A·C·C
ENVIRONMENTAL
CONSULTANTS

September 29, 2003

Re 2541

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

RE: August 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 Mr. Barney Chan of the Alameda County Health Care Services Agency (ACHCSA) for review. ACC understands that the Hayward Fire Department has referred the case to the ACHCSA for oversight and to be the lead regulatory agency.

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
Mr. Barney Chan, ACHCSA

A·C·C
ENVIRONMENTAL
CONSULTANTS

AUGUST 2003 GROUNDWATER MONITORING REPORT

September 29, 2003

1220 West Tennyson Road
Hayward, California

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

ACC Project Number 6651-004.00

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ENVIRONMENTAL
CONSULTANTS

AUGUST 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

September 29, 2003

Prepared by: _____
Edward Giacometti
Staff Geologist

Reviewed by: _____
David R. DeMent, RG, REA II
Environmental Division Manager

REGISTERED GEOLOGIST
DAVID R. DEMENT
NO. 5876
STATE OF CALIFORNIA

7977 Capwell Drive, Suite 100 • Oakland, CA 94621 • (510) 638-8400 • FAX: (510) 638-8404
OAKLAND • LOS ANGELES • SACRAMENTO • SEATTLE

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

1.0 INTRODUCTION

This August 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). No significant water was measured in the observation well and it was not purged and sampled.

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 August 27, 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
		05/27/03	11.49	10.37
		08/27/03	11.85	10.01
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
		05/27/03	10.99	10.57
		08/27/03	11.35	10.21
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
		05/27/03	10.09	10.45
		08/27/03	10.47	10.07

Notes: *All measurements in feet*
**Well elevation measured to top of casing*
***ACC*

3.2 Groundwater Gradient

The groundwater flow direction, as determined from monitoring well data that was obtained on August 27, 2003, is illustrated on Figure 3. ACC utilized the well elevations relative to mean sea level reported by Artesian in its *Subsurface Investigation Report* dated April 1992. Based on groundwater elevation calculations, groundwater flow direction is toward the west-southwest at an average gradient of 0.004 foot per foot. These values are inconsistent with previous trends. 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
05/27/03	0.005	west-southwest
08/27/03	0.004	west-southwest

3.3 Groundwater Sampling

Before groundwater sampling, each well was purged using a disposable polyethylene bailer. Groundwater samples were collected when 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.

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 was reported in the samples at concentrations ranging from 190 to 55,000 ppb. Analytical results

5/27/03 data

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
	05/27/03	38,000*	<250	<250	<250	<500	53,000	NA
	08/27/03	<13,000	<130	<130	<130	<250	36,000	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	<30	<50	<100	17,000	NA
	05/27/03	130*	<0.50	<0.50	<0.50	<1.0	190	NA
	08/27/03	<50	<0.50	<0.50	<0.50	<1.0	60	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
	05/27/03	<10,000	<100	<100	<100	<200	7,400	NA
	08/27/03	<2,500	<25	<25	<25	<50	4,500	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*
MW-2 = ACC inadvertently sampled a 4-inch observation well located on the site instead of monitoring well MW-2

5.0 DISCUSSION

The August 2003 sampling event represents the seventh groundwater monitoring event. The calculated groundwater flow direction and gradient were west-southwest at 0.004 foot per foot. The groundwater gradient is similar to the previous sampling event in May 2003 and not similar to the five previous sampling events. The current calculated groundwater flow direction is approximately 80 degrees west of south. ACC believes the groundwater flow direction shift may be the result of the relatively flat gradient and the lack of any significant precipitation in the last two quarters.

Water sample analytical results are fairly consistent with previous analytical results. MTBE only was reported in the water samples at concentrations ranging from 60 to 36,000 ppb. MTBE concentrations decreased in well MW-1 from 53,000 to 36,000 ppb, decreased in well MW-2 from 190 to 60 ppb, and decreased in well MW-3 from 7,400 to 4,500 ppb.

Since groundwater monitoring resumed in November 2002, reported TPHg values are likely comprised entirely of MTBE since they do not match the laboratory gasoline standard and no significant BTEX concentrations were reported. While reporting limits were raised due to interference effects of MTBE, TPHg and BTEX concentrations are significantly less than those reported by Artesian Environmental in 1992, especially in downgradient well MW-3.

