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December 13, 2006

QUARTERLY GROUNDWATER MONITORING REPORT  
OCTOBER 2006 GROUNDWATER SAMPLING  
ASE JOB NO. 3412

at  
Yee Property  
726 Harrison Street  
Oakland, CA 94602

Prepared by:  
AQUA SCIENCE ENGINEERS, INC.  
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## 1.0 INTRODUCTION

### Site Location (Site). See Figure 1

Yee Property  
(Previously Former Chan's Shell Station)  
726 Harrison Street  
Oakland, CA 94602  
(510) 444-6583

### Responsible Party

Peter Yee  
1000 San Antonio Avenue  
Alameda, CA 94501

### Environmental Consulting Firm

Aqua Science Engineers, Inc. (ASE)  
208 W. El Pintado, Suite C  
Danville, CA 94526  
Contact: Robert Kitay, Senior Geologist  
(925) 820-9391

### Agency Review

Alameda County Health  
Care Services Agency (ACHCSA)  
1131 Harbor Bay Pkwy  
Suite 250  
Alameda, CA 94502  
Contact: Mr. Barney Chan  
(510) 567-6700

California Regional Water  
Quality Control Board (RWQCB)  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612  
Contact: Ms. Betty Graham  
(510) 622-2433

The following is a report detailing the results of the October 2006 quarterly groundwater sampling at the Yee Property, previously referred to as the former Chan's Shell Station. This sampling was conducted as required by the ACHCSA and RWQCB. ASE has prepared this report on behalf of Peter Yee, the current responsible party, who purchased the property from Kin Chan. This report is intended to supplement the ASE report: "Report of Soil and Groundwater Assessment" dated January 8, 1999.



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## 2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On October 10, 2006, ASE measured the depth to groundwater in all five site monitoring wells using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. No free-floating hydrocarbons were observed in any site well. ASE coordinated this groundwater sampling with Cambria Environmental Technology, Inc., (Cambria), who is investigating the adjacent property, located at 706 Harrison Street, referred to in this report as the former ARCO station, and groundwater elevation levels were measured on the same day. Groundwater elevation data for both sites are presented in Tables One and Two. A groundwater potentiometric surface map illustrating groundwater elevation contours is presented as Figure 2. The groundwater flow direction below the site is generally to the southwest at a gradient of 0.013 feet/foot.

## 3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

On October 10, 2006, ASE collected groundwater samples from monitoring wells MW-1, MW-2, MW-3, MW-4 and MW-5. Prior to sampling, each well was purged of three well casing volumes of groundwater using disposable polyethylene bailers. Petroleum hydrocarbon odors were noted during the purging and sampling of monitoring wells MW-1, MW-2, MW-4, and MW-5. The parameters pH, temperature, and conductivity were monitored during the well purging, and samples were not collected until these parameters stabilized. Groundwater samples were collected from each well using disposable polyethylene bailers and were decanted from the bottom of the bailers using low-flow emptying devices into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid. The samples were capped without headspace, labeled, and placed in coolers with wet ice for transport to Severn Trent Laboratories (STL) San Francisco of Pleasanton, California (ELAP #2496) under appropriate chain-of-custody documentation. Well sampling field logs are presented in Appendix A.

The well purge water was placed into a 55-gallon steel drum, labeled, and staged on-site for temporary storage until proper off-site disposal could be arranged.

The groundwater samples were analyzed by STL San Francisco for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8260B. The analytical results for this and previous sampling periods are presented in Table Three. The certified analytical report and chain-of-custody documentation are included as Appendix B.



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## 4.0 CONCLUSIONS

- Concentrations of TPH-G, benzene, and MTBE in samples collected from monitoring well MW-1 decreased significantly.
- Concentrations of MTBE decreased in groundwater samples collected from monitoring well MW-2.
- Concentrations of MTBE increased in groundwater samples collected from monitoring well MW-3.
- Concentrations of TPH-G and MTBE increased significantly in groundwater samples collected from monitoring well MW-4.
- Concentrations of TPH-G, BTEX, and MTBE increased significantly in groundwater samples collected from monitoring well MW-5.
- Unless otherwise stated, detected compounds in groundwater samples remain relatively unchanged compared to previous analytical results.

The following groundwater sample concentrations remain in excess of Environmental Screening Levels (ESLs) as presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region dated February 2005.

- Monitoring wells MW-1 contained concentrations of TPH-G, benzene and MTBE in excess of the ESLs.
- Monitoring wells MW-3 contained concentrations of MTBE in excess of the ESLs.
- Monitoring wells MW-4 contained concentrations of TPH-G and MTBE in excess of the ESLs.
- Monitoring well MW-5 contained concentrations of TPH-G, benzene, ethyl benzene, toluene, xylene and MTBE in excess of the ESLs.

## 5.0 RECOMMENDATION

ASE recommends continued groundwater monitoring on a quarterly basis. The next groundwater sampling is scheduled for January 2007.

Additionally, ASE has received approval from the ACHCSA for a workplan to conduct in-situ chemical oxidation of hydrocarbons in the soil and groundwater below the site. The remediation work will begin during the next quarter.



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## 6.0 REPORT LIMITATIONS

The results presented in this report represent the conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the former underground storage tanks and associated plumbing at the site, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CAL-DHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

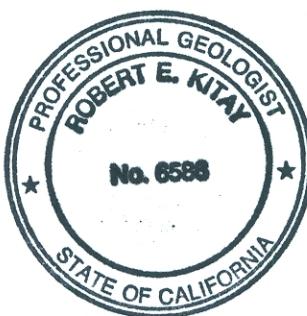
AQUA SCIENCE ENGINEERS, INC.

A handwritten signature in black ink that reads "Michael Rauser".

Michael Rauser  
Project Geologist

A handwritten signature in black ink that reads "Robert E. Kitay".

Robert E. Kitay, P.G., R.E.A.  
Senior Geologist



Attachments: Figures 1 and 2  
Appendices A and B

cc: Mr. Jerry Wickham, Alameda County Health Care Services Agency  
Ms. Betty Graham, RWQCB, San Francisco Bay Region

