

April 18, 2003

Mr. Kelly Engineer
All Star Inc.
1791 Pine Street
Concord, CA 94520

RECEIVED BY
FIRE PREVENTION OFFICE

APR 21 2003

HAYWARD FIRE DEPARTMENT

RE: February 2003 Groundwater Monitoring Report
1220 West Tennyson Road, Hayward, California
ACC Project Number: 6651-004.00

Dear Mr. Engineer:

ACC Environmental Consultants, Inc., (ACC) has enclosed two copies of the Groundwater Sampling and Monitoring Report. Methyl tertiary butyl ether (MTBE) was the only gasoline constituent reported in the samples from the three existing groundwater monitoring wells. On your behalf, a copy of this report has been submitted to the Hayward Fire Department for review.

If you have any questions regarding this report or the findings of the work, please contact me at (510) 638-8400, extension 109.

Sincerely,



David R. DeMent, RG, REA II
Environmental Division Manager

/ejg:drd

Enclosures

cc: Mr. Paul Rosenstein, Attorney at Law

DDement@ACCENV.com



**FEBRUARY 2003
GROUNDWATER
MONITORING
REPORT**

April 18, 2003

1220 West Tennyson Road
Hayward, California

Prepared For:
Mr. Kelly Engineer
All Star Inc.
1791 Pine Street
Concord, CA

OAKLAND ▪ SACRAMENTO
SEATTLE ▪ LOS ANGELES

ACC Project Number 6651-004.00

FEBRUARY 2003 GROUNDWATER MONITORING REPORT

**1220 West Tennyson Road
Hayward, California**

ACC Project Number 6651-004.00

Prepared for:

Mr. Kelly Engineer
All Star Inc.
1791 Pine Street
Concord, CA 94520

April 18, 2003

Prepared by:



Edward Giacometti
Staff Geologist

Reviewed by:



David R. DeMent, RG, REA II
Environmental Division Manager

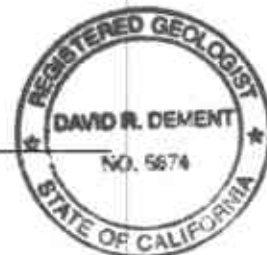


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FEBRUARY 2003 GROUNDWATER MONITORING REPORT
1220 West Tennyson Road
Hayward, California

1.0 INTRODUCTION

This February 2003 Groundwater Sampling and Monitoring Report was prepared by ACC Environmental Consultants, Inc., (ACC) at the request of Kelly Engineer and All Star Inc., to describe work performed at 1220 West Tennyson Road, Hayward, California (Site). The project objectives were to purge and sample three groundwater monitoring wells and one observation well, calculate groundwater gradient and flow direction, and characterize concentrations of petroleum hydrocarbons in groundwater in the vicinity of four former underground storage tanks (USTs).

2.0 BACKGROUND

The subject site is located on the southwest corner of West Tennyson Road and Pompano Street, Hayward, California (Figure 1). An operating gasoline and automobile repair facility currently occupy the Site. The following information was obtained during file review at the City of Hayward Fire Department.

Environmental Geotechnical Consultants, Inc. removed one 6,000-gallon and three 4,000-gallon USTs from the site in October 1990. Four new USTs were subsequently installed at the site. One groundwater and eight soil samples were collected from the tank pit during removal of the USTs. Analysis of the soil samples revealed the presence of total petroleum hydrocarbons as gasoline (TPHg) at 4,300 parts per million (ppm), benzene at 29,000 parts per billion (ppb), toluene at 160,000 ppb, ethylbenzene at 68,000 ppb and total xylenes at 280,000 ppb. Analysis of the groundwater sample revealed the presence of TPHg at 26 ppm, benzene at 2,400 ppb, toluene at 1,800 ppb and total xylenes at 5,200 ppb.

Artesian Environmental Consultants (Artesian) performed a subsurface investigation at the Site in March 1992. Three soil borings were drilled at the Site and converted into groundwater monitoring wells (MW-1, MW-2 and MW-3). Analysis of seven soil samples collected from the borings revealed the presence of TPHg at 680 ppm, benzene at 8,100 ppb, toluene at 15,000 ppb, ethylbenzene at 11,000 ppm and total xylenes at 73,000 ppb. Analyses of soil samples collected from the tank pit revealed the presence of TPHg at 2,900 ppm, benzene at 12,000 ppm, toluene at 160,000 ppm, ethylbenzene at 35,000 ppb and total xylenes at 420,000 ppb. Analyses of groundwater samples collected from the groundwater monitoring wells revealed the presence of TPHg at 59,000 ppb, benzene at 13,000 ppb, toluene at 12,000 ppb, ethylbenzene at 1,600 ppb and total xylenes at 13,000 ppb.

The City of Hayward has requested additional site investigation and remediation at the Site.