6.0 CONCLUSIONS

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

- Groundwater gradient and flow direction were calculated at 0.004 foot/foot to the west-southwest;
- Groundwater sample analytical results indicate that previous TPHg and BTEX impact in groundwater across the majority of the site appears to have decreased or is below laboratory reporting limits due to natural attenuation processes; and
- MTBE concentrations decreased in all three groundwater monitoring wells.

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 all future water samples for TPHg, BTEX, and MTBE by EPA Method 8260 in case additional analysis for all five fuel oxygenates and scavengers are indicated; and
- Perform additional downgradient subsurface investigation as requested by the Alameda County Health Care Services Agency.

The downgradient subsurface investigation is scheduled for early October and the next monitoring event is tentatively scheduled for November 2003.

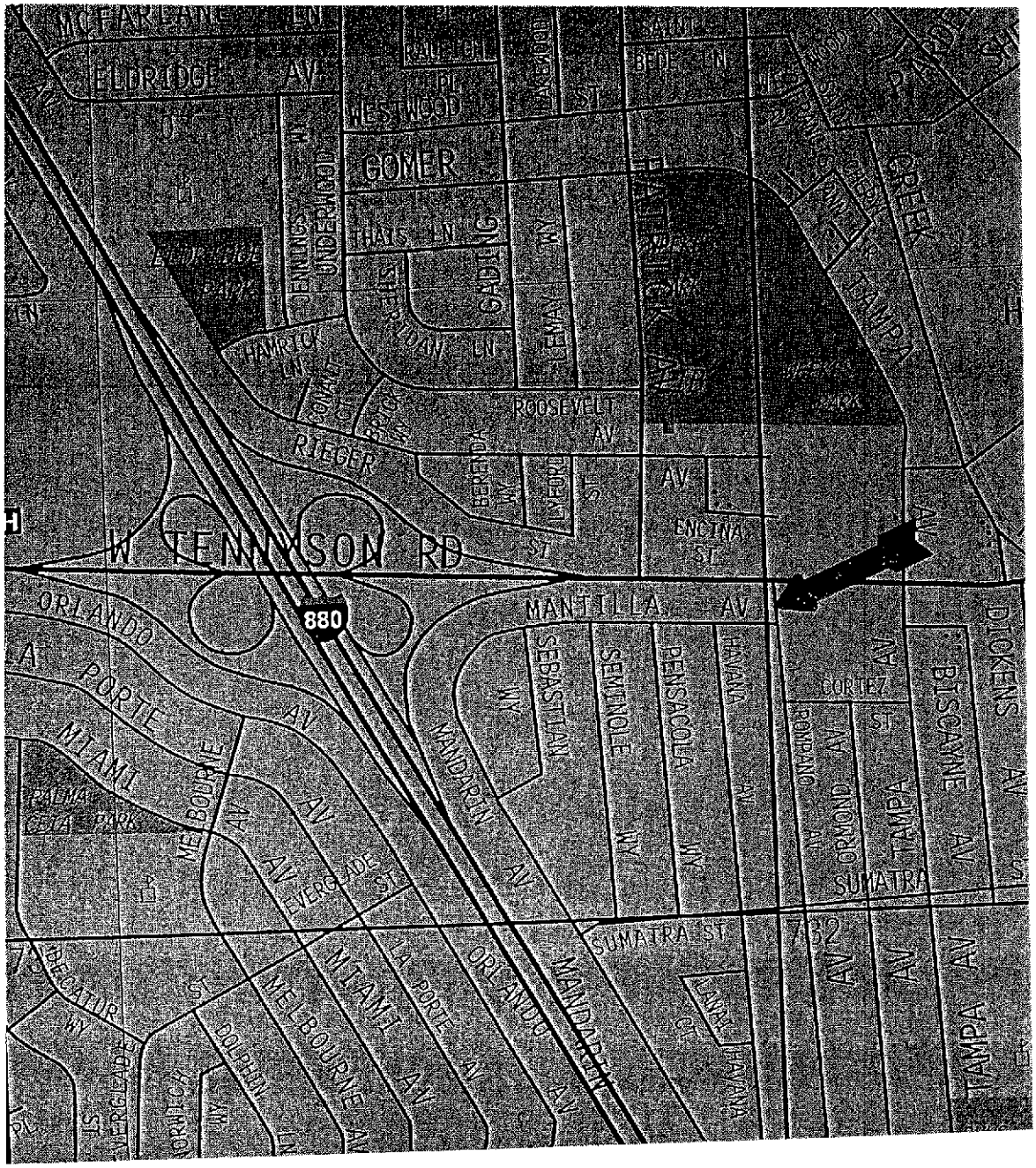
8.0 LIMITATIONS

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.