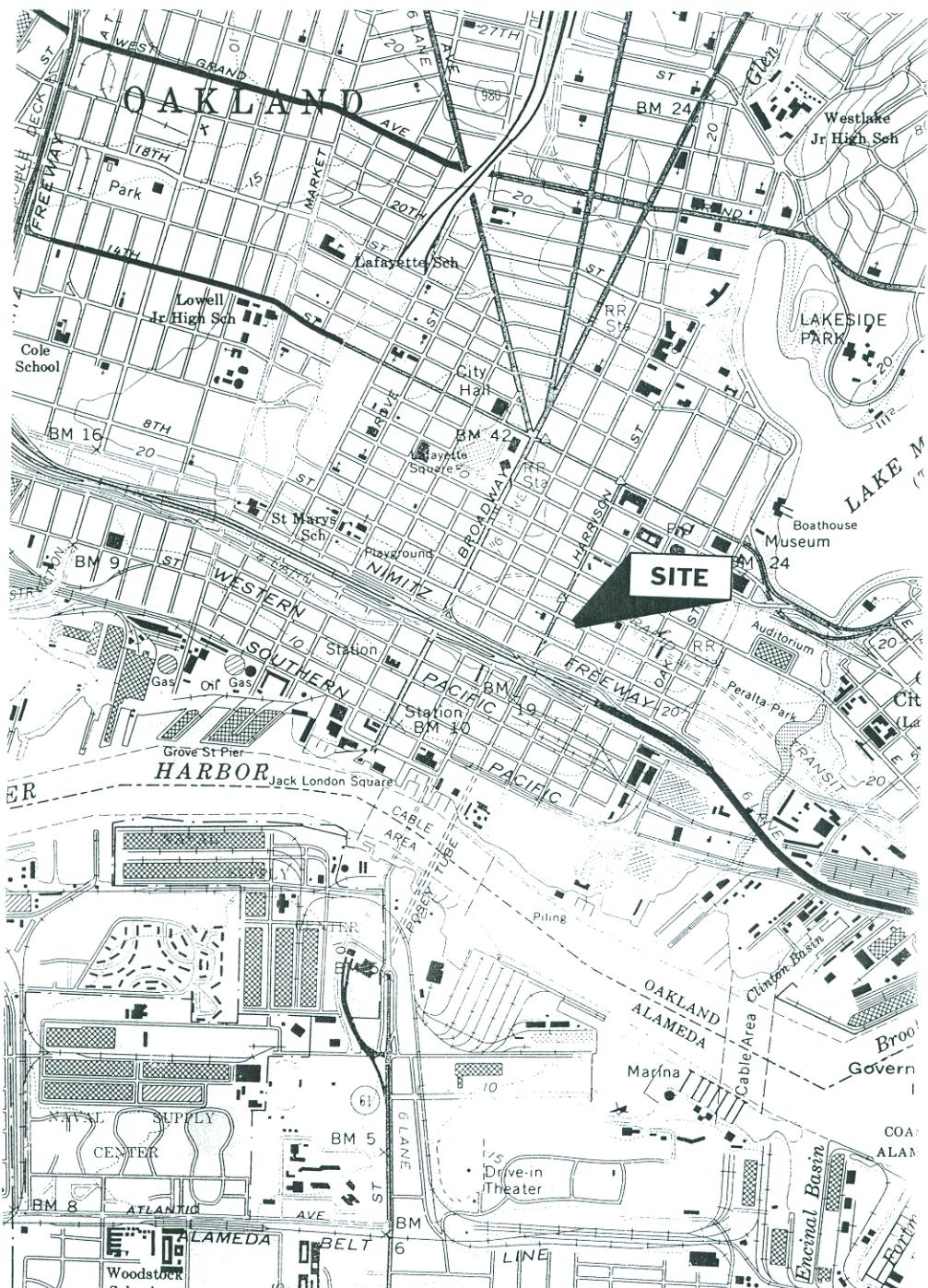


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## **FIGURES**



NORTH



### SITE LOCATION MAP

YEE PROPERTY  
726 HARRISON STREET  
OAKLAND, CALIFORNIA

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Figure 1

# 8TH STREET

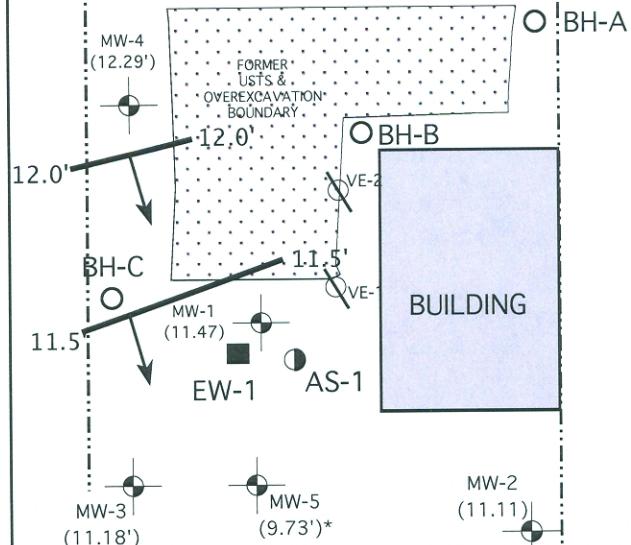


NORTH

## SCALE

1" = 30'

### SUBJECT PROPERTY



FORMER  
USTS/  
OVEREXCAVATIONS

HARRISON STREET

10.5'

ARCO  
MW-7  
(10.47')

10.0'

ARCO  
MW-6  
(9.63')

7TH STREET

ARCO  
MW-5  
(9.63')

11.0'

ARCO  
MW-4  
(10.99')

ARCO  
MW-1  
(9.66')\*

ARCO  
MW-2  
(10.79')

FORMER  
STATION  
10.0'

SIDEWALK

GROUNDWATER ELEVATION  
CONTOUR MAP - 10/16/06

YEE PROPERTY  
726 HARRISON STREET  
OAKLAND, CALIFORNIA

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Figure 2

### LEGEND

Approx. Groundwater Flow Direction



MW-1 ASE Monitoring Well



MW-1 Former ARCO Monitoring Well

(11.47)

Groundwater elevation, relative to MSL



Groundwater elevation contour

\*

Anomalous data - Not used for contouring



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## **TABLES**

**TABLE ONE**  
**Groundwater Elevation Data**  
**Yee Property**  
**726 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-1</b>	12/15/98	31.95*	17.32	14.63
	3/4/99		15.52	16.43
	6/17/99		16.9	15.05
	8/27/99		17.39	14.56
	12/9/99		18.03	13.92
	3/7/00		15.11	16.84
	6/7/00		16.66	15.29
	10/11/00		18.08	13.87
	1/18/01		17.96	13.99
	4/5/01		16.35	15.60
	7/17/01		16.94	15.01
	10/5/01		17.35	11.63
	1/18/02		15.40	13.58
	4/11/02		15.76	13.22
	7/8/02		16.17	12.81
	10/9/02		16.72	12.26
	1/29/03		16.26	12.72
	4/11/03		16.56	12.42
	7/18/03		16.42	12.56
	10/9/03		16.88	12.10
	1/28/04		16.10	12.88
	4/7/04		15.43	13.55
	7/23/04		16.41	12.57
	10/12/04		17.73	11.25
	1/29/05		15.02	13.96
	4/28/05		14.99	13.99
	7/19/05		16.36	12.62
	10/18/05		17.82	11.16
	1/23/06		15.80	13.18
	4/12/06		13.24	15.74
	7/10/06		15.64	13.34
	<b>10/16/06</b>		<b>17.51</b>	<b>11.47</b>
<b>MW-2</b>	12/15/98	32.40*	18.03	14.37
	3/4/99		16.11	16.29
	6/17/99		17.72	14.68
	8/27/99		Inaccessible	
	12/9/99		Inaccessible	
	3/7/00		Inaccessible	
	6/7/00		17.67	14.73
	10/11/00		18.91	13.49
	1/18/01		18.66	13.74
	4/5/01		16.97	15.43
	7/17/01		17.54	14.86
	10/5/01		17.98	11.46
	1/18/02		15.87	13.57
	4/11/02		16.36	13.08
	7/8/02		16.72	12.72
	10/9/02		17.33	12.11
	1/29/03		16.82	12.62
	4/11/03		17.15	12.29
	7/18/03		17.05	12.39
	10/9/03		17.52	11.92
	1/28/04		16.70	12.74
	4/7/04		16.02	13.42
	7/23/04		Inaccessible	
	10/12/04		17.31	12.13
	1/29/05		15.46	13.98
	4/28/05		15.79	13.65
	7/19/05		17.25	12.19
	10/18/05		17.72	11.72
	1/23/05		15.65	13.79
	4/12/06		12.33	17.11
	7/10/06		16.58	12.86
	<b>10/16/06</b>		<b>18.33</b>	<b>11.11</b>

