

20321 (DH)



August 31, 2004

Alameda County

SEP 09 2004

ENVIRONMENTAL HEALTH

QUARTERLY GROUNDWATER MONITORING REPORT
JULY 2004 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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Danville, CA 94526
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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
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: Mr. Chuck Headlee
(510) 622-2433

The following is a report detailing the results of the July 2004 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 during the previous quarter from Kin Chan. This report is intended to supplement the ASE report: "Report of Soil and Groundwater Assessment" dated January 8, 1999.

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On July 23, 2004, ASE measured the depth to groundwater in four site monitoring wells and one site extraction well using an electric water level sounder. Monitoring well MW-2 was obstructed and could not be accessed. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. No free-floating hydrocarbons or sheen was observed in any site well. As requested by the ACHCSA, the groundwater gauging and sampling was coordinated with Cambria Environmental Technology, Inc., (Cambria). Cambria is investigating the adjacent property, located at 706 Harrison Street, referred to in this report as the former ARCO station. Groundwater elevation data for both sites is presented in Tables One and Two. A groundwater potentiometric surface map illustrating elevation is presented as Figure 2. The groundwater flow direction below the site is generally to the south/southwest with a gradient of approximately 0.009 feet/foot, which is consistent with previous findings.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

On July 23, 2004, ASE collected groundwater samples from monitoring wells MW-1, MW-3, MW-4, and MW-5. Per previous ASE recommendations, and with ACHCSA approval, quarterly groundwater sampling of monitoring well MW-2 and extraction well EW-1 has been suspended. 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 all sampled monitoring wells. 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. Recent and current analytical data for the former ARCO station is summarized in Table Four.

4.0 CONCLUSIONS

The TPH-G, benzene and MTBE concentrations in monitoring well MW-1 increased to their highest levels since monitoring began in 1997. The benzene concentration in monitoring well MW-5 also reached a record high level. Other notable increases are the TPH-G and MTBE concentrations in monitoring wells MW-3 and MW-5. The MTBE concentration in monitoring well MW-4, and the toluene and total xylenes concentrations in MW-5 decreased slightly.

The TPH-G, BTEX and/or MTBE concentrations detected in the groundwater samples collected from all wells sampled 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 July 2003.

5.0 RECOMMENDATIONS

ASE recommends continued groundwater monitoring on a quarterly basis. The next groundwater sampling is scheduled for October 2004.

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 property has recently been purchased, and the remediation work will begin upon authorization by the new owner.

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.

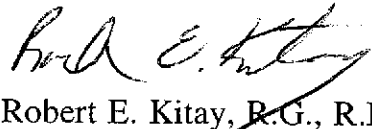
Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

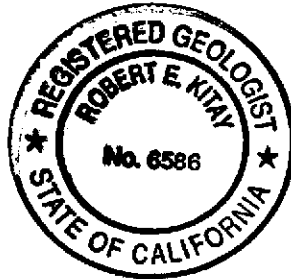
AQUA SCIENCE ENGINEERS, INC.



Damian Hriciga
Project Geologist



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



Attachments: Figures 1 and 2
Appendices A and B

cc: Mr. Barney Chan, Alameda County Health Care Services
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region

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)	
MW-1	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	28.98	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			
MW-2	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	29.44	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				

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)
MW-3	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	28.64	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		
MW-4	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	29.58	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		

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)
MW-5	8/29/01	29.06	17.42	11.64
	1/18/02		15.68	13.38
	4/11/02		16.17	12.89
	7/18/02		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
	EW-1		1/18/02	28.89
4/11/02		15.73	13.16	
7/18/02		16.13	12.76	
10/9/02		16.70	12.19	
1/29/03		16.20	12.69	
4/11/03		16.52	12.37	
7/18/03		16.38	12.51	
10/9/03		16.84	12.05	
1/28/04		15.94	12.95	
4/7/04		15.02	13.87	
7/23/04		16.01	12.88	

* 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)
MW-1	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
MW-2	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
MW-3	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
MW-4	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
MW-5	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
MW-6	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
MW-7	7/18/03	29.67	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

* Survey data updated on 10/27/2003

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
MW-1						
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
7/18/02	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
MW-2						
12/5/98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 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
MW-3						
12/5/98	6,500***	< 50	50	60	50	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
7/18/02	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