3.0 GROUNDWATER SAMPLING AND MONITORING

ACC conducted groundwater sampling and monitoring on February 24, 2003. Work at the site included measuring depth to water, subjectively evaluating groundwater in the wells, purging and sampling the wells, and submitting the samples to a laboratory for analysis.

3.1 Groundwater Monitoring

Before groundwater sampling, the depth to the surface of the water table was measured from the top of the well casing using a Solinst water level meter. The water level measurements were recorded to the nearest 0.01 foot with respect to mean sea level (MSL). Worksheets of recorded groundwater monitoring data are included as Appendix 1. Information regarding well elevations and groundwater depths is summarized in Table 1.

TABLE 1 - GROUNDWATER DEPTH INFORMATION

Well No.	Well Elevation* (above MSL)	Date Measured	Depth to Groundwater	Groundwater Elevation
MW-1	21.86	04/07/92	10.08	11.78
		04/11/01	10.54	11.32
		07/16/01	11.18	10.68
		11/25/02	11.62	10.24
		2/24/03	11.29	10.57
MW-2	21.56	04/07/92	9.49	12.07
		04/11/01	9.67	11.89
		07/16/01	10.36	11.20
		11/25/02	11.13	10.43
		2/24/03	10.51	11.05
MW-3	20.54	04/07/92	10.64	9.90
		04/11/01	11.40	9.14
		07/16/01	11.67	8.87
		11/25/02	10.22	9.68
		2/24/03	9.88	10.66

Notes: All measurements in feet

*Well elevation measured to top of casing

3.2 Groundwater Gradient

The groundwater flow direction, as determined from monitoring well data that was obtained on February 24, 2003, is illustrated on Figure 3. ACC utilized the well elevations relative to mean seal level reported by Artesian in its *Subsurface Investigation Report* dated April 1992. Based on groundwater elevation calculations, groundwater flow direction is toward the south at an average gradient of 0.026 foot per foot. Table 2 summarizes previous gradients and calculated groundwater flow directions.

TABLE 2 - GROUNDWATER GRADIENT AND FLOW DIRECTION

Date Monitored	Gradient (foot/foot)	Direction
04/07/92	0.025	south-southeast
04/11/01	0.031	south
07/16/01	0.026	south
11/25/02	0.008	south
02/24/03	0.002	south

3.3 Groundwater Sampling

Before groundwater sampling, each well was purged using a disposable polyethylene bailer. Groundwater samples were collected when temperature, pH, and conductivity of the water stabilized and a minimum of four well casing volumes of water had been removed. Following purging, each well was allowed to recharge before sampling. When recovery to 80 percent of the static water level was observed, a sample was collected for analysis. Groundwater was also monitored for dissolved oxygen (DO).

Wells were sampled using disposable polyethylene bailers attached to new rope for each well. From each monitoring well, approved, laboratory-supplied sample vials were filled to overflowing and sealed to eliminate trapped air in the vial. Once filled, sample vials were inverted and tapped to test for air bubbles. Sample containers were labeled with self adhesive, preprinted tags. The samples were stored in a prechilled, insulated container pending delivery to STL San Francisco, a state-certified laboratory for analysis.

Water purged prior to sampling the monitoring wells was temporarily stored on site in Department of Transportation-approved 55-gallon drums pending laboratory analysis and proper disposal.

4.0 RESULTS OF GROUNDWATER SAMPLING

Groundwater samples from monitoring wells MW-1, MW-2, MW-3 were collected and submitted to Chromalab for analysis of TPHg, BTEX, and MTBE by EPA Method 5030/8015M/8020. MTBE only was reported in the samples at concentrations ranging from 4,000 to 20,000 ppb. Analytical results from the groundwater samples are summarized in Table 3. A copy of the analytical results and chain of custody record for groundwater samples is included as Appendix 2.

TABLE 3 - GROUNDWATER SAMPLE ANALYTICAL RESULTS

Well No	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE* (µg/L)	TBA* (µg/L)
MW-1	04/07/92	< 50	2.1	0.56	< 0.5	1.4	NA	NA
	04/11/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA
	07/16/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA
	11/25/02	16,000*	< 100	< 100	< 100	< 100	20,000	NA
	02/24/03	< 25,000	< 250	< 250	< 250	< 500	59,000	NA
MW-2	04/07/92	2,100	450	200	45	360	NA	NA
	04/11/01	< 5,000	< 50	< 50	< 50	150	5,200	NA
	07/16/01	6,300	< 50	< 50	< 50	< 50	6,500	NA
	11/25/02	13,000*	< 50	< 50	< 50	< 50	20,000	NA
	02/24/03	< 5,000	< 50	< 50	< 50	< 100	17,000	NA
MW-3	04/07/92	59,000	13,000	12,000	1,600	13,000	NA	NA
	04/11/01	4,800	< 5.0	5.1	320	< 5	760	1,500
	07/16/01	4,300	< 10	< 10	100	60	2,400	NA
	11/25/02	2,900*	< 10	< 10	< 10	< 10	4,000	NA
	02/24/03	< 5,000	< 50	< 50	< 50	< 100	4,900	NA