**TABLE ONE**  
**Groundwater Elevation Data**  
**Yee Property**  
**726 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-3</b>	12/15/98	31.61*	17.26	14.35
	3/4/99		15.47	16.14
	6/17/99		16.92	14.69
	8/27/99		17.40	14.21
	12/9/99		18.01	13.60
	3/7/00		16.15	15.46
	6/7/00		16.85	14.76
	10/11/00		18.07	13.54
	1/18/01		17.89	13.72
	4/5/01		16.21	15.40
	7/17/01		16.90	14.71
	10/5/01		17.32	11.32
	1/18/02		15.35	13.29
	4/11/02		15.82	12.82
	7/8/02		16.15	12.49
	10/9/02		16.67	11.97
	1/29/03		16.19	12.45
	4/11/03		16.49	12.15
	7/18/03		16.42	12.22
	10/9/03		16.80	11.84
	1/28/03		15.94	12.70
	4/7/04		15.28	13.36
	7/23/04		16.15	12.49
	10/12/04		16.63	12.01
	1/29/05		16.15	12.49
	4/28/05		14.94	13.70
	7/19/05		16.25	12.39
	10/18/05		16.76	11.88
<b>MW-4</b>	1/23/06		15.81	12.83
	4/12/06		13.22	15.42
	7/10/06		15.49	13.15
	10/16/06		<b>17.46</b>	<b>11.18</b>
	12/15/98	32.53*	17.59	14.94
	3/4/99		15.88	16.65
	6/17/99		17.14	15.39
	8/27/99		17.65	14.88
	12/9/99		18.28	14.25
	3/7/00		15.41	17.12
	6/7/00		17.09	15.44
	10/11/00		18.33	14.20
	1/18/01		18.23	14.30
	4/5/01		16.69	15.84
	7/17/01		17.32	15.21
	10/5/01		17.71	11.87
	1/18/02		15.85	13.73
	4/11/02		16.14	13.44
	7/8/02		16.56	13.02
	10/9/02		17.09	12.49
	1/29/03		16.65	12.93
	4/11/03		16.93	12.65
	7/18/03		16.78	12.80
	10/9/03		17.26	12.32
	1/28/04		16.38	13.20
	4/7/04		15.64	13.94
	7/23/04		16.58	13.00
	10/12/04		Inaccessible	
	1/29/05		14.90	14.68
	4/28/05		15.18	14.40
	7/19/05		16.48	13.10
	10/18/05		16.99	12.59
	1/23/06		15.09	14.49
	4/12/06		13.49	16.09
	7/10/06		14.99	14.59
	10/16/06		<b>17.29</b>	<b>12.29</b>

**TABLE ONE**  
**Groundwater Elevation Data**  
**Yee Property**  
**726 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-5</b>	8/29/01	29.06	17.42	11.64
	1/18/02		15.68	13.38
	4/11/02		16.17	12.89
	7/8/02		16.51	12.55
	10/9/02		17.10	11.96
	1/29/03		16.58	12.48
	4/11/03		16.87	12.19
	7/18/03		16.77	12.29
	10/9/03		17.21	11.85
	1/28/04		16.34	12.72
	4/7/04		15.38	13.68
	7/23/04		16.55	12.51
	10/12/04		17.02	12.04
	1/29/05		15.23	13.83
	4/28/05		15.41	13.65
	7/19/05		16.79	12.27
	10/18/05		17.28	11.78
	1/23/06		15.28	13.78
	4/12/06		13.66	15.40
	7/10/06		16.14	12.92
	<b>10/16/06</b>		<b>19.33</b>	<b>9.73</b>

\* Top of casing elevation relative to arbitrary project datum

**TABLE TWO**  
**Groundwater Elevation Data**  
**Former ARCO Station**  
**706 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation* (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-1</b>	7/18/03	29.15	14.50	14.65
	10/9/03	26.17	13.81	12.36
	1/28/04		13.09	13.08
	4/7/04		14.97	11.20
	7/23/04		14.15	12.02
	10/12/04		16.30	9.87
	4/27/05		13.35	12.82
	7/19/05		14.68	11.49
	10/18/05		15.15	11.02
	1/23/06		13.27	12.90
	4/12/06		12.33	13.84
	7/10/06		14.93	11.24
	<b>10/16/06</b>		<b>16.51</b>	<b>9.66</b>
<b>MW-2</b>	7/18/03	30.51	16.84	13.67
	10/9/03	27.53	16.05	11.48
	1/28/04		15.39	12.14
	4/7/04		16.01	11.52
	7/23/04		15.30	12.23
	10/12/04		17.87	9.66
	4/27/05		14.63	12.90
	7/19/05		15.60	11.93
	10/18/05		16.08	11.45
	1/23/06		14.20	13.33
	4/12/06		12.51	15.02
	7/10/06		14.76	12.77
	<b>10/16/06</b>		<b>16.74</b>	<b>10.79</b>
<b>MW-3</b>	7/18/03	29.77	14.80	14.97
	10/9/03	26.79	14.13	12.66
	1/28/04		13.47	13.32
	4/7/04		15.41	11.38
	7/23/04		14.54	12.25
	10/12/04		16.58	10.21
	4/27/05		13.68	13.11
	7/19/05		15.15	11.64
	10/18/05		15.60	11.19
	1/23/06		11.94	14.85
	4/12/06		11.94	14.85
	7/10/06		14.48	12.31
	<b>10/16/06</b>		<b>16.19</b>	<b>10.60</b>
<b>MW-4</b>	7/18/03	31.18	17.08	14.10
	10/9/03	28.20	16.25	11.95
	1/28/04		15.65	12.55
	4/7/04		16.49	11.71
	7/23/04		15.86	12.34
	10/12/04		18.05	10.15
	4/27/05		14.20	14.00
	7/19/05		16.08	12.12
	10/18/05		16.55	11.65
	1/23/06		14.66	13.54
	4/12/06		12.92	15.28
	7/10/06		15.38	12.82
	<b>10/16/06</b>		<b>17.21</b>	<b>10.99</b>

**TABLE TWO**  
**Groundwater Elevation Data**  
**Former ARCO Station**  
**706 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation* (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-5</b>	7/18/03	28.04	14.28	13.76
	10/9/03	25.07	13.36	11.71
	1/28/04		12.68	12.39
	4/7/04		14.71	10.36
	7/23/04		13.49	11.58
	10/12/04		15.88	9.19
	4/27/05		13.40	11.67
	7/19/05		14.21	10.86
	10/18/05		14.79	10.28
	1/23/06		13.12	11.95
	4/12/06		11.39	13.68
	7/10/06		14.40	10.67
	<b>10/16/06</b>	<b>15.44</b>	<b>9.63</b>	
<b>MW-6</b>	7/18/03	29.10	15.47	13.63
	10/9/03	26.13	14.73	11.40
	1/28/04		14.05	12.08
	4/7/04		14.41	11.72
	7/23/04		15.15	10.98
	10/12/04		17.27	8.86
	4/27/05		14.10	12.03
	7/19/05		15.18	10.95
	10/18/05		15.65	10.48
	1/23/06		14.02	12.11
	4/12/06		12.66	13.47
	7/10/06		14.64	11.49
	<b>10/16/06</b>	<b>16.50</b>	<b>9.63</b>	
<b>MW-7</b>	7/18/03		15.19	14.48
	10/9/03	26.70	14.45	12.25
	1/28/04		13.88	12.82
	4/7/04		15.71	10.99
	7/23/04		14.85	11.85
	10/12/04		16.90	9.80
	4/27/05		13.75	12.95
	7/19/05		14.91	11.79
	10/18/05		15.40	11.30
	1/23/06		13.99	12.71
	4/12/06		12.32	14.38
	7/10/06		14.31	12.39
	<b>10/16/06</b>	<b>16.23</b>	<b>10.47</b>	