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
MW-4						
12/5/98	880	3	<0.5	<0.5	<0.5	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
7/18/02	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
MW-5						
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
7/18/02	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
EW-1						
1/18/02	11,000	1,000	<100	220	350	6,700
4/11/02	17,000	1,000	<100	120	140	9,700
7/18/02	21,000	1,300	<100	<100	200	12,000
10/9/02	12,000	900	<25	<25	200	9,200
1/29/03	12,000	860	73	130	500	4,500
4/11/03	8,700	890	<25	<25	82	5,400
7/18/03	8,200	650	77	99	140	4,300
10/9/03	5,700**	500	28	53	35	3,600
1/28/04	17,000***	1,600	90	250	280	9,700
ESL	400	46	130	290	13	1,800

Notes:

* EPA Method 8020/EPA Method 8260 (MTBE confirmation)

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

*** Sample contains a discrete peak in addition to gasoline

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

Most current data is in **Bold**

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

TABLE FOUR
 Summary of Analytical Results for GROUNDWATER Samples
 Former ARCO Station
 706 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
MW-1						
7/18/03	<50	<0.5	<0.5	<0.5	<0.5	<5.0
10/9/03	<50	<0.5	<0.5	<0.5	<0.5	<5.0
1/28/04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
4/7/04	180	60	0.56	1.9	<0.5	<5.0
7/23/04	130	36	<0.5	0.65	<0.5	<5.0
MW-2						
7/18/03	57,000	2,100	8,700	2,200	10,000	<50*
10/9/03	49,000	1,800	7,000	1,700	7,600	<1,500/26
1/28/04	550	21	33	3	61	<100
4/7/04	41,000	2,500	11,000	1,900	8,000	<2,000
7/23/04	81,000	2,000	12,000	2,500	12,000	<2,000
MW-3						
7/18/03	<50	<0.5	<0.5	<0.5	<0.5	<5.0
1/28/04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
7/23/04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
MW-4						
7/18/03	<50	<0.5	<0.5	<0.5	<0.5	0.74*
10/9/03	210	5	0.57	1.6	1.1	<10/10
1/28/04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
4/12/04	770	56	3.2	7.0	6.5	120/160
7/23/04	1100	130	11	17.0	17	790/800
MW-5						
7/18/03	<50	<0.5	<0.5	<0.5	<0.5	<5.0
1/28/04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
7/23/04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
MW-6						
7/18/03	<50	<0.5	<0.5	<0.5	<0.5	<5.0
1/28/04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
7/23/04	3,300	1,300	<5.0	52	9.7	<50
MW-7						
7/18/03	<50	<0.5	<0.5	<0.5	<0.5	<5.0
1/28/04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
7/23/04	<50	<0.5	<0.5	<0.5	<0.5	130/120
ESL	400	46	130	290	13	1,800

Notes:

* Indicates EPA Method 8260

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

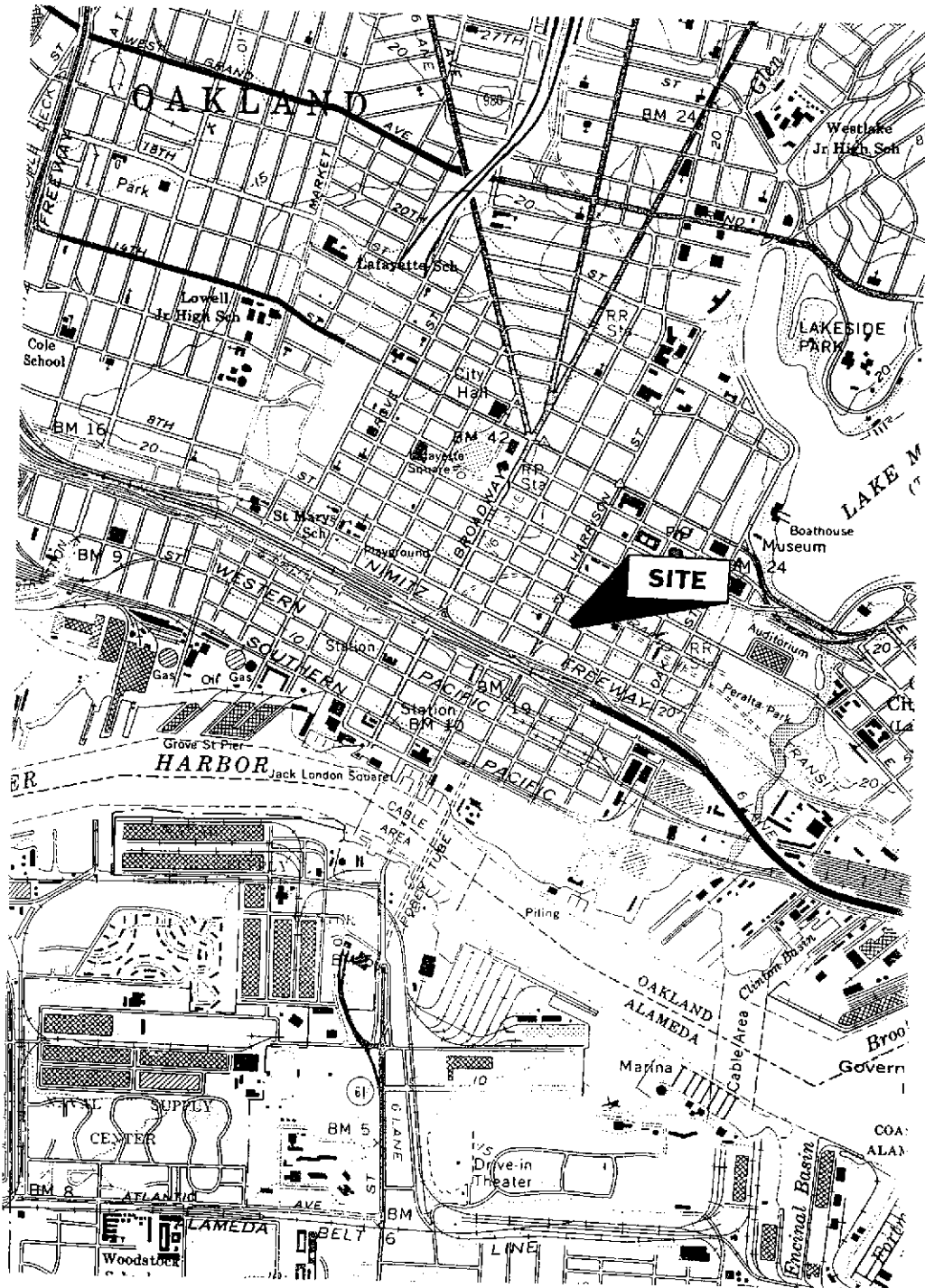
ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

Most current data is in **Bold**

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



NORTH



SITE LOCATION MAP

YEE PROPERTY
 726 HARRISON STREET
 OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS

Figure 1

8TH STREET



NORTH

SCALE
1" = 30'

Unocal
MW-7

Unocal
MW-8

CHAN AUTO

BH-A

MW-4
(13.00')

FORMER
USTS &
OVEREXCAVATION
BOUNDARY

13.0'

BH-B

BUILDING

BH-C

MW-1
(12.57')

VE-1

EW-1
(12.88')

AS-1

MW-5
(12.51')

12.5'

MW-3
(12.49')

MW-2
(1NM)

FORMER
USTS/
OVEREXCAVATIONS

ARCO
MW-4
(12.34')

ARCO
MW-2
(12.23')

ARCO
MW-3
(12.25')

FORMER
ARCO
STATION

ARCO
MW-1
(12.02')

12.0'

SIDEWALK

LEGEND

- Approx. Groundwater Flow Direction
- ASE Monitoring Well
Groundwater elevation relative to MSL
- Groundwater elevation contour
- Anomalous data - Not used for contouring

ARCO
MW-7
(11.85')

11.5'

ARCO
MW-6
(10.98')

11.0'

7TH STREET

ARCO
MW-5
(11.58')

GROUNDWATER ELEVATION
CONTOUR MAP - 7/23/2004

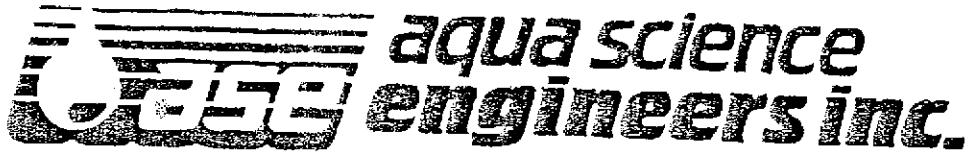
YEE PROPERTY
726 HARRISON STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS

Figure 2

APPENDIX A

Well Sampling Field Logs



WELL SAMPLING FIELD LOG

Project Name and Address: 2412
 Job #: 3412 Date of sampling: 7/2 dry
 Well Name: MW-1 Sampled by: pit
 Total depth of well (feet): 27.2 Well diameter (inches): 2
 Depth to water before sampling (feet): 16.41
 Thickness of floating product if any: -
 Depth of well casing in water (feet): 10.79
 Number of gallons per well casing volume (gallons): 1.7
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 512
 Equipment used to purge the well: BAILER
 Time Evacuation Began: 1938 Time Evacuation Finished: 1950
 Approximate volume of groundwater purged: 6
 Did the well go dry?: NO After how many gallons: 6
 Time samples were collected: 1954
 Depth to water at time of sampling: 16.48
 Percent recovery at time of sampling: -
 Samples collected with: BAILER
 Sample color: - Odor: HC
 Description of sediment in sample: -

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2</u>	<u>65.7</u>	<u>6.79</u>	<u>715</u>
<u>4</u>	<u>66.8</u>	<u>6.81</u>	<u>723</u>
<u>6</u>	<u>66.1</u>	<u>6.83</u>	<u>724</u>

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	iced?	Analysis
<u>MW-1</u>	<u>3</u>	<u>200 ml WQA</u>	<u>HC</u>	<u>✓</u>	



WELL SAMPLING FIELD LOG

Project Name and Address: C. HAW
Job #: _____ Date of sampling: _____
Well Name: MW-2 Sampled by: _____
Total depth of well (feet): _____ Well diameter (inches): _____
Depth to water before sampling (feet): OBSTRUCTED
Thickness of floating product if any: _____
Depth of well casing in water (feet): _____
Number of gallons per well casing volume (gallons): _____
Number of well casing volumes to be removed: _____
Required volume of groundwater to be purged before sampling (gallons): _____
Equipment used to purge the well: _____
Time Evacuation Began: _____ Time Evacuation Finished: _____
Approximate volume of groundwater purged: _____
Did the well go dry: _____ After how many gallons: _____
Time samples were collected: _____
Depth to water at time of sampling: _____
Percent recovery at time of sampling: _____
Samples collected with: _____
Sample color: _____ Color: _____
Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

NOT SAMPLED THIS QUARTER



WELL SAMPLING FIELD LOG

Project Name and Address: CHAW
 Job #: 2112 Date of sampling: 7/22/04
 Well Name: MW-3 Sampled by: DLS
 Total depth of well (feet): 29.2 Well diameter (inches): 2
 Depth to water before sampling (feet): 16.15
 Thickness of floating product if any: _____
 Depth of well casing in water (feet): 13.05
 Number of gallons per well casing volume (gallons): ~~2.1~~ 2.1
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 6.3
 Equipment used to purge the well: BAUER
 Time Evacuation Began: 1855 Time Evacuation Finished: 1912
 Approximate volume of groundwater purged: 6.3
 Did the well go dry?: NO After how many gallons: _____
 Time samples were collected: 1914
 Depth to water at time of sampling: 16.20
 Percent recovery at time of sampling: _____
 Samples collected with: SAMPLER
 Sample color: _____ Odor: HC
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
2.1 2.1	66.4	6.81	640
4.2 4.2	68.9	6.78	666
6.3 6.3	68.1	6.78	670
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Lead?	Analysis
<u>MW-3</u>	<u>403</u>	<u>4.2 ml 60ml</u>	<u>HC</u>	<u>Y</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



WELL SAMPLING FIELD LOG

Project Name and Address: C HAW
 Job #: 5412 Date of sampling: 7/22/07
 Well Name: MW-4 Sampled by: PH
 Total depth of well (feet): 29.7 Well diameter (inches): 2
 Depth to water before sampling (feet): 16.58
 Thickness of floating product if any: -
 Depth of well casing in water (feet): 13.12
 Number of gallons per well casing volume (gallons): 2.1
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 6.3
 Equipment used to purge the well: -
 Time Evacuation Began: 1938 Time Evacuation Finished: 240
 Approximate volume of groundwater purged: 6.3
 Did the well go dry?: NO After how many gallons: -
 Time samples were collected: 2012
 Depth to water at time of sampling: 16.60
 Percent recovery at time of sampling: -
 Samples collected with: BAMCOR
 Sample color: - Odor: H/C
 Description of sediment in sample: -