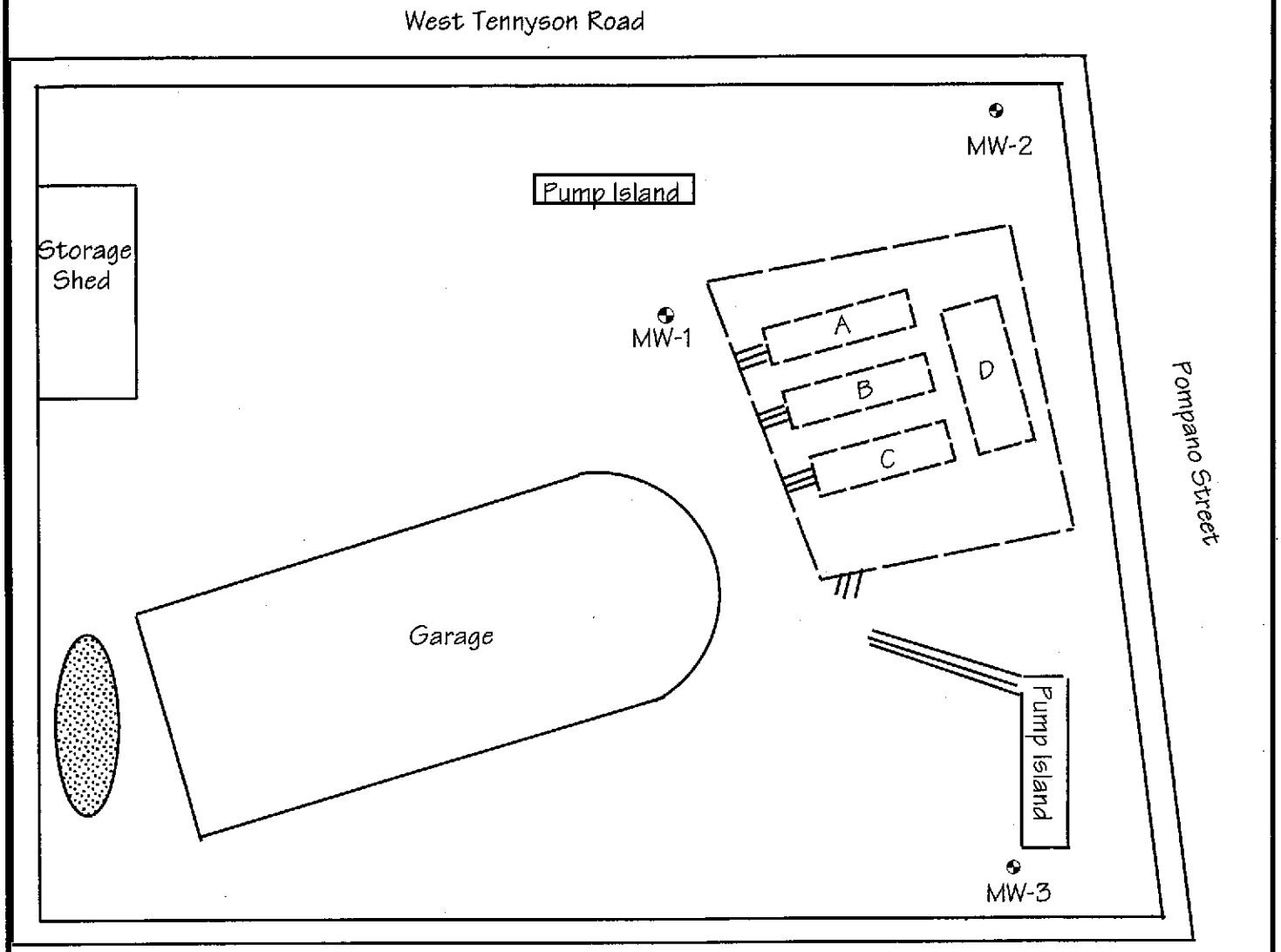
ACC has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ACC is not responsible for laboratory errors in procedure or result reporting.