Notes: µg/L = micrograms per liter (approximately equivalent to ppb)

< = concentrations were below reporting limits

NA = Not analyzed

* = Hydrocarbon reported in the gasoline range does not match the gasoline standard

5.0 DISCUSSION

Approximately 15 months have elapsed since the last groundwater monitoring event. The calculated groundwater flow direction and gradient were south at 0.026 foot per foot. The groundwater flow direction is similar to previous sampling events but the calculated groundwater gradient is approximately one third as steep as the gradient calculated by ACC in July 2001. This is likely due to the lack of significant precipitation in the area over the previous eight months.

Water sample analytical results are fairly consistent with previous analytical results. MTBE only was reported in the water samples at concentrations ranging from 4,000 to 20,000 ppb. MTBE concentrations increased significantly in wells MW-1 and MW-2 and to a much lesser degree in the downgradient well MW-3. The reported TPHg values are likely comprised entirely of MTBE since they do not match the laboratory gasoline standard and no reportable BTEX was detected.

ACC encountered some type of obstruction in well MW-2 at approximately 11.7 feet in the well. During the previous November 2002 sampling event, the bottom of well MW-2 was tagged at 17.14 feet and the water column was calculated to be 1.0 gallon. The current depth of 11.7 feet represents a

loss of 5.45 feet of well and resulting water column of only 0.2 gallons. ACC recommends investigating the obstruction in the well prior to the next sampling event.

6.0 CONCLUSIONS

Based on the results of groundwater sampling and monitoring performed at 1220 West Tennyson Road in February 2003, ACC concludes the following:

- Groundwater gradient and flow direction were calculated at 0.026 foot/foot to the south;
- Groundwater sample analytical results indicate that previous TPHg and BTEX impact in groundwater across the majority of the site appears to have decreased below laboratory reporting limits due to natural attenuation processes; and
- MTBE concentrations have increased significantly in the two upgradient groundwater monitoring wells since the last well monitoring event conducted in July 2001 and a potential source of MTBE may be present.

7.0 RECOMMENDATIONS

Based on the conclusions of previous investigation and recent groundwater monitoring performed, ACC recommends:

- Instituting quarterly groundwater monitoring in wells MW-1, MW-2, and MW-3;
- Analyzing future water samples for TPHg, BTEX, and the five fuel oxygenates and two scavengers by EPA Method 8260;
- Request a meeting with the Hayward Fire Department to discuss site conditions and the need for additional subsurface investigation; and
- Investigating and removing the obstruction in well MW-2 prior to the next sampling event.

The next monitoring event is tentatively scheduled for May 2003.

8.0 LIMITATIONS

The service performed by ACC has been conducted in a manner consistent with the levels of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

The conclusions presented in this report are professional opinions based on the indicated data described in this report and applicable regulations and guidelines currently in place. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study.

ACC has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ACC is not responsible for laboratory errors in procedure or result reporting.