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2.1</u>	<u>66.8</u>	<u>6.82</u>	<u>709</u>
<u>4.2</u>	<u>66.1</u>	<u>6.90</u>	<u>690</u>
<u>6.3</u>	<u>66.2</u>	<u>6.90</u>	<u>690</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	iced?	Analysis
<u>MW-4</u>	<u>3</u>	<u>40 ml VOA</u>	<u>H/C</u>	<u>Y</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



WELL SAMPLING FIELD LOG

Project Name and Address: CIAW
 Job #: _____ Date of sampling: 7/23/07
 Well Name: MU-5 Sampled by: DH
 Total depth of well (feet): 28.5 Well diameter (inches): 2
 Depth to water before sampling (feet): 16.55
 Thickness of floating product if any: _____
 Depth of well casing in water (feet): 11.95
 Number of gallons per well casing volume (gallons): 1.9
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 5.7
 Equipment used to purge the well: RAILOR
 Time Evacuation Began: 1916 Time Evacuation Finished: 1932
 Approximate volume of groundwater purged: 6
 Did the well go dry?: NO After how many gallons: ~~10~~
 Time samples were collected: 1934
 Depth to water at time of sampling: 16.60
 Percent recovery at time of sampling: _____
 Samples collected with: RAILOR
 Sample color: _____ Odor: HL
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2</u>	<u>67.2</u>	<u>6.82</u>	<u>1120</u>
<u>4</u>	<u>66.8</u>	<u>6.90</u>	<u>1131</u>
<u>6</u>	<u>66.6</u>	<u>6.91</u>	<u>1132</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	ICcd?	Analysis
<u>MU-5</u>	<u>3</u>	<u>4.0 gal VOA</u>	<u>HL</u>	<u>✓</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



WELL SAMPLING FIELD LOG

Project Name and Address: CHAW
 Job #: _____ Date of sampling: 7/23/01
 Well Name: EW-1 Sampled by: P.H.
 Total depth of well (feet): _____ Well diameter (inches): 6
 Depth to water before sampling (feet): 16.01
 Thickness of floating product if any: _____
 Depth of well casing in water (feet): _____
 Number of gallons per well casing volume (gallons): _____
 Number of well casing volumes to be removed: _____
 Required volume of groundwater to be purged before sampling (gallons): _____
 Equipment used to purge the well: _____
 Time Evacuation Began: _____ Time Evacuation Finished: _____
 Approximate volume of groundwater purged: _____
 Did the well go dry: _____ After how many gallons: _____
 Time samples were collected: _____
 Depth to water at time of sampling: _____
 Percent recovery at time of sampling: _____
 Samples collected with: _____
 Sample color: _____ Color: _____
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iccd?	Analysis
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

NOT SAMPLED THIS QUARTER

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

Aqua Science Engineers, Inc.

August 11, 2004

208 West El Pintado
Danville, CA 94526

Attn.: Damian Hriciga
Project: Chan

Dear Mr. Hriciga,

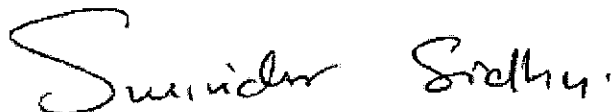
Attached is our report for your samples received on 07/29/2004 18:30
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after
09/12/2004 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: ssidhu@stl-inc.com

Sincerely,



Surinder Sidhu
Project Manager

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.

Attn.: Damian Hriciga

208 West El Pintado

Danville, CA 94526

Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	07/23/2004 19:54	Water	1
MW-3	07/23/2004 19:14	Water	2
MW-4	07/23/2004 20:12	Water	3
MW-5	07/23/2004 19:34	Water	4

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

08/05/2004 16:45

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.

Attn.: Damian Hriciga

208 West El Pintado

Danville, CA 94526

Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Prep(s): 5030B Test(s): 8260B
 Sample ID: MW-1 Lab ID: 2004-07-0868 - 1
 Sampled: 07/23/2004 19:54 Extracted: 8/5/2004 12:14
 Matrix: Water QC Batch#: 2004/08/05-01.62
 Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	56000	25000	ug/L	500.00	08/05/2004 12:14	dp
Methyl tert-butyl ether (MTBE)	53000	250	ug/L	500.00	08/05/2004 12:14	
Benzene	4500	250	ug/L	500.00	08/05/2004 12:14	
Toluene	ND	250	ug/L	500.00	08/05/2004 12:14	
Ethylbenzene	390	250	ug/L	500.00	08/05/2004 12:14	
Total xylenes	ND	500	ug/L	500.00	08/05/2004 12:14	
Surrogate(s)						
1,2-Dichloroethane-d4	115.0	72-128	%	500.00	08/05/2004 12:14	
Toluene-d8	99.2	80-113	%	500.00	08/05/2004 12:14	

Sewer Trent Laboratories, Inc.