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b><u>MW-1</u></b>						
7/3/97	18,000	2,700	350	450	900	7,400
12/5/98	18,000	1,500	270	260	560	14,000
3/4/99	44,000	2,800	400	440	960	43,000
6/17/99	33,000	2,200	250	460	660	25,000
8/27/99	6,000	1,000	97	190	230	14,000/ 16,000*
12/9/99	15,000	1,500	160	220	420	17,000
3/7/00	9,300	1,500	210	66	530	12,000
6/7/00	26,000**	1,700	< 250	360	580	30,000
10/11/00	13,000**	1,600	< 100	140	160	19,000
1/18/01	14,000**	450	< 100	110	230	9,600
4/5/01	38,000	2,200	180	290	590	35,000
7/17/01	35,000**	1,800	< 100	300	170	35,000
10/5/01	17,000	1,500	210	420	790	27,000
1/18/02	18,000	1,500	120	160	220	22,000
4/11/02	41,000	2,700	210	340	380	30,000
7/8/02	36,000	2,800	140	360	300	31,000
10/9/02	30,000	1,700	310	< 100	< 100	19,000
1/29/03	26,000	2,400	< 100	310	520	20,000
4/11/03	22,000	1,700	< 100	270	580	16,000
7/18/03	40,000	3,200	290	480	830	39,000
10/9/03	54,000**	3,300	< 130	350	310	49,000
1/28/04	26,000***	3,000	310	420	800	31,000
4/7/04	33,000***	2,800	130	310	310	39,000
7/23/04	56,000***	4,500	< 250	390	< 500	53,000
10/12/04	25,000***	1,400	< 250	< 250	< 500	25,000
1/29/05	24,000	1,600	< 100	160	< 200	19,000
4/28/05	< 10,000	2,000	< 100	160	100	34,000
7/19/05	37,000	2,100	83	210	230	28,000
10/18/05	37,000	1,300	< 250	< 250	< 250	23,000
1/24/06	23,000	780	< 100	160	260	11,000
4/12/06	11,000	1,500	87	360	670	17,000
7/10/06	72,000	4,700	< 250	350	< 500	66,000
<b>10/16/06</b>	<b>26,000</b>	<b>1,600</b>	<b>&lt; 250</b>	<b>330</b>	<b>&lt; 500</b>	<b>22,000</b>

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b><u>MW-2</u></b>						
12/5/98	< 50	< 0.5	< 0.52	< 0.53	< 0.54	< 5
3/4/99	Inaccessible due to car parked over well					
6/17/99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
8/27/99	Inaccessible due to car parked over well					
12/9/99	Inaccessible due to car parked over well					
3/7/00	Inaccessible due to car parked over well					
6/7/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/11/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
1/18/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
4/5/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
7/17/01	No longer sampled					
7/10/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	4.5
10/16/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-3</b>						
12/5/98	6,500***	< 50	50	60	502	3,900
3/4/99	2,800	< 25	< 25	< 25	< 25	1,600
6/17/99	1,000	< 10	< 10	< 10	< 10	1,400
8/27/99	230	< 0.5	0.51	0.5	1	1,500/ 1,600*
12/9/99	870**	< 0.5	< 0.5	< 0.5	< 0.5	2,100
3/7/00	150**	4	< 0.5	< 0.5	< 0.5	830
6/7/00	140**	< 0.5	< 0.5	< 0.5	< 0.5	1,100
10/11/00	620**	< 5.0	< 5.0	< 5.0	< 5.0	1,500
1/18/01	1,200**	< 5.0	< 5.0	< 5.0	< 5.0	1,000
4/5/01	1,700**	< 5.0	< 5.0	< 5.0	< 5.0	1,900
7/17/01	1,400**	< 10	< 10	< 10	< 10	1,700
10/5/01	< 1,000	< 10	< 10	< 10	< 10	1,700
1/18/02	1,600	26	20	16	54	2,100
4/11/02	2,600	21	16	< 10	21	2,300
7/8/02	2,800	< 10	< 10	< 10	< 10	3,800
10/9/02	6,000	< 50	< 50	< 50	< 50	4,900
1/29/03	1,800	< 10	< 10	< 10	< 10	2,300
4/11/03	2,900	< 25	< 25	< 25	< 25	3,100
7/18/03	3,400	< 10	< 10	< 10	< 10	3,200
10/9/03	2,300	< 10	< 10	< 10	< 10	2,700
1/28/03	1,700**	< 10	< 10	< 10	< 10	2,900
4/7/04	2,700**	< 10	< 10	< 10	< 20	3,600
7/23/04	4,200**	< 25	< 25	< 25	< 50	4,900
10/12/04	5,000**	< 50	< 50	< 50	< 100	5,900
1/29/05	< 1,000	< 10	< 10	< 10	< 20	3,100
4/28/05	< 200	< 2.0	< 2.0	< 2.0	< 2.0	1,300
7/19/05	4,400	< 20	< 20	< 20	< 40	3,000
10/18/05	18,000	< 50	< 50	< 50	< 50	6,800
1/24/06	17,000	< 100	< 100	< 100	< 200	7,000
4/12/06	< 200	< 2.0	< 2.0	< 2.0	< 2.0	7,800
7/10/06	11,000	< 100	< 100	< 100	< 200	12,000
10/16/06	< 10,000	< 100	< 100	< 100	< 200	17,000

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b><u>MW-2</u></b>						
12/5/98	< 50	< 0.5	< 0.52	< 0.53	< 0.54	< 5
3/4/99	Inaccessible due to car parked over well					
6/17/99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
8/27/99	Inaccessible due to car parked over well					
12/9/99	Inaccessible due to car parked over well					
3/7/00	Inaccessible due to car parked over well					
6/7/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/11/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
1/18/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
4/5/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
7/17/01	No longer sampled					
7/10/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	4.5
10/16/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-4</b>						
12/5/98	880	3	< 0.5	< 0.52	< 0.53	950
3/4/99	3,800	< 25	< 25	< 25	< 25	3,700
6/17/99	2,700	< 25	< 25	< 25	< 25	2,700
8/27/99	440	4.7	1.1	0.58	1.3	1,600/ 1,700*
12/9/99	1,100**	< 2.5	< 2.5	< 2.5	< 2.5	1,700
3/7/00	< 250	< 2.5	< 2.5	< 2.5	< 2.5	1,700
6/7/00	530**	8.8	< 2.5	< 2.5	< 2.5	440
10/11/00	700**	3.9	< 2.5	< 2.5	< 2.5	680
1/18/01	2,000**	< 2.5	< 2.5	< 2.5	< 2.5	780
4/5/01	810**	< 2.5	< 2.5	< 2.5	< 2.5	620
7/17/01	880**	< 2.5	< 2.5	< 2.5	< 2.5	570
10/5/01	550**	< 2.5	< 2.5	< 2.5	< 2.5	710
1/18/02	960**	< 5.0	< 5.0	< 5.0	< 5.0	1,300
4/11/02	1,100**	< 5.0	< 5.0	< 5.0	< 5.0	550
7/8/02	1,200**	< 5.0	< 5.0	< 5.0	< 5.0	890
10/9/02	1,300**	< 5.0	< 5.0	< 5.0	< 5.0	880
1/29/03	530**	< 1.0	< 1.0	< 1.0	< 1.0	190
4/11/03	690**	< 2.5	< 2.5	< 2.5	< 2.5	310
7/18/03	1,600**	< 10	< 10	< 10	< 10	1,300
10/9/03	1500***	< 10	< 10	< 10	< 10	1,400
1/28/04	1,200**	< 10	< 10	< 10	< 10	1,900
4/7/04	1,900**	< 10	< 10	< 10	< 20	2,200
7/23/04	1,800**	< 10	< 10	< 10	< 20	1,600
10/12/04	Inaccessible due to car parked over well					
1/29/05	< 1,300	< 13	< 13	< 13	< 25	3,900
4/28/05	510	< 1.5	< 1.5	< 1.5	< 1.5	510
7/19/05	5,400	< 50	< 50	< 50	< 100	2,700
10/18/05	10,000	< 50	< 50	< 50	< 50	9,000
1/24/06	10,000	< 100	< 100	< 100	< 200	8,300
4/12/06	1,900	< 10	< 10	< 10	< 20	2,200
7/10/06	750	5.4	< 5.0	< 5.0	< 10	790
10/16/06	2,400	< 10	< 10	< 10	< 20	2,200