FIGURES



Source: The Thomas Guide, Bay Area 2002

Title: ***Location Map*** ***1220 West Tennyson Road*** ***Hayward, California***	
Figure Number: 1	Scale: None
Project No: 6551-004.00	Drawn By: EJG
A • C • C ENVIRONMENTAL CONSULTANTS	Date: 9/29/03
7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	N W E S



Legend

- Excavated Soil Pile
- MW-3 — 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 ENVIRONMENTAL CONSULTANTS	Date: 9/29/03

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

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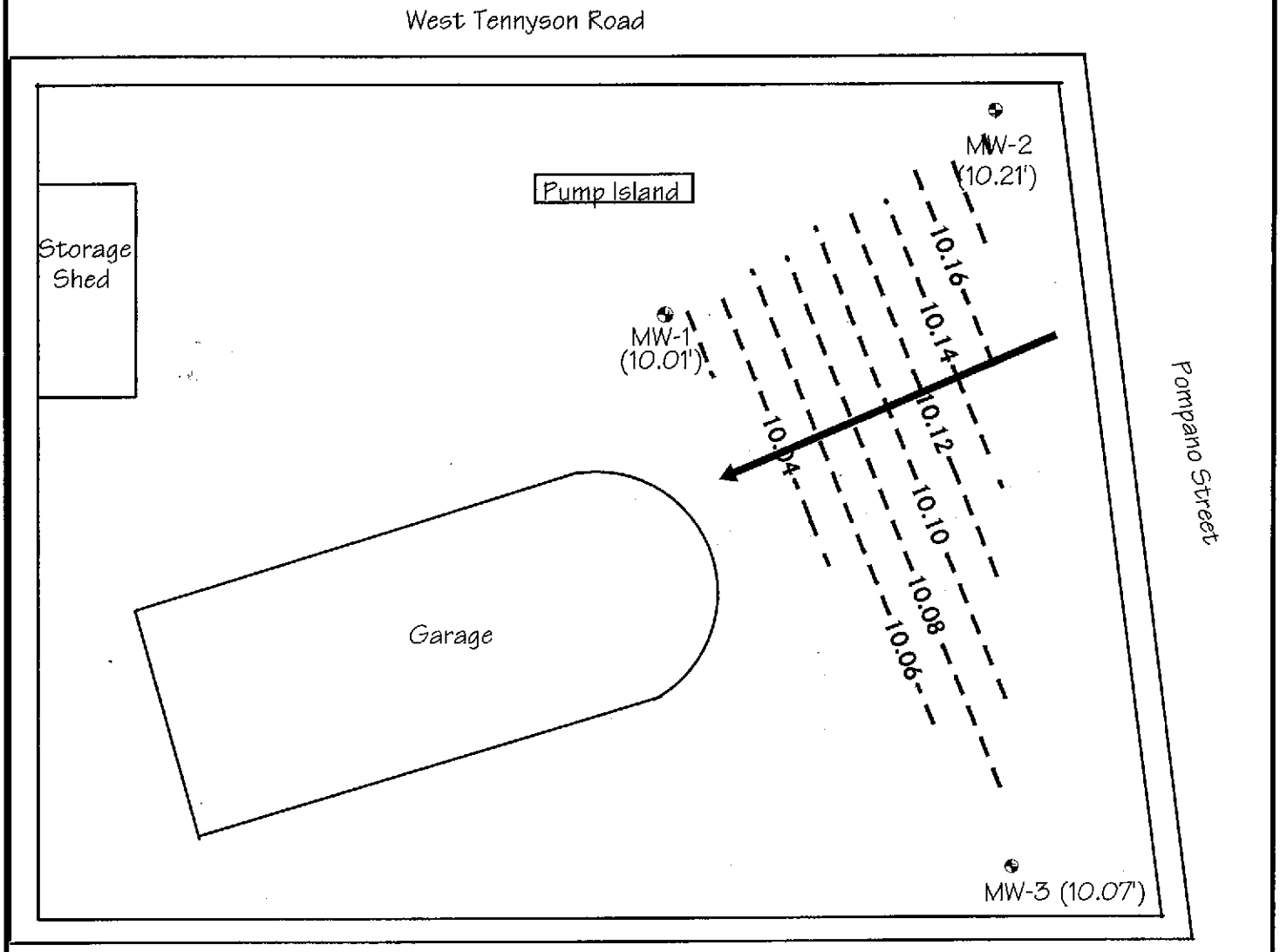

