

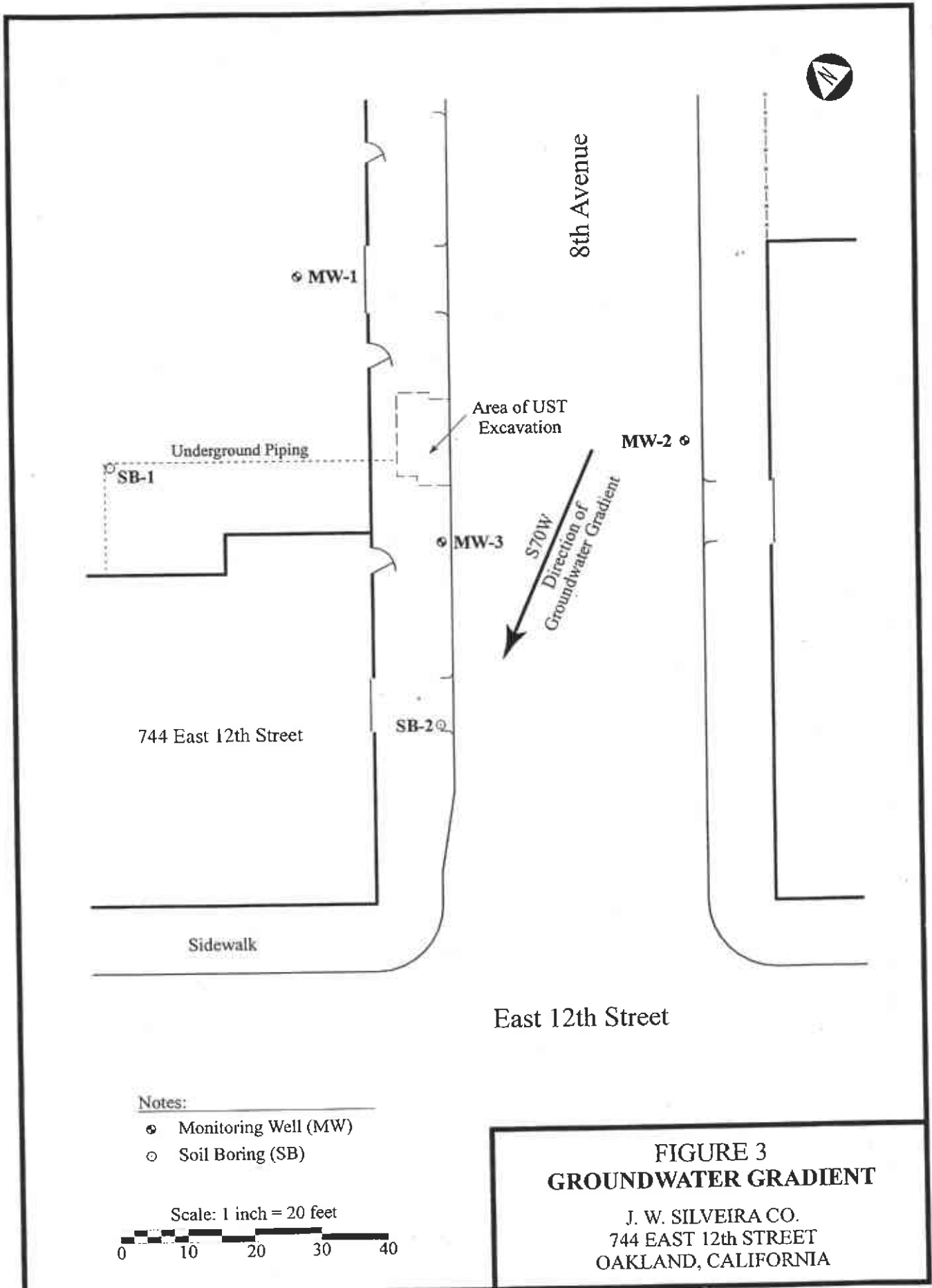


TABLE 1
GROUNDWATER ELEVATIONS
744 EAST 12TH STREET

Date	Groundwater Elevations from TOC		
	MW-1	MW-2	MW-3
2/9/00	9.13	9.07	8.9

Notes:

-
- MW-1 Monitoring Well Number 1
 - MW-2 Monitoring Well Number 2
 - MW-3 Monitoring Well Number 3
 - TOC Top of Casing

- MW-1 TOC Elevation (in feet)/Depth to Groundwater from TOC (in feet) - 18.17/9.04
- MW-2 TOC Elevation (in feet)/Depth to Groundwater from TOC (in feet) - 16.71/7.64
- MW-3 TOC Elevation (in feet)/Depth to Groundwater from TOC (in feet) - 16.35/7.45