FIGURES



Source: Thomas Guide Digital Edition 2002

Title: **Location Map**
1220 West Tennyson Road
Road, California

Figure Number: 1 Scale: None

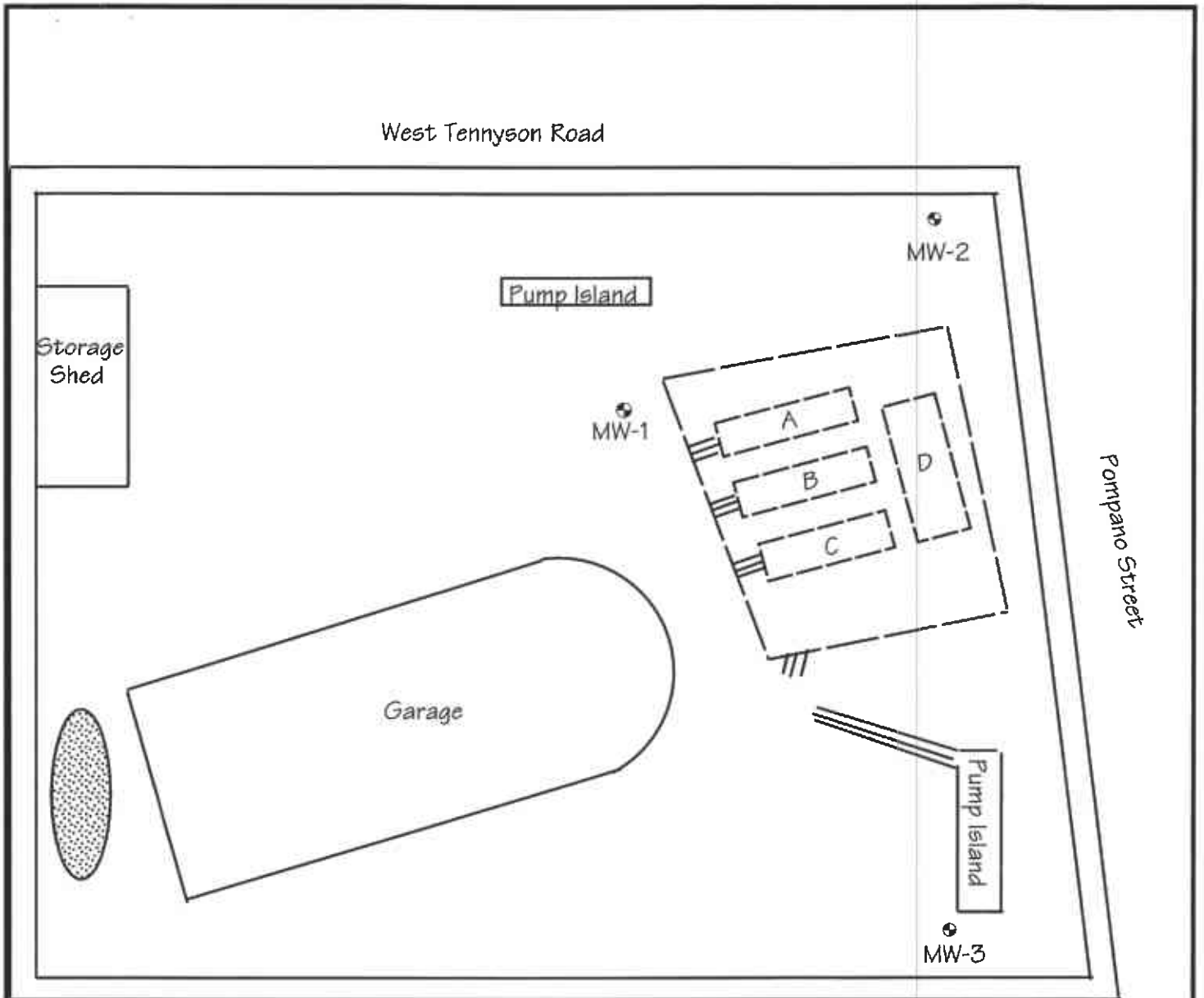
Project No: 6551-004.00 Drawn By: E/JG

A • C • C
ENVIRONMENTAL
CONSULTANTS

Date: 4/18/03

7977 Capwell Drive, Suite 10
 Oakland, California 94621
 (510) 638-8400 Fax: (510) 638-840





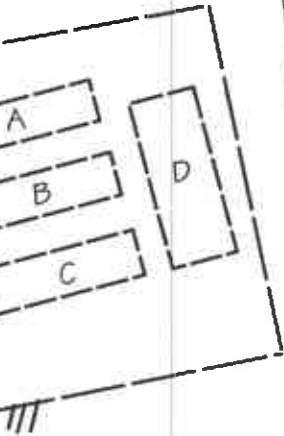
West Tennyson Road

Pump Island

MW-2

Storage Shed

MW-1



Pompano Street

Garage

Pump Island
MW-3

Mantilla Avenue

Legend



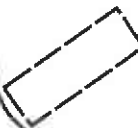
Excavated Soil Pile



Groundwater Monitoring Well Location



Area of Excavation



Approximate Former Tank Location

Title: **Site Map**
1220 W. Tennyson Ave.
Hayward, California

Figure Number: **2**

Scale: 1" = 20'