Legend

MW-3 (10.07') — 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	Date: 9/29/03
7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax (510) 638-8404	N W E S

APPENDICES

ACC ENVIRONMENTAL CONSULTANTS

ACC MONITORING WELL WORKSHEET

JOB NAME:	PURGE METHOD: Manual Bail
SITE ADDRESS: 1220 W. Tennyson	SAMPLED BY: Ed Giacomelli / Trevor Brinkmann
JOB #: 6581-004.00	LABORATORY: STL-SF
DATE: 8/27/03	ANALYSIS: TPHg/BTEX/MTBE
Onsite Drum Inventory SOIL: 1@ 60%	MONITORING ☒ DEVELOPING ☐
EMPTY: WATER:	SAMPLING ☒

WELL: MW-1

DEPTH OF BORING: 18.81
DEPTH TO WATER: 11.85
WATER COLUMN: 6.96
WELL DIAMETER: 2"
WELL VOLUME: 1.1
COMMENTS:
Purge: 14:00
Sample:

PURGE VOL (Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.
1.1	8.15	24.0	1.34	0.06	280	
2.2	7.96	23.2	1.29	0.05	203	
3.3	7.86	22.9	1.29	0.05	858	
4.4	7.75	22.5	1.27	0.05	999	

OBSERVATIONS: ☐ Froth ☐ Sheen ☒ Odor Type slight gas ☐ Free Product Amount____ Type____ ☐ Other
Cloudy

WELL: MW-2

DEPTH OF BORING: 17.14
DEPTH TO WATER: 11.35
WATER COLUMN: 5.89
WELL DIAMETER: 2"
WELL VOLUME: 1.0
COMMENTS:
Purge: 14:00
Sample:

PURGE VOL (Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.
1.0	7.79	23.4	1.34	0.06	999	
2.0	7.74	24.1	1.34	0.06	999	
3.0	7.74	22.9	1.35	0.06	999	
4.0	7.60	22.9	1.35	0.06	999	

OBSERVATIONS: ☐ Froth ☐ Sheen ☐ Odor Type____ ☐ Free Product Amount____ Type____ ☐ Other
silty

WELL: MW-3

DEPTH OF BORING: 18.24
DEPTH TO WATER: 10.47
WATER COLUMN: 7.77
WELL DIAMETER: 2"
WELL VOLUME: 1.3
COMMENTS:
Purge: 14:12
Sample:

PURGE VOL (Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.
1.3	7.68	23.5	1.19	0.05	970	
2.6	7.63	23.4	1.19	0.05	950	
3.9	7.58	22.9	1.23	0.05	999	
5.2	7.58	22.7	1.23	0.05	999	

OBSERVATIONS: ☐ Froth ☐ Sheen ☐ Odor Type____ ☐ Free Product Amount____ Type____ ☐ Other

SEVERN TRENT STL

Submission#: 2003-09-0010

ACC Environmental Consultants

September 08, 2003

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn.: Ed Giacometti

Project#: 6651-004.00
Project: 1220 W. Tennyson

Dear Mr. Giacometti,

Attached is our report for your samples received on 08/29/2003 17:29
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 10/13/2003 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 STL

Submission #: 2003-09-0010

Fuel Oxygenates by 8260B

ACC Environmental Consultants
Attn.: Ed Giacometti

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

Project: 6651-004.00
1220 W. Tennyson

Received: 08/29/2003 17:29

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	08/27/2003 14:30	Water	1
MW-2	08/27/2003 14:30	Water	2
MW-3	08/27/2003 14:30	Water	3

Fuel Oxygenates by 8260B

ACC Environmental Consultants
Attn.: Ed Giacometti

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

Project: 6651-004.00
1220 W. Tennyson

Received: 08/29/2003 17:29

Prep(s): 5030B
Sample ID: MW-1
Sampled: 08/27/2003 14:30
Matrix: Water
Analysis Flag: o (See Legend and Note Section)