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-5</b>						
8/29/01	14,000	1,300	470	230	800	14,000
1/18/02	24,000	3,200	1,300	390	1,500	5,700
4/11/02	23,000	2,700	980	38	950	4,300
7/8/02	19,000	3,300	25	360	1,100	2,100
10/9/02	24,000	2,800	990	360	820	2,400
1/29/03	17,000	2,100	1,400	380	1,400	< 250
4/11/03	26,000	2,900	2,200	590	2,200	630
7/18/03	26,000	3,500	1,700	480	1,300	1,300
10/9/03	27,000	3,800	1,900	510	1,700	1,200
1/28/04	29,000	4,800	2,900	770	2,300	3,300
4/7/04	23,000	4,400	2,700	720	2,200	1,700
7/23/04	29,000	5,200	2,200	810	1,400	2,200
10/12/04	26,000	4,300	2,000	670	1,300	2,200
1/29/05	29,000	4,600	2,500	750	1,400	2,200
10/9/03	5,700**	500	28	53	35	3,600
1/28/04	17,000***	1,600	90	250	280	9,700
4/7/04			No longer sampled			
1/24/06	21,000	1,800	1,200	270	820	13,000
7/10/06	45,000	3,700	2,600	650	1,800	23,000
<b>10/16/06</b>	<b>66,000</b>	<b>4,200</b>	<b>3,300</b>	<b>800</b>	<b>2,100</b>	<b>35,000</b>
ESL	100	1	40	30	20	1,800

Notes:

Most current data is in **Bold**

\* Indicates EPA Method 8260

Concentrations separated by a "/" indicate results by both EPA Methods 8020/8260

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (February 2005)" document prepared by the

Non-detectable concentrations noted by the less than sign (<) followed by the laboratory method reporting limit.



Aqua Science Engineers, Inc. 208 West El Pintado, Suite C, Danville, CA 94526  
(925) 820-9391 - Fax (925) 837-4853 - [www.aquascienceengineers.com](http://www.aquascienceengineers.com)

## **APPENDIX A**

### **Well Sampling Field Logs**



Aqua Science Engineers, Inc. 208 West El Pintado, Suite C, Danville, CA 94526  
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## **APPENDIX B**

Certified Analytical Report  
and  
Chain of Custody Documentation

## AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME Yee

JOB NUMBER

DATE OF SAMPLING 10-16-06WELL ID. MW-1SAMPLER MLRTOTAL DEPTH OF WELL 27.2WELL DIAMETER 2DEPTH TO WATER PRIOR TO PURGING 17.5PRODUCT THICKNESS 0DEPTH OF WELL CASING IN WATER 9.69NUMBER OF GALLONS PER WELL CASING VOLUME 1.5NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 4.6EQUIPMENT USED TO PURGE WELL BailerTIME EVACUATION STARTED 700TIME EVACUATION COMPLETED 715TIME SAMPLES WERE COLLECTED 720DID WELL GO DRY NoAFTER HOW MANY GALLONS -VOLUME OF GROUNDWATER PURGED 5.0SAMPLING DEVICE BailerSAMPLE COLOR clearODOR/SEDIMENT Strong O/N: Sslight sheenCHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
	<u>67.2</u>	<u>7.05</u>	<u>710</u>
	<u>67.4</u>	<u>6.81</u>	<u>742</u>
	<u>67.3</u>	<u>6.73</u>	<u>758</u>

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-1</u>	<u>3</u>	<u>VDA</u>		<u>HCl</u>

## AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME

Yee

JOB NUMBER

DATE OF SAMPLING

10-16-06

WELL ID.

MW-2

SAMPLER

MLR

TOTAL DEPTH OF WELL

28.0

WELL DIAMETER

2

DEPTH TO WATER PRIOR TO PURGING

19.33

PRODUCT THICKNESS

0

DEPTH OF WELL CASING IN WATER

9.67

NUMBER OF GALLONS PER WELL CASING VOLUME

1.5

NUMBER OF WELL CASING VOLUMES TO BE REMOVED

3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING

4.6

EQUIPMENT USED TO PURGE WELL

Bailer

TIME EVACUATION STARTED

0755

TIME EVACUATION COMPLETED

0805

TIME SAMPLES WERE COLLECTED

0810

DID WELL GO DRY

No

AFTER HOW MANY GALLONS

—

VOLUME OF GROUNDWATER PURGED

5.0

SAMPLING DEVICE

Bailer

SAMPLE COLOR

clear      brn

ODOR/SEDIMENT N/A      0 / Brn      Soden†

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	67.3	6.49	358
2	67.2	6.44	325
3	67.0	6.42	298

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-2	3	VVA	HQ	

## AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME  
Yee

JOB NUMBER

DATE OF SAMPLING 10-16-06

WELL ID. MW-3

SAMPLER MLR

TOTAL DEPTH OF WELL 29.2

WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 17.46

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 11.74

NUMBER OF GALLONS PER WELL CASING VOLUME 1.8

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5.6

EQUIPMENT USED TO PURGE WELL Bailer

TIME EVACUATION STARTED 615

TIME EVACUATION COMPLETED 625

TIME SAMPLES WERE COLLECTED 630

DID WELL GO DRY No

AFTER HOW MANY GALLONS -

VOLUME OF GROUNDWATER PURGED 6.0

SAMPLING DEVICE

SAMPLE COLOR Clear / brown tint

ODOR/SEDIMENT N: O / N: S

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	69.3	6.81	598
2	68.4	6.62	609
3	68.1	6.58	622

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-3	3	VDA		HCl

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME

Yee

JOB NUMBER

DATE OF SAMPLING

10-16-06

WELL ID.