Project Number: **6551-004.00**

Drawn By: **EJG**

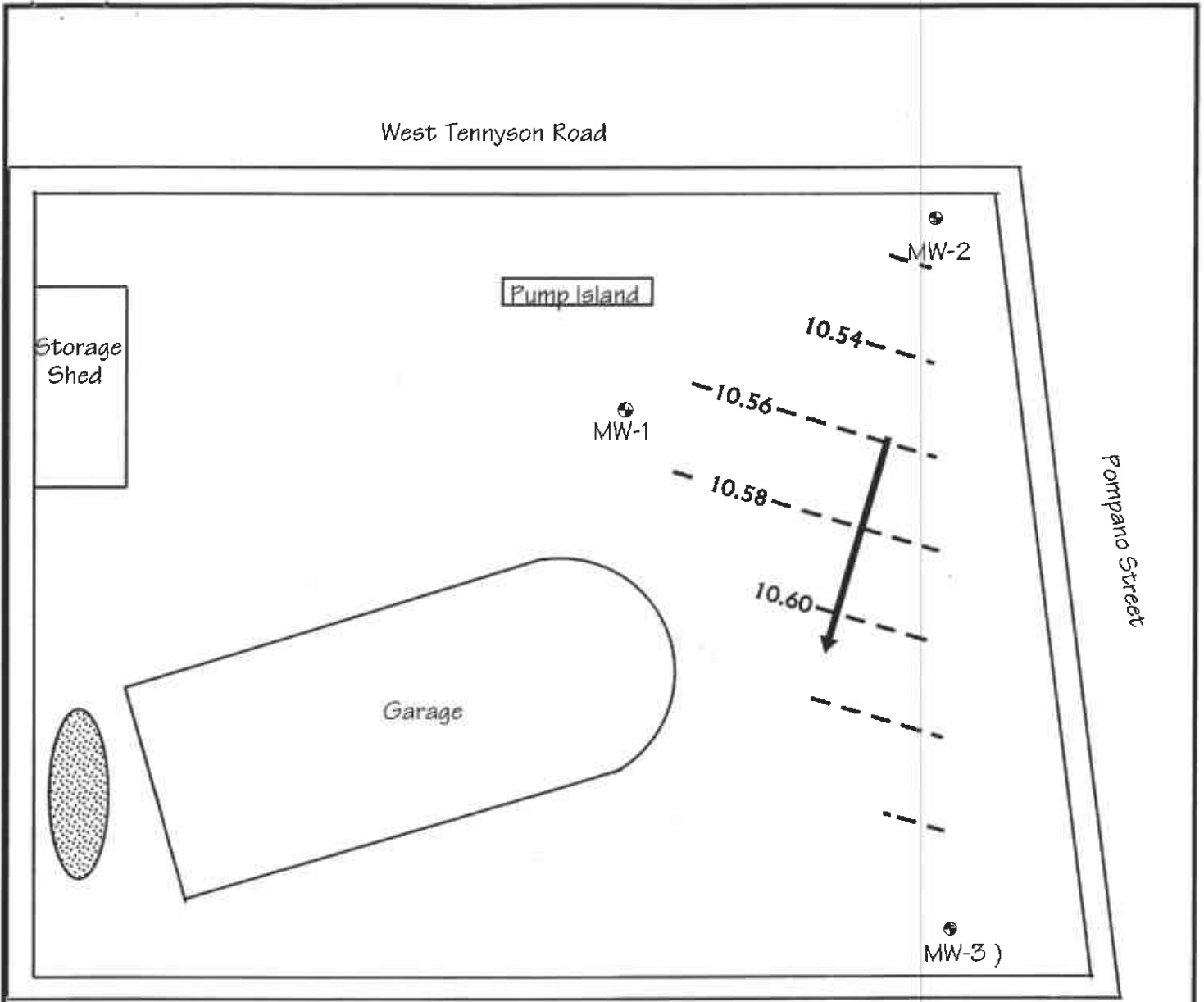
A·C·C

Date: **4/18/03**

ENVIRONMENTAL
CONSULTANTS



7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax (510) 638-8404



West Tennyson Road

Pump Island

Storage Shed

MW-1

MW-2

Garage

Pompano Street

10.54





10.56


10.58

MW-3

Mantilla Avenue

Legend

-  Excavated Soil Pile
-  Groundwater Monitoring Well Location (Groundwater Elevation in Feet Above MSL)
-  Approximate Groundwater Flow Direction
-  Groundwater Elevation Contour

Title: Site Map 1220 W. Tennyson Ave. Hayward, California	
Figure Number: 3	Scale: 1" = 20'
Project Number: 6551-004.00	Drawn By: EJG
A·C·C ENVIRONMENTAL CONSULTANTS	
7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax (510) 638-8404	
	

APPENDICES

JOB NAME:	PURGE METHOD: <i>Manual Reel</i>
SITE ADDRESS: <i>1220 W. Tennyson</i>	SAMPLED BY: <i>EJG/TRB</i>
JOB #: <i>6651-004.00</i>	LABORATORY: <i>STL-SF</i>
DATE: <i>2/24/03</i>	ANALYSIS: <i>8260 B</i>
Onsite Drum Inventory SOIL:	MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/>
EMPTY: WATER:	SAMPLING <input checked="" type="checkbox"/>