TABLE 2
QUARTERLY GROUNDWATER
MONITORING RESULTS FOR FEBRUARY 2000
744 EAST 12TH STREET

Analyte	Monitoring Well		
	MW-1 Sample JW3-12	MW-2 Sample JW3-13	MW-3 Sample JW3-14
VOC ($\mu\text{g/L}$)			
Benzene	ND	ND	2.4
Ethylbenzene	ND	ND	ND
Toluene	ND	ND	ND
m,p-Xylenes	ND	ND	ND
o-Xylene	ND	ND	ND
MTBE	ND	ND	29
	MW-1 Sample JW3-09	MW-2 Sample JW3-10	MW-3 Sample JW3-11
TPH ($\mu\text{g/L}$)			
Gasoline	ND	ND	ND

Notes:

$\mu\text{g/L}$ micrograms per Liter
 ND Not Detected
 TPH Total Petroleum Hydrocarbons
 VOC Volatile Organic Compound

APPENDIX A
ANALYTICAL DATA PACKAGE



Chain of Custody Record

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

PO#		Lab: C&T			No./Container Types		Preservative Added HCl																
Project name: 744 E 12th St.		TriEMI technical contact: JACKIE LUTA			Field samplers: Har Dawson Roy Glenn		Analysis Required																
Project number: P1106-04		TriEMI project manager: Har Dawson			Field samplers' signatures: Roy D. Glenn		40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pestic/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	MIBX	BTEX				
Sample ID 7/23/00		Sample Description/Notes			Date	Time																	
JW3-0712		MW1 744 E 12th St			2-9-00	1430	WATER	6								X	X	X					
JW3-0813		MW2 "			"	1500	"	6								X	X	X					
JW3-0914		MW3 "			"	1530	"	6								X	X	X					
trip blank		trip blank			2-9-00		"	3										X	X				

Relinquished by:	Name (print)	Company Name	Date	Time
Roy D. Glenn	Roy Glenn	TT EMI	2-10-00	
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

RECEIVED

Laboratory Number 143868

Aromatic Volatile Organics by GC/MS
EPA 8260

TETRA TECH EMI INC.

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

Project#: P110604
Location: JW Silveira Props

Sample ID	Lab ID
JW3-0712	143868-001
JW3-0813	143868-002
JW3-0914	143868-003
TRIP BLANK	143868-004

for
3/21/00

I certify that this data package has been reviewed for technical correctness and completeness. Please see attached narrative for a discussion of any analytical problems related to this sample set. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

The case narrative is an integral and inseparable part of this report.

Signature: Teresa K Morris - for JG
Title: Operations Manager

Date: 3/17/00

Signature: Carol Waltham
Title: Project Manager

Date: 3/17/00 0001



Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Field ID:	JW3-0712	Batch#:	53818
Lab ID:	143868-001	Sampled:	02/09/00
Matrix:	Water <i>for silica</i>	Received:	02/10/00
Units:	ug/L	Analyzed:	02/16/00
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	98	80-115

ND = Not Detected

RL = Reporting Limit

Page 1 of 1

0007



Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Field ID:	JW3-0813	Batch#:	53818
Lab ID:	143868-002	Sampled:	02/09/00
Matrix:	Water	Received:	02/10/00
Units:	ug/L	Analyzed:	02/16/00
Diln Fac:	1.000		

pas
3/21/00

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	98	80-115

ND = Not Detected

RL = Reporting Limit

Page 1 of 1

0008

Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Field ID:	JW3-0914	Batch#:	53818
Lab ID:	143868-003	Sampled:	02/09/00
Matrix:	Water	Received:	02/10/00
Units:	ug/L	Analyzed:	02/16/00
Diln Fac:	1.000		

*Ans
7/16/00*

Analyte	Result	RL
MTBE	29	0.5
Benzene	2.4	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	98	80-115

Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	53792
Lab ID:	143868-004	Sampled:	02/09/00
Matrix:	Water	Received:	02/10/00
Units:	ug/L	Analyzed:	02/15/00
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	113	80-115

Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	53792
MSS Lab ID:	143869-001	Sampled:	02/09/00
Matrix:	Water	Received:	02/09/00
Units:	ug/L	Analyzed:	02/15/00
Diln Fac:	1.000		

Type: MS Lab ID: QC107987

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<5.000	50.00	45.50	91	80-114
Toluene	<5.000	50.00	46.05	92	79-121

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	78-123
Toluene-d8	97	80-110
Bromofluorobenzene	101	80-115

Type: MSD Lab ID: QC107988

Analyte	Spiked	Result	%REC	Limits	RPD	Lin
Benzene	50.00	45.05	90	80-114	1	20
Toluene	50.00	45.61	91	79-121	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	102	80-115

Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	53818
Units:	ug/L	Analyzed:	02/16/00
Diln Fac:	1.000		

Type: BS Lab ID: QC108062

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	46.09	92	80-116
Toluene	50.00	47.22	94	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	99	80-115

Type: BSD Lab ID: QC108063

Analyte	Spiked	Result	%REC	Limits	RPD	Lin
Benzene	50.00	44.46	89	80-116	4	20
Toluene	50.00	45.58	91	80-120	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	78-123
Toluene-d8	97	80-110
Bromofluorobenzene	99	80-115



Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC107972	Batch#:	53792
Matrix:	Water	Analyzed:	02/15/00
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	44.92	90	80-116
Toluene	50.00	47.16	94	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	102	80-115



Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC107973	Batch#:	53792
Matrix:	Water	Analyzed:	02/15/00*
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	112	80-115

ND = Not Detected

RL = Reporting Limit

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Purgeable Aromatics by GC/MS

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC108064	Batch#:	53818
Matrix:	Water	Analyzed:	02/16/00
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	98	80-115



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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

RECEIVED

Laboratory Number 143868

Total Volatile Hydrocarbons
EPA 8015 (Mod)

TETRA TECH EM INC.

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

Project#: P110604
Location: JW Silveira Props

Sample ID

Lab ID

JW3-0712
JW3-0813
JW3-0914

143868-001
143868-002
143868-003

JWS
3/21/00

I certify that this data package has been reviewed for technical correctness and completeness. Please see attached narrative for a discussion of any analytical problems related to this sample set. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

The case narrative is an integral and inseparable part of this report.

Signature: Teresa K Morrison for JG
Title: Operations Manager

Date: 8/17/00

Signature: Carol Wortham
Title: Project Manager

Date: 3/17/00 9901

Laboratory Number: 143868

Receipt Date: 02/10/00

Client: Tetra Tech EMI

Location: Silveira Site 2

Project#: P110604

TPH-PURGEABLES CASE NARRATIVE

This hardcopy data package contains sample and QC results for three water samples that were received on February 10, 2000.

No analytical problems were encountered.

Gasoline by GC/FID CA LUFT

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8015M
Field ID:	JW3-0712	Batch#:	53760
Lab ID:	143868-001	Sampled:	02/09/00
Matrix:	Water	Received:	02/10/00*
Units:	ug/L	Prepared:	02/14/00
Diln Fac:	1.000	Analyzed:	02/15/00

Sm
3/2/00

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	59-135
Bromofluorobenzene (FID)	108	60-140

Gasoline by GC/FID CA LUFT

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8015M
Field ID:	JW3-0813	Batch#:	53760
Lab ID:	143868-002	Sampled:	02/09/00
Matrix:	Water	Received:	02/10/00
Units:	ug/L	Prepared:	02/14/00
Diln Fac:	1.000	Analyzed:	02/15/00

no 3/2/00

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	59-135
Bromofluorobenzene (FID)	108	60-140

Gasoline by GC/FID CA LUFT

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8015M
Field ID:	JW3-08/14	Batch#:	53760
Lab ID:	143868-003	Sampled:	02/09/00
Matrix:	Water	Received:	02/10/00
Units:	ug/L	Prepared:	02/14/00
Diln Fac:	1.000	Analyzed:	02/15/00

hys
3/24/00

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	59-135
Bromofluorobenzene (FID)	109	60-140

Gasoline by GC/FID CA LUFT

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Batch#:	53760
MSS Lab ID:	143892-005	Sampled:	02/10/00
Matrix:	Water	Received:	02/10/00
Units:	ug/L	Analyzed:	02/14/00
Diln Fac:	1.000		

Type: MS Lab ID: QC107854

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<50.00	2,000	2,158	108	65-131

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	59-135
Bromofluorobenzene (FID)	113	60-140

Type: MSD Lab ID: QC107855

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,975	99	65-131	9	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	59-135
Bromofluorobenzene (FID)	112	60-140

Gasoline by GC/FID CA LUFT

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC107851	Batch#:	53760
Matrix:	Water	Analyzed:	02/14/00
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,097	105	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	59-135
Bromofluorobenzene (FID)	103	60-140

Gasoline by GC/FID CA LUFT

Lab #:	143868	Location:	JW Silveira Props
Client:	Tetra Tech EMI	Prep:	EPA 5030
Project#:	P110604	Analysis:	EPA 8015M
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC107853	Batch#:	53760
Matrix:	Water	Analyzed:	02/14/00
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	59-135
Bromofluorobenzene (FID)	99	60-140