MW-4

SAMPLER

MLR

TOTAL DEPTH OF WELL

29.7

WELL DIAMETER

2

DEPTH TO WATER PRIOR TO PURGING

17.29

PRODUCT THICKNESS

0

DEPTH OF WELL CASING IN WATER

NUMBER OF GALLONS PER WELL CASING VOLUME

1.2

NUMBER OF WELL CASING VOLUMES TO BE REMOVED

3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING

3.7

EQUIPMENT USED TO PURGE WELL

~~Bucket~~ Bucket

TIME EVACUATION STARTED

635

TIME EVACUATION COMPLETED

645

TIME SAMPLES WERE COLLECTED

650

DID WELL GO DRY

No

AFTER HOW MANY GALLONS

—

VOLUME OF GROUNDWATER PURGED

4.0

SAMPLING DEVICE

SAMPLE COLOR

clear

ODOR/SEDIMENT

Slight O / No S

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	68.4	6.98	725
2	68.2	6.60	785
3	68.0	6.52	820

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-4	3	VOA		HQ

## AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME

Yee

JOB NUMBER

DATE OF SAMPLING

10-16-06

WELL ID.

MW-5

SAMPLER

MLR

TOTAL DEPTH OF WELL

28.5

WELL DIAMETER

2

DEPTH TO WATER PRIOR TO PURGING

19.33

PRODUCT THICKNESS

0

DEPTH OF WELL CASING IN WATER

9.17

NUMBER OF GALLONS PER WELL CASING VOLUME

1.4

NUMBER OF WELL CASING VOLUMES TO BE REMOVED

3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING

4.4

EQUIPMENT USED TO PURGE WELL

Bailev

TIME EVACUATION STARTED

725

TIME EVACUATION COMPLETED

735

TIME SAMPLES WERE COLLECTED

750

DID WELL GO DRY

No

AFTER HOW MANY GALLONS

—

VOLUME OF GROUNDWATER PURGED

5.0

SAMPLING DEVICE

Bailev

SAMPLE COLOR

clear / gray tint

ODOR/SEDIMENT strong O/N<sub>2</sub> SedCHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	69.1	6.64	1252
2	69.2	6.61	1229
3	67.8	6.59	1217

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-5	3	VCA		HCl

## ANALYTICAL REPORT

Job Number: 720-6029-1

Job Description: Yee Oakland

For:  
Aqua Science Engineers Inc  
208 West El Pintado Road  
Danville, CA 94526

Attention: Mr. Mike Rauser

*Melissa Brewer*

---

Melissa Brewer  
Project Manager I  
[mbrewer@stl-inc.com](mailto:mbrewer@stl-inc.com)  
10/25/2006

cc: Dave Allen

Project Manager: Melissa Brewer

## EXECUTIVE SUMMARY - Detections

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-6029-1	MW-1				
Benzene		1600	250	ug/L	8260B
Ethylbenzene		330	250	ug/L	8260B
MTBE		22000	250	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		26000	25000	ug/L	8260B
720-6029-3	MW-3				
MTBE		17000	100	ug/L	8260B
720-6029-4	MW-4				
MTBE		2200	10	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		2400	1000	ug/L	8260B
720-6029-5	MW-5				
Benzene		4200	200	ug/L	8260B
Ethylbenzene		800	200	ug/L	8260B
Toluene		3300	200	ug/L	8260B
MTBE		35000	200	ug/L	8260B
Xylenes, Total		2100	400	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		66000	20000	ug/L	8260B

## METHOD SUMMARY

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

Description	Lab Location	Method	Preparation Method
<b>Matrix:</b> Water			
Volatile Organic Compounds by GC/MS Purge-and-Trap	STL SF STL SF	SW846 8260B SW846 5030B	

### LAB REFERENCES:

STL SF = STL San Francisco

### METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986  
And Its Updates.

## SAMPLE SUMMARY

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-6029-1	MW-1	Water	10/16/2006 0720	10/18/2006 1025
720-6029-2	MW-2	Water	10/16/2006 0810	10/18/2006 1025
720-6029-3	MW-3	Water	10/16/2006 0630	10/18/2006 1025
720-6029-4	MW-4	Water	10/16/2006 0650	10/18/2006 1025
720-6029-5	MW-5	Water	10/16/2006 0750	10/18/2006 1025

## Analytical Data

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

Client Sample ID: MW-1

Lab Sample ID: 720-6029-1

Date Sampled: 10/16/2006 0720

Client Matrix: Water

Date Received: 10/18/2006 1025

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B Analysis Batch: 720-14466  
Preparation: 5030B  
Dilution: 500  
Date Analyzed: 10/19/2006 1924  
Date Prepared: 10/19/2006 1924

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\10  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1600		250
Ethylbenzene	330		250
Toluene	ND		250
MTBE	22000		250
Xylenes, Total	ND		500
Gasoline Range Organics (GRO)-C5-C12	26000		25000
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	102		77 - 121
1,2-Dichloroethane-d4 (Surr)	111		73 - 130

## Analytical Data

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

Client Sample ID: MW-2

Lab Sample ID: 720-6029-2

Date Sampled: 10/16/2006 0810

Client Matrix: Water

Date Received: 10/18/2006 1025

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	720-14644	Instrument ID:	Varian 3900C
Preparation:	5030B			Lab File ID:	c:\saturnws\data\200610\10
Dilution:	1.0			Initial Weight/Volume:	40 mL
Date Analyzed:	10/23/2006 1649			Final Weight/Volume:	40 mL
Date Prepared:	10/23/2006 1649				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	107		77 - 121
1,2-Dichloroethane-d4 (Surr)	117		73 - 130

## Analytical Data

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

Client Sample ID: MW-3

Lab Sample ID: 720-6029-3

Client Matrix: Water

Date Sampled: 10/16/2006 0630

Date Received: 10/18/2006 1025

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	720-14499	Instrument ID:	Saturn 3900B
Preparation:	5030B			Lab File ID:	c:\saturnws\data\200610\10
Dilution:	200			Initial Weight/Volume:	40 mL
Date Analyzed:	10/20/2006 1426			Final Weight/Volume:	40 mL
Date Prepared:	10/20/2006 1426				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		100
Ethylbenzene	ND		100
Toluene	ND		100
MTBE	17000		100
Xylenes, Total	ND		200
Gasoline Range Organics (GRO)-C5-C12	ND		10000
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	99		77 - 121
1,2-Dichloroethane-d4 (Surr)	89		73 - 130

## Analytical Data

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

Client Sample ID: MW-4

Lab Sample ID: 720-6029-4

Client Matrix: Water

Date Sampled: 10/16/2006 0650

Date Received: 10/18/2006 1025

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	720-14644	Instrument ID:	Varian 3900C
Preparation:	5030B			Lab File ID:	c:\saturnws\data\200610\10
Dilution:	20			Initial Weight/Volume:	40 mL
Date Analyzed:	10/23/2006 1903			Final Weight/Volume:	40 mL
Date Prepared:	10/23/2006 1903				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		10
Ethylbenzene	ND		10
Toluene	ND		10
MTBE	2200		10
Xylenes, Total	ND		20
Gasoline Range Organics (GRO)-C5-C12	2400		1000
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	102		77 - 121
1,2-Dichloroethane-d4 (Surr)	117		73 - 130

## Analytical Data

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

Client Sample ID: MW-5

Lab Sample ID: 720-6029-5

Client Matrix: Water

Date Sampled: 10/16/2006 0750

Date Received: 10/18/2006 1025

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	720-14644	Instrument ID:	Varian 3900C
Preparation:	5030B			Lab File ID:	c:\saturnws\data\200610\10
Dilution:	400			Initial Weight/Volume:	40 mL
Date Analyzed:	10/23/2006 1930			Final Weight/Volume:	40 mL
Date Prepared:	10/23/2006 1930				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	4200		200
Ethylbenzene	800		200
Toluene	3300		200
MTBE	35000		200
Xylenes, Total	2100		400
Gasoline Range Organics (GRO)-C5-C12	66000		20000
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	106		77 - 121
1,2-Dichloroethane-d4 (Surr)	115		73 - 130