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

08/05/2004 16:45

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.

Attn.: Damian Hriciga

208 West El Pintado

Danville, CA 94526

Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-3	Lab ID: 2004-07-0868 - 2
Sampled: 07/23/2004 19:14	Extracted: 8/5/2004 12:36
Matrix: Water	QC Batch#: 2004/08/05-01.62
Analysis Flag: o (See Legend and Note Section)	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	4200	2500	ug/L	50.00	08/05/2004 12:36	g
Methyl tert-butyl ether (MTBE)	4900	25	ug/L	50.00	08/05/2004 12:36	
Benzene	ND	25	ug/L	50.00	08/05/2004 12:36	
Toluene	ND	25	ug/L	50.00	08/05/2004 12:36	
Ethylbenzene	ND	25	ug/L	50.00	08/05/2004 12:36	
Total xylenes	ND	50	ug/L	50.00	08/05/2004 12:36	
Surrogate(s)						
1,2-Dichloroethane-d4	119.0	72-128	%	50.00	08/05/2004 12:36	
Toluene-d8	100.4	80-113	%	50.00	08/05/2004 12:36	

Severn Trent Laboratories, Inc.

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

08/05/2004 16:45

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.

Attn.: Damian Hriciga

208 West El Pintado

Danville, CA 94526

Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Prep(s): 5030B

Test(s): 8260B

Sample ID: MW-4

Lab ID: 2004-07-0868 - 3

Sampled: 07/23/2004 20:12

Extracted: 8/4/2004 20:27

Matrix: Water

QC Batch#: 2004/08/04-02.69

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1800	1000	ug/L	20.00	08/04/2004 20:27	g
Methyl tert-butyl ether (MTBE)	1600	10	ug/L	20.00	08/04/2004 20:27	
Benzene	ND	10	ug/L	20.00	08/04/2004 20:27	
Toluene	ND	10	ug/L	20.00	08/04/2004 20:27	
Ethylbenzene	ND	10	ug/L	20.00	08/04/2004 20:27	
Total xylenes	ND	20	ug/L	20.00	08/04/2004 20:27	
Surrogate(s)						
1,2-Dichloroethane-d4	101.1	72-128	%	20.00	08/04/2004 20:27	
Toluene-d8	95.7	80-113	%	20.00	08/04/2004 20:27	

Severn Trent Laboratories, Inc.

08/05/2004 16:45

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

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.
Attn.: Damian Hriciga

208 West El Pintado
Danville, CA 94526
Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Prep(s): 5030B Test(s): 8260B
 Sample ID: MW-5 Lab ID: 2004-07-0868 - 4
 Sampled: 07/23/2004 19:34 Extracted: 8/5/2004 12:58
 Matrix: Water QC Batch#: 2004/08/05-01.62
 Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	29000	2500	ug/L	50.00	08/05/2004 12:58	
Methyl tert-butyl ether (MTBE)	2200	25	ug/L	50.00	08/05/2004 12:58	
Benzene	5200	25	ug/L	50.00	08/05/2004 12:58	
Toluene	2200	25	ug/L	50.00	08/05/2004 12:58	
Ethylbenzene	810	25	ug/L	50.00	08/05/2004 12:58	
Total xylenes	1400	50	ug/L	50.00	08/05/2004 12:58	
Surrogate(s)						
1,2-Dichloroethane-d4	116.0	72-128	%	50.00	08/05/2004 12:58	
Toluene-d8	96.7	80-113	%	50.00	08/05/2004 12:58	

Sewern 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

08/05/2004 16:45

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.

Attn.: Damian Hriciga

208 West El Pintado

Danville, CA 94526

Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2004/08/04-02.69

MB: 2004/08/04-02.69-027

Date Extracted: 08/04/2004 18:27

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	08/04/2004 18:27	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	08/04/2004 18:27	
Benzene	ND	0.5	ug/L	08/04/2004 18:27	
Toluene	ND	0.5	ug/L	08/04/2004 18:27	
Ethylbenzene	ND	0.5	ug/L	08/04/2004 18:27	
Total xylenes	ND	1.0	ug/L	08/04/2004 18:27	
Surrogates(s)					
1,2-Dichloroethane-d4	95.0	72-128	%	08/04/2004 18:27	
Toluene-d8	100.8	80-113	%	08/04/2004 18:27	

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

08/05/2004 16:45

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.