Test(s): 8260B
Lab ID: 2003-09-0010 - 1
Extracted: 9/5/2003 23:33
QC Batch#: 2003/09/05-02.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	13000	ug/L	250.00	09/05/2003 23:33	
Methyl tert-butyl ether (MTBE)	36000	130	ug/L	250.00	09/05/2003 23:33	
Benzene	ND	130	ug/L	250.00	09/05/2003 23:33	
Toluene	ND	130	ug/L	250.00	09/05/2003 23:33	
Ethylbenzene	ND	130	ug/L	250.00	09/05/2003 23:33	
Total xylenes	ND	250	ug/L	250.00	09/05/2003 23:33	
Surrogate(s)						
1,2-Dichloroethane-d4	104.1	76-114	%	250.00	09/05/2003 23:33	
Toluene-d8	103.9	88-110	%	250.00	09/05/2003 23:33	

Fuel Oxygenates by 8260B

ACC Environmental Consultants
Attn.: Ed Giacometti

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

Project: 6651-004.00
1220 W. Tennyson

Received: 08/29/2003 17:29

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-2	Lab ID:	2003-09-0010 - 2
Sampled:	08/27/2003 14:30	Extracted:	9/5/2003 23:55
Matrix:	Water	QC Batch#:	2003/09/05-02.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	09/05/2003 23:55	
Methyl tert-butyl ether (MTBE)	60	0.50	ug/L	1.00	09/05/2003 23:55	
Benzene	ND	0.50	ug/L	1.00	09/05/2003 23:55	
Toluene	ND	0.50	ug/L	1.00	09/05/2003 23:55	
Ethylbenzene	ND	0.50	ug/L	1.00	09/05/2003 23:55	
Total xylenes	ND	1.0	ug/L	1.00	09/05/2003 23:55	
Surrogate(s)						
1,2-Dichloroethane-d4	98.6	76-114	%	1.00	09/05/2003 23:55	
Toluene-d8	98.2	88-110	%	1.00	09/05/2003 23:55	

Fuel Oxygenates by 8260B

ACC Environmental Consultants
Attn.: Ed Giacometti

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

Project: 6651-004.00
1220 W. Tennyson

Received: 08/29/2003 17:29

Prep(s):	**5030B**	**Test(s):**	**8260B**
Sample ID:	**MW-3**	**Lab ID:**	**2003-09-0010 - 3**
Sampled:	**08/27/2003 14:30**	**Extracted:**	**9/6/2003 00:17**
Matrix:	**Water**	**QC Batch#:**	**2003/09/05-02.64**

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	2500	ug/L	50.00	09/06/2003 00:17	
Methyl tert-butyl ether (MTBE)	4500	25	ug/L	50.00	09/06/2003 00:17	
Benzene	ND	25	ug/L	50.00	09/06/2003 00:17	
Toluene	ND	25	ug/L	50.00	09/06/2003 00:17	
Ethylbenzene	ND	25	ug/L	50.00	09/06/2003 00:17	
Total xylenes	ND	50	ug/L	50.00	09/06/2003 00:17	
Surrogate(s)						
1,2-Dichloroethane-d4	100.3	76-114	%	50.00	09/06/2003 00:17	
Toluene-d8	99.2	88-110	%	50.00	09/06/2003 00:17	

Fuel Oxygenates by 8260B

ACC Environmental Consultants
Attn.: Ed Giacometti

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

Project: 6651-004.00
1220 W. Tennyson

Received: 08/29/2003 17:29

Batch QC Report

Prep(s): 5030B **Test(s): 8260B**

Method Blank **Water** **QC Batch # 2003/09/05-02.64**

MB: 2003/09/05-02.64-050 **Date Extracted: 09/05/2003 18:50**

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	09/05/2003 18:50	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	09/05/2003 18:50	
Benzene	ND	0.5	ug/L	09/05/2003 18:50	
Toluene	ND	0.5	ug/L	09/05/2003 18:50	
Ethylbenzene	ND	0.5	ug/L	09/05/2003 18:50	
Total xylenes	ND	1.0	ug/L	09/05/2003 18:50	
Surrogates(s)					
1,2-Dichloroethane-d4	84.5	76-114	%	09/05/2003 18:50	
Toluene-d8	101.4	88-110	%	09/05/2003 18:50	