## DATA REPORTING QUALIFIERS

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

<b><u>Lab Section</u></b>	<b><u>Qualifier</u></b>	<b><u>Description</u></b>
GC/MS VOA	F	MS or MSD exceeds the control limits

## Quality Control Results

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:720-14466</b>					
LCS 720-14466/2	Lab Control Spike	T	Water	8260B	
LCSD 720-14466/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-14466/3	Method Blank	T	Water	8260B	
720-6029-1	MW-1	T	Water	8260B	
<b>Analysis Batch:720-14499</b>					
LCS 720-14499/2	Lab Control Spike	T	Water	8260B	
LCSD 720-14499/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-14499/3	Method Blank	T	Water	8260B	
720-6029-3	MW-3	T	Water	8260B	
<b>Analysis Batch:720-14644</b>					
LCS 720-14644/2	Lab Control Spike	T	Water	8260B	
LCSD 720-14644/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-14644/3	Method Blank	T	Water	8260B	
720-6029-2	MW-2	T	Water	8260B	
720-6029-C-3 MSMS	Matrix Spike	T	Water	8260B	
720-6029-C-3 MSDMSD	Matrix Spike Duplicate	T	Water	8260B	
720-6029-4	MW-4	T	Water	8260B	
720-6029-5	MW-5	T	Water	8260B	

#### Report Basis

T = Total

## Quality Control Results

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

**Method Blank - Batch: 720-14466****Method: 8260B****Preparation: 5030B**

Lab Sample ID: MB 720-14466/3

Analysis Batch: 720-14466

Instrument ID: Varian 3900C

Client Matrix: Water

Prep Batch: N/A

Lab File ID: c:\saturnws\data\200610\1\

Dilution: 1.0

Units: ug/L

Initial Weight/Volume: 40 mL

Date Analyzed: 10/19/2006 1123

Final Weight/Volume: 40 mL

Date Prepared: 10/19/2006 1123

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	% Rec	Acceptance Limits	
Toluene-d8 (Surr)	92	77 - 121	
1,2-Dichloroethane-d4 (Surr)	107	73 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

### Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-14466

Method: 8260B  
Preparation: 5030B

LCS Lab Sample ID: LCS 720-14466/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/19/2006 0936  
Date Prepared: 10/19/2006 0936

Analysis Batch: 720-14466  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\101  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-14466/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/19/2006 1003  
Date Prepared: 10/19/2006 1003

Analysis Batch: 720-14466  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\101  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	104	102	69 - 129	2	25		
Toluene	110	113	70 - 130	3	25		
MTBE	119	121	65 - 165	2	25		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	103		104		77 - 121		
1,2-Dichloroethane-d4 (Surr)	99		103		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

### Method Blank - Batch: 720-14499

Lab Sample ID: MB 720-14499/3

Client Matrix: Water

Dilution: 1.0

Date Analyzed: 10/20/2006 1121

Date Prepared: 10/20/2006 1121

Analysis Batch: 720-14499

Prep Batch: N/A

Units: ug/L

### Method: 8260B

### Preparation: 5030B

Instrument ID: Saturn 3900B

Lab File ID: c:\saturnws\data\200610\10

Initial Weight/Volume: 40 mL

Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	% Rec	Acceptance Limits	
Toluene-d8 (Surr)	99	77 - 121	
1,2-Dichloroethane-d4 (Surr)	82	73 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

### Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-14499

LCS Lab Sample ID: LCS 720-14499/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/20/2006 0941  
Date Prepared: 10/20/2006 0941

Analysis Batch: 720-14499  
Prep Batch: N/A  
Units: ug/L

**Method: 8260B**  
**Preparation: 5030B**

Instrument ID: Saturn 3900B  
Lab File ID: c:\saturnws\data\200610\1\  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-14499/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/20/2006 1006  
Date Prepared: 10/20/2006 1006

Analysis Batch: 720-14499  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Saturn 3900B  
Lab File ID: c:\saturnws\data\200610\102\  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	93	101	69 - 129	8	25		
Toluene	90	98	70 - 130	9	25		
MTBE	87	96	65 - 165	10	25		
Surrogate		LCS % Rec		LCSD % Rec		Acceptance Limits	
Toluene-d8 (Surr)		97		94		77 - 121	
1,2-Dichloroethane-d4 (Surr)		94		96		73 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

### Method Blank - Batch: 720-14644

Lab Sample ID: MB 720-14644/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/23/2006 1222  
Date Prepared: 10/23/2006 1222

Analysis Batch: 720-14644  
Prep Batch: N/A  
Units: ug/L

**Method: 8260B**  
**Preparation: 5030B**

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\10  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	% Rec	Acceptance Limits	
Toluene-d8 (Surr)	113	77 - 121	
1,2-Dichloroethane-d4 (Surr)	118	73 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

### Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-14644

Method: 8260B  
Preparation: 5030B

LCS Lab Sample ID: LCS 720-14644/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/23/2006 1035  
Date Prepared: 10/23/2006 1035

Analysis Batch: 720-14644  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-14644/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/23/2006 1102  
Date Prepared: 10/23/2006 1102

Analysis Batch: 720-14644  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\102(Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Benzene	97	99	69 - 129	3	25	
Toluene	104	105	70 - 130	0	25	
MTBE	96	107	65 - 165	11	25	
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
Toluene-d8 (Surr)	108		107		77 - 121	
1,2-Dichloroethane-d4 (Surr)	102		106		73 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Aqua Science Engineers Inc

Job Number: 720-6029-1

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 720-14644

Method: 8260B  
Preparation: 5030B

MS Lab Sample ID: 720-6029-C-3 MS      Analysis Batch: 720-14644  
Client Matrix: Water      Prep Batch: N/A  
Dilution: 200  
Date Analyzed: 10/23/2006 1810  
Date Prepared: 10/23/2006 1810

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\1  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

MSD Lab Sample ID: 720-6029-C-3 MSD      Analysis Batch: 720-14644  
Client Matrix: Water      Prep Batch: N/A  
Dilution: 200  
Date Analyzed: 10/23/2006 1837  
Date Prepared: 10/23/2006 1837

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\1C  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	111	118	69 - 129	6	20		
Toluene	100	119	70 - 130	17	20		
MTBE	89	249	65 - 165	29	20		F
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	98		111		77 - 121		
1,2-Dichloroethane-d4 (Surr)	109		115		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Aqua Science Engineers, Inc.  
208 W. El Pintado Road  
Danville, CA 94526  
(925) 820-9391  
FAX (925) 837-4853

~~720-6029~~

# Chain of Custody

18

SAMPLER (SIGNATURE) <i>M. R.</i>		PROJECT NAME Yee Property		PAGE
		ADDRESS 726 Harrison St., Oakland, CA		JOB NO
ANALYSIS REQUEST				
SPECIAL INSTRUCTIONS:				
SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY
MW-1	10-16-06	720	W	<input checked="" type="checkbox"/>
MW-2		810		<input checked="" type="checkbox"/>
MW-3		630		<input checked="" type="checkbox"/>
MW-4		650		<input checked="" type="checkbox"/>
MW-5		750		<input checked="" type="checkbox"/>
RELINQUISHED BY: <i>M. R.</i> (signature)	RECEIVED BY: <i>B. Thomas</i> (signature)	RELINQUISHED BY: <i>B. Thomas</i> (signature)	RECEIVED BY LABORATORY: <i>4/25/06</i> (signature)	COMMENTS: <i>10/18/06</i>
(printed name) D. ALLEN (date)	(printed name) Bryan Thomas (date) 10/18/06	(printed name) Bryan Thomas (date) 10/18/06	(printed name) Bryan Thomas (date) 10/18/06	TURNAROUND 10/18/06
Company-ASE, INC.	Company- STR-SF	Company- STR-SF	Company- STR-SF	STL-SF STANDARD OTHER:



Aqua Science Engineers, Inc. 208 West El Pintado, Suite C, Danville, CA 94526  
(925) 820-9391 - Fax (925) 837-4853 - [www.aquascienceengineers.com](http://www.aquascienceengineers.com)

## **APPENDIX C**

CAMBRIA Certified Analytical Report  
and  
Chain of Custody Documentation



**McCampbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: [www.mccampbell.com](http://www.mccampbell.com) E-mail: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: 877-252-9262 Fax: 925-252-9269

Cambria Env. Technology  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #230-0116; BoGin	Date Sampled: 07/10/06
		Date Received: 07/11/06
	Client Contact: Matt Meyers	Date Reported: 07/18/06
	Client P.O.:	Date Completed: 07/18/06

**WorkOrder: 0607115**

July 18, 2006

Dear Matt:

Enclosed are:

- 1). the results of 7 analyzed samples from your #230-0116; BoGin project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager



## McCampbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: [www.mccampbell.com](http://www.mccampbell.com) E-mail: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: 877-252-9262 Fax: 925-252-9269

When Quality Counts		
Cambria Env. Technology  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #230-0116; BoGin	Date Sampled: 07/10/06
		Date Received: 07/11/06
	Client Contact: Matt Meyers	Date Extracted: 07/14/06-07/15/06
	Client P.O.:	Date Analyzed: 07/14/06-07/15/06

## Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0607115

\* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.



## **McCampbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: [www.mccampbell.com](http://www.mccampbell.com) E-mail: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: 877-252-9262 Fax: 925-252-9269

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #230-0116; BoGin	Date Sampled: 07/10/06
		Date Received: 07/11/06
	Client Contact: Matt Meyers	Date Extracted: 07/14/06-07/18/06
	Client P.O.:	Date Analyzed: 07/14/06-07/18/06

## Methyl tert-Butyl Ether\*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 0607115

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	0.5	µg/L
	S	NA	NA

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



**McCampbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
 Web: [www.mccampbell.com](http://www.mccampbell.com) E-mail: [main@mccampbell.com](mailto:main@mccampbell.com)  
 Telephone: 877-252-9262 Fax: 925-252-9269

## QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0607115

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 22580			Spiked Sample ID: 0607086-020A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) <sup>E</sup>	ND	60	87.6	101	13.9	83.3	83.4	0.0731	70 - 130	70 - 130
MTBE	300	10	NR	NR	NR	95.2	97.4	2.25	70 - 130	70 - 130
Benzene	ND	10	80.8	98.7	19.9	97.1	96.2	0.855	70 - 130	70 - 130
Toluene	ND	10	71.3	89.7	22.8	98.3	96.2	2.11	70 - 130	70 - 130
Ethylbenzene	ND	10	85.9	95.8	11.0	99.3	98	1.36	70 - 130	70 - 130
Xylenes	ND	30	80.7	86.3	6.79	100	100	0	70 - 130	70 - 130
%SS:	103	10	98	102	3.99	96	97	1.12	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

### BATCH 22580 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0607115-001A	7/10/06 4:50 PM	7/14/06	7/14/06 5:23 AM	0607115-001A	7/10/06 4:50 PM	7/14/06	7/14/06 10:10 PM
0607115-002A	7/10/06 5:25 PM	7/14/06	7/14/06 5:55 AM	0607115-003A	7/10/06 3:40 PM	7/14/06	7/14/06 10:00 AM
0607115-003A	7/10/06 3:40 PM	7/15/06	7/15/06 5:52 AM	0607115-004A	7/10/06 4:15 PM	7/14/06	7/14/06 6:47 AM
0607115-004A	7/10/06 4:15 PM	7/15/06	7/15/06 6:21 AM	0607115-005A	7/10/06 2:00 PM	7/14/06	7/14/06 10:34 AM
0607115-006A	7/10/06 2:30 PM	7/14/06	7/14/06 11:08 AM	0607115-007A	7/10/06 3:05 PM	7/14/06	7/14/06 11:41 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

<sup>E</sup> TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**McCampbell Analytical, Inc.**

"When Quality Counts"

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 Web: [www.mccampbell.com](http://www.mccampbell.com) E-mail: [main@mccampbell.com](mailto:main@mccampbell.com)  
 Telephone: 877-252-9262 Fax: 925-252-9269

## QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0607115

EPA Method: SW8260B		Extraction: SW5030B			BatchID: 22581			Spiked Sample ID: 0607100-001A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
Methyl-t-butyl ether (MTBE)	ND	10	118	122	3.46	122	119	2.07	70 - 130	70 - 130
%SSI:	95	10	84	82	2.18	84	86	1.81	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

### BATCH 22581 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0607115-001B	7/10/06 4:50 PM	7/15/06	7/15/06 3:19 AM	0607115-002B	7/10/06 5:25 PM	7/14/06	7/14/06 5:48 AM
0607115-003B	7/10/06 3:40 PM	7/15/06	7/15/06 4:03 AM	0607115-004B	7/10/06 4:15 PM	7/18/06	7/18/06 9:38 AM
0607115-006B	7/10/06 2:30 PM	7/15/06	7/15/06 5:31 AM	0607115-007B	7/10/06 3:05 PM	7/14/06	7/14/06 8:50 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (\text{MS-Sample}) / (\text{Amount Spiked})$ ; RPD =  $100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification N° 1644

QA/QC Officer

# McCormick Analytical, Inc.



110 Second Avenue South, #D7  
Pacheco, CA 94553-5560  
(925) 798-1620

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0607115

ClientID: CETE

EDF: YES

**Report to:**

Matt Meyers  
Cambria Env. Technology  
5900 Hollis St, Suite A  
Emeryville, CA 94608

TEL: (510) 420-0700  
FAX: (510) 420-9170  
ProjectNo: #230-0116; BoGin  
PO:

**Bill to:**

Accounts Payable  
Cambria Env. Technology  
5900 Hollis St, Ste. A  
Emeryville, CA 94608

Requested TAT: 5 days  
  
*Date Received:* 07/11/2006  
*Date Printed:* 07/11/2006

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12

0607115-001	MW-1	Water	7/10/06 4:50:00 PM	<input type="checkbox"/>	A	B	A										
0607115-002	MW-2	Water	7/10/06 5:25:00 PM	<input type="checkbox"/>	A	B											
0607115-003	MW-3	Water	7/10/06 3:40:00 PM	<input type="checkbox"/>	A	B											
0607115-004	MW-4	Water	7/10/06 4:15:00 PM	<input type="checkbox"/>	A	B											
0607115-005	MW-5	Water	7/10/06 2:00:00 PM	<input type="checkbox"/>	A												
0607115-006	MW-6	Water	7/10/06 2:30:00 PM	<input type="checkbox"/>	A	B											
0607115-007	MW-7	Water	7/10/06 3:05:00 PM	<input type="checkbox"/>	A	B											

Test Legend:

1	G-MBTEX_W
6	
11	

2	MTBE_W
7	
12	

3	PREDF REPORT
8	

4	
9	

5	
10	

Prepared by: Maria Venegas

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