	PURGE VOL.	PURGE WATER READINGS						OBSERVATIONS
		(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	
WELL: <i>MW-1</i>								<input type="checkbox"/> Froth
DEPTH OF BORING: <i>18.81</i>	<i>1.3</i>	<i>6.99</i>	<i>19.7</i>	<i>1.28</i>	<i>0.06</i>	<i>155</i>	<i>1.88</i>	<input checked="" type="checkbox"/> Sheen
DEPTH TO WATER: <i>11.29</i>	<i>2.6</i>	<i>6.98</i>	<i>19.9</i>	<i>1.28</i>	<i>0.05</i>	<i>406</i>	<i>2.25</i>	<input checked="" type="checkbox"/> Odor Type <i>gas</i>
WATER COLUMN: <i>7.52</i>	<i>3.9</i>	<i>6.99</i>	<i>19.9</i>	<i>1.28</i>	<i>0.05</i>	<i>377</i>	<i>2.02</i>	<input type="checkbox"/> Free Product
WELL DIAMETER: <i>2"</i>	<i>5.2</i>	<i>7.13</i>	<i>19.5</i>	<i>1.29</i>	<i>0.05</i>	<i>404</i>	<i>2.00</i>	Amount _____ Type _____
WELL VOLUME: <i>1.3</i>								<input type="checkbox"/> Other
COMMENTS: <i>Purge: 13:45</i> <i>Sample: 14:10</i>								
WELL: <i>MW-2</i>								<input type="checkbox"/> Froth
DEPTH OF BORING: <i>11.69</i>	<i>0.3</i>	<i>6.94</i>	<i>18.8</i>	<i>0.838</i>	<i>0.03</i>	<i>69</i>	<i>8.47</i>	<input type="checkbox"/> Sheen
DEPTH TO WATER: <i>10.51</i>	<i>0.6</i>	<i>6.89</i>	<i>18.7</i>	<i>0.852</i>	<i>0.03</i>	<i>69</i>	<i>6.72</i>	<input checked="" type="checkbox"/> Odor Type <i>unknown</i>
WATER COLUMN: <i>1.18</i>	<i>0.9</i>	<i>/</i>	<i>Purge Dry</i>	<i>/</i>	<i>/</i>	<i>/</i>	<i>/</i>	<input type="checkbox"/> Free Product
WELL DIAMETER: <i>4"</i>	<i>1.2</i>	<i>/</i>	<i>/</i>	<i>/</i>	<i>/</i>	<i>/</i>	<i>/</i>	Amount _____ Type _____
WELL VOLUME:								<input type="checkbox"/> Other
COMMENTS: <i>Purge: 13:30</i> <i>Sample: 14:05</i>								<i>Sludge in bottom of well</i>
WELL: <i>MW-3</i>								<input type="checkbox"/> Froth
DEPTH OF BORING: <i>18.24</i>	<i>1.3</i>	<i>7.05</i>	<i>20.1</i>	<i>1.15</i>	<i>0.05</i>	<i>98</i>	<i>2.13</i>	<input checked="" type="checkbox"/> Sheen
DEPTH TO WATER: <i>9.88</i>	<i>2.6</i>	<i>7.08</i>	<i>20.1</i>	<i>1.19</i>	<i>0.05</i>	<i>708</i>	<i>2.17</i>	<input checked="" type="checkbox"/> Odor Type <i>slight gas</i>
WATER COLUMN: <i>8.36</i>	<i>3.9</i>	<i>7.21</i>	<i>20.2</i>	<i>1.21</i>	<i>0.06</i>	<i>999</i>	<i>1.73</i>	<input type="checkbox"/> Free Product
WELL DIAMETER: <i>2"</i>	<i>5.2</i>	<i>7.50</i>	<i>20.1</i>	<i>1.22</i>	<i>0.06</i>	<i>999</i>	<i>2.03</i>	Amount _____ Type _____
WELL VOLUME: <i>1.3</i>								<input type="checkbox"/> Other
COMMENTS: <i>Purge: 13:30</i> <i>Sample: 14:00</i>								<i>Silty</i>

ACC Environmental Consultants

March 04, 2003

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn.: Trevor Bausman

Project#: 6651-004.C0

Project: 1220 W. TENNYSON

Dear Mr. Bausman,

Attached is our report for your samples received on 02/25/2003 17:10

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 04/11/2003 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: vvancil@stl-inc.com

Sincerely,



Vincent Vancil
Project Manager

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Trevor Bausman

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0

1220 W. TENNYSON

Received: 02/25/2003 17:10

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	02/24/2003 14:10	Water	1
MW-2	02/24/2003 14:05	Water	2
MW-3	02/24/2003 14:00	Water	3

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

03/04/2003 12:33

Page 1 of 9

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Trevor Bausman

7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0
1220 W. TENNYSON

Received: 02/25/2003 17:10

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-1	Lab ID: 2003-02-0495 - 1
Sampled: 02/24/2003 14:10	Extracted: 2/28/2003 15:00
Matrix: Water	QC Batch#: 2003/02/28-01.27
Analysis Flag: o (See Legend and Note Section)	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	25000	ug/L	500.00	02/28/2003 15:00	
Methyl tert-butyl ether (MTBE)	59000	250	ug/L	500.00	02/28/2003 15:00	
Benzene	ND	250	ug/L	500.00	02/28/2003 15:00	
Toluene	ND	250	ug/L	500.00	02/28/2003 15:00	
Ethylbenzene	ND	250	ug/L	500.00	02/28/2003 15:00	
Total xylenes	ND	500	ug/L	500.00	02/28/2003 15:00	
Surrogates(s)						
1,2-Dichloroethane-d4	101.5	76-114	%	500.00	02/28/2003 15:00	
Toluene-d8	100.5	88-110	%	500.00	02/28/2003 15:00	