Fuel Oxygenates by 8260B

ACC Environmental Consultants
Attn.: Ed Giacometti

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

Project: 6651-004.00
1220 W. Tennyson

Received: 08/29/2003 17:29

Batch QC Report

Prep(s): 5030B **Test(s): 8260B**

Laboratory Control Spike **Water** **QC Batch # 2003/09/05-02.64**

LCS 2003/09/05-02.64-006 Extracted: 09/05/2003 Analyzed: 09/05/2003 18:06
LCSD 2003/09/05-02.64-033 Extracted: 09/05/2003 Analyzed: 09/05/2003 19:33

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	23.8	22.2	25.0	95.2	88.8	7.0	65-165	20		
Benzene	26.0	24.0	25.0	104.0	96.0	8.0	69-129	20		
Toluene	27.3	25.9	25.0	109.2	103.6	5.3	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	459	415	500	91.8	83.0		76-114			
Toluene-d8	496	512	500	99.2	102.4		88-110			

Fuel Oxygenates by 8260B

ACC Environmental Consultants
Attn.: Ed Giacomettl

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Legend and Notes

Analysis Flag

e

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

SEVERN TRENT SERVICES

STL San Francisco

Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 484-1096
E-mail: info@chromalab.com

2003-09-0010

Reference #: 77445

Date 8/28/03 Page 1 of 1

Report To

Attn: ED GIACOMETTI

Company: ACC ENVIRONMENTAL CONSULTANTS

Address: 7977 CAPWELL DRIVE, OAKLAND, CA

P: (510) 638-8400 x 114 E:egiacometti@accenv.com

Bill To: ACC ENVIRONMENTAL

Sampled By: Ed Giacometti

Attn: ED Phone ext: 114

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxyenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	W.E.T (STLC) ☐ TCLP	Hexavalent Chromium pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ TSS	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4					Number of Containers
MW-1	8/27/03	14:30	H2O	HCl/Cold	X																							3
MW-2	↓	14:30	↓	↓	X																							3
MW-3	↓	14:46	↓	↓	X																							3

Project Info.

Project Name: 1220 W. Tennyson

Project#: 6651 - 004.00

PO#:

Credit Card#:

Sample Receipt

of Containers:

Head Space:

Temp: 2.3

Conforms to record:

Other:

TAT: (Std 5 Day) 72h 48h 24h

Report: (Routine) ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF

Special Instructions / Comments:

☐ Global ID _____

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Edward Giacometti		
Signature Time	Signature Time	Signature 1729 Time
ED GIACOMETTI 8/28/03		B Morris 8/29/03
Printed Name Date	Printed Name Date	Printed Name Date
ACC ENVIRONMENTAL CONSULTANTS		STL-SF
Company	Company	Company
1) Received by:	**2) Received by:**	**3) Received by:**
1247		1729
Signature Time	Signature Time	Signature Time
B Morris 8/29/03		M. VILLANUEVA 8/29/03
Printed Name Date	Printed Name Date	Printed Name Date
STL-SF		STL SF
Company	Company	Company

Rev 01/02

STL

STL San Francisco

Sample Receipt Checklist

Submission #:2003- 09 - 0010

Checklist completed by: (initials) CR Date: 09/02/03

Courier name: ☒ STL San Francisco ☐ Client _____

Custody seals intact on shipping container/samples	Yes____ No____	Not Present ✓
Chain of custody present?	Yes ✓	No____
Chain of custody signed when relinquished and received?	Yes ✓	No____
Chain of custody agrees with sample labels?	Yes ✓	No____
Samples in proper container/bottle?	Yes ✓	No____
Sample containers intact?	Yes ✓	No____
Sufficient sample volume for indicated test?	Yes ✓	No____
All samples received within holding time?	Yes ✓	No____
Container/Temp Blank temperature in compliance (4^{o} C ± 2)?	Temp: 2.3 °C Yes ✓	No____
	Ice Present Yes ✓	No____
Water - VOA vials have zero headspace?	No VOA vials submitted____ Yes ✓	No____

(if bubble is present, refer to approximate bubble size and itemize in comments as **S** (small ~O), **M** (medium ~ O) or **L** (large ~ O)

Water - **pH acceptable upon receipt?** ☑ Yes ☐ No

☐ **pH adjusted**– Preservative used: ☐ HNO_3 ☐ HCl ☐ H_2SO_4 ☐ NaOH ☐ ZnOAc –**Lot #(s)** _____

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments: _____

Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (initials) _____ Date: ____/____/03

Client contacted: ☐ Yes ☐ No

Summary of discussion: _____

Corrective Action (per PM/Client): _____