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Trevor Bausman

7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0
1220 W. TENNYSON

Received: 02/25/2003 17:10

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-2	Lab ID:	2003-02-0495 - 2
Sampled:	02/24/2003 14:05	Extracted:	2/27/2003 16:05
Matrix:	Water	QC Batch#:	2003/02/27-01-27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	5000	ug/L	100.00	02/27/2003 16:05	
Methyl tert-butyl ether (MTBE)	17000	50	ug/L	100.00	02/27/2003 16:05	
Benzene	ND	50	ug/L	100.00	02/27/2003 16:05	
Toluene	ND	50	ug/L	100.00	02/27/2003 16:05	
Ethylbenzene	ND	50	ug/L	100.00	02/27/2003 16:05	
Total xylenes	ND	100	ug/L	100.00	02/27/2003 16:05	
Surrogates(s)						
1,2-Dichloroethane-d4	106.2	76-114	%	100.00	02/27/2003 16:05	
Toluene-d8	99.0	88-110	%	100.00	02/27/2003 16:05	

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Trevor Bausman

7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0
1220 W. TENNYSON

Received: 02/25/2003 17:10

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-3	Lab ID:	2003-02-0495 - 3
Sampled:	02/24/2003 14:00	Extracted:	2/28/2003 15:22
Matrix:	Water	QC Batch#:	2003/02/28-01:27
Analysis Flag: o (See Legend and Note Section)			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	5000	ug/L	100.00	02/28/2003 15:22	
Methyl tert-butyl ether (MTBE)	4900	50	ug/L	100.00	02/28/2003 15:22	
Benzene	ND	50	ug/L	100.00	02/28/2003 15:22	
Toluene	ND	50	ug/L	100.00	02/28/2003 15:22	
Ethylbenzene	ND	50	ug/L	100.00	02/28/2003 15:22	
Total xylenes	ND	100	ug/L	100.00	02/28/2003 15:22	
Surrogates(s)						
1,2-Dichloroethane-d4	103.2	76-114	%	100.00	02/28/2003 15:22	
Toluene-d8	97.3	88-110	%	100.00	02/28/2003 15:22	

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566
Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

03/04/2003 12:33

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Trevor Bausman

7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0
1220 W. TENNYSON

Received: 02/25/2003 17:10

Batch QC Report

Prep(s): 5030B

Method Blank

MB: 2003/02/27-01.27-005

Water

Test(s): 8260B

QC Batch # 2003/02/27-01.27

Date Extracted: 02/27/2003 12:20

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/27/2003 12:20	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	02/27/2003 12:20	
Benzene	ND	0.5	ug/L	02/27/2003 12:20	
Toluene	ND	0.5	ug/L	02/27/2003 12:20	
Ethylbenzene	ND	0.5	ug/L	02/27/2003 12:20	
Total xylenes	ND	1.0	ug/L	02/27/2003 12:20	
Surrogates(s)					
1,2-Dichloroethane-d4	109.0	76-114	%	02/27/2003 12:20	
Toluene-d8	98.4	88-110	%	02/27/2003 12:20	

Fuel Oxygenates by 8260B

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Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0
1220 W. TENNYSON

Received: 02/25/2003 17:10

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2003/02/28-01.27

MB: 2003/02/28-01.27-005

Date Extracted: 02/28/2003 11:29

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/28/2003 11:29	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	02/28/2003 11:29	
Benzene	ND	0.5	ug/L	02/28/2003 11:29	
Toluene	ND	0.5	ug/L	02/28/2003 11:29	
Ethylbenzene	ND	0.5	ug/L	02/28/2003 11:29	
Total xylenes	ND	1.0	ug/L	02/28/2003 11:29	
Surrogates(s)					
1,2-Dichloroethane-d4	100.0	76-114	%	02/28/2003 11:29	
Toluene-d8	99.0	88-110	%	02/28/2003 11:29	

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03/04/2003 12:33

Fuel Oxygenates by 8260B

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Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0
1220 W. TENNYSON

Received: 02/25/2003 17:10

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2003/02/27-01,27

LCS 2003/02/27-01.27-003

Extracted: 02/27/2003

Analyzed: 02/27/2003 11:30

LCSD 2003/02/27-01.27-004

Extracted: 02/27/2003

Analyzed: 02/27/2003 11:58

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	26.4	25.3	25.0	105.6	101.2	4.3	65-165	20		
Benzene	22.7	22.3	25.0	90.8	89.2	1.8	69-129	20		
Toluene	23.2	22.2	25.0	92.8	88.8	4.4	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	526	533	500	105.2	106.6		76-114			
Toluene-d8	490	483	500	98.0	96.6		88-110			

Severn Trent Laboratories, Inc.

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03/04/2003 12:33

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Trevor Bausman

7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0
1220 W. TENNYSON

Received: 02/25/2003 17:10

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2003/02/28-01.27

LCS 2003/02/28-01.27-003

Extracted: 02/28/2003

Analyzed: 02/28/2003 10:39

LCSD 2003/02/28-01.27-004

Extracted: 02/28/2003

Analyzed: 02/28/2003 11:08

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	24.8	25.4	25.0	99.2	101.6	2.4	65-165	20		
Benzene	22.7	22.0	25.0	90.8	88.0	3.1	69-129	20		
Toluene	22.5	22.0	25.0	90.0	88.0	2.2	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	503	506	500	100.6	101.2		76-114			
Toluene-d8	496	492	500	99.2	98.4		88-110			

Severn Trent Laboratories, Inc.

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Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

03/04/2003 12:33

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Trevor Bausman

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6651-004.C0

1220 W. TENNYSON

Received: 02/25/2003 17:10

Legend and Notes

Analysis Flag

o

Reporting limits were raised due to high level of analyte present in the sample.

2003-02-0495
Email: info@chromalab.com

Report To **Analysis Request**

Attn: **TREVOR BAUSMAN**
Company: **ACC ENVIRONMENTAL CONSULTANTS**
Address: **7977 CAPWELL DRIVE, OAKLAND, CA**
P: (510) 638-8400 x 113 E: tbausman@accenv.com
Bill To: **ACC ENVIRONMENTAL** Sampled By: *Tom Bausman*
Attn: **TREVOR** Phone ext: 113

Sample ID	Date	Time	Mat rix	Pres erv.	TPH EPA - <input type="checkbox"/> 8015/8021 <input checked="" type="checkbox"/> 8260B <input checked="" type="checkbox"/> Gas w/ <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> MTBE	Purgeable Aromatics BTEX EPA - <input type="checkbox"/> 8021 <input type="checkbox"/> 8260B	TEPH EPA 8015M <input type="checkbox"/> Silica Gel <input type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other	Fuel Tests EPA 8260B: <input type="checkbox"/> Gas <input type="checkbox"/> BTEX <input type="checkbox"/> Five Oxysterates <input type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol	Purgeable Halocarbons (HVOCS) EPA 8021	Volatile Organics GC/MS (VOCs) <input type="checkbox"/> EPA 8260B <input type="checkbox"/> 624	Semivolatiles GC/MS <input type="checkbox"/> EPA 8270 <input type="checkbox"/> 625	Oil and Grease <input type="checkbox"/> Petroleum (EPA 1684) <input type="checkbox"/> Total	Pesticides <input type="checkbox"/> EPA 8081 <input type="checkbox"/> 608 PCBs <input type="checkbox"/> EPA 8082 <input type="checkbox"/> 608	PNAs by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other	W.E.T (STLC) TCLP	Hexavalent Chromium pH (24h hold time for H ₂ O)	Spec Cond. <input type="checkbox"/> Alkalinity TSS <input type="checkbox"/> TDS	Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO ₄ <input type="checkbox"/> NO ₃ <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO ₂ <input type="checkbox"/> PO ₄	Number of Containers		
MW-1	2/25/03	14:00	H ₂ O	HCl	X																	3	
MW-2	2/25/03	14:05	H ₂ O	HCl	X																		3
MW-3	2/25/03	14:00	H ₂ O	HCl	X																		3

Project Info. Project Name: 1220 W. TENNESSEE
Project#: 6651-004.00
PO#: _____
Credit Card#: _____
of Containers: _____
Head Space: _____
Temp: _____
Conforms to record: _____
Other: _____

Report: Routine Level 3 Level 4 EDD State Tank Fund EDF
Special Instructions / Comments: _____
 Global ID _____

1) Relinquished by:
Tom Bausman
Signature _____ Time 2/25/03
TREVOR BAUSMAN
Printed Name _____ Date
ACC ENVIRONMENTAL CONSULTANTS
Company

1) Received by:
[Signature]
Signature _____ Time 10:06
B. Morin 2/25/03
Printed Name _____ Date
STL-SF
Company

2) Relinquished by:
Signature _____ Time _____
Printed Name _____ Date _____
Company _____

2) Received by:
Signature _____ Time _____
Printed Name _____ Date _____
Company _____

3) Relinquished by:
[Signature] 1710
Signature _____ Time
B. Morin 2/25/03
Printed Name _____ Date
STL-SF
Company

3) Received by:
[Signature] 1710
Signature _____ Time
NOUNAK
Printed Name _____ Date
STL SF 02/25/03
Company