Attn.: Damian Hriciga

208 West El Pintado

Danville, CA 94526

Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2004/08/05-01.62

MB: 2004/08/05-01.62-021

Date Extracted: 08/05/2004 08:21

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	08/05/2004 08:21	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	08/05/2004 08:21	
Benzene	ND	0.5	ug/L	08/05/2004 08:21	
Toluene	ND	0.5	ug/L	08/05/2004 08:21	
Ethylbenzene	ND	0.5	ug/L	08/05/2004 08:21	
Total xylenes	ND	1.0	ug/L	08/05/2004 08:21	
Surrogates(s)					
1,2-Dichloroethane-d4	108.4	72-128	%	08/05/2004 08:21	
Toluene-d8	99.8	80-113	%	08/05/2004 08:21	

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

08/05/2004 16:45

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.
Attn.: Damian Hriciga

208 West El Pintado
Danville, CA 94526
Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2004/08/04-02.69

LCS 2004/08/04-02.69-050

Extracted: 08/04/2004

Analyzed: 08/04/2004 17:50

LCSD 2004/08/04-02.69-008

Extracted: 08/04/2004

Analyzed: 08/04/2004 18:08

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	18.6	20.7	25.0	74.4	82.8	10.7	65-165	20		
Benzene	23.0	26.8	25.0	92.0	107.2	15.3	69-129	20		
Toluene	21.6	23.1	25.0	86.4	92.4	6.7	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	431	459	500	86.2	91.8		72-128			
Toluene-d8	517	481	500	103.4	96.2		80-113			

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

08/05/2004 16:45

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.

Attn.: Damian Hriciga

208 West El Pintado

Danville, CA 94526

Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2004/08/05-01.62

LCS 2004/08/05-01.62-038

Extracted: 08/05/2004

Analyzed: 08/05/2004 07:38

LCSD 2004/08/05-01.62-016

Extracted: 08/05/2004

Analyzed: 08/05/2004 07:16

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	23.5	22.6	25.0	94.0	90.4	3.9	65-165	20		
Benzene	25.1	24.8	25.0	100.4	99.2	1.2	69-129	20		
Toluene	26.1	27.2	25.0	104.4	108.8	4.1	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	484	487	500	96.8	97.4		72-128			
Toluene-d8	485	505	500	97.0	101.0		80-113			

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

08/05/2004 16:45

Fuel Oxygenates by 8260B

Aqua Science Engineers, Inc.
Attn.: Damian Hriciga

208 West El Pintado
Danville, CA 94526
Phone: (925) 820-9391 Fax: (925) 837-4853

Project: Chan

Received: 07/29/2004 18:30

Legend and Notes

Analysis Flag

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

Result Flag

- dp Sample contains discrete peak in addition to gasoline.
- g Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Severn Trent Laboratories, Inc.

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

08/05/2004 16:45

SEVERN
TRENT

STL

STL San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756

Phone: (925) 484-1919 • Fax: (925) 484-1096

Email: info@stl-inc.com

Reference #: 88240

2004-07-09

Date 7/28 Page 1 of 1

Report To Analysis Request

Attn: DAMIAN HRICIGA
 Company: ADVA SOURCE ENGINEERS
 Address:
 Phone: 925 870 9391 Email:
 Bill To: Sampled by: DH
 Attn: Phone:

Sample ID	Date	Time	Mix	Pres	TPH EPA - 8215021	Purgeable Aromatics	TEPH EPA 801 EM*	Fuel Test EPA 82605	Purgeable Halocarbons (HVCs) EPA 8021	Volatile Organics GC/MS (VOCs)	Semivolatiles GC/MS	Oil and Grease (EPA 1654)	Pesticides PCBs	PAHs by	CAMI 7 Metals	Metals	Low Level Metals by EPA 200.9/8020 (ICP-MS)	WET (SLC)	Hexavalent Chromium	Spec Cond.	Alkalinity	Anions	Number of Containers
MW-1	7/23/04	1454	W	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
MW-3	↓	1914	W	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
MW-4	↓	2012	W	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
MW-5	↓	1934	W	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3

Project Info	Sample Receipt	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Project Name: <u>CHAN</u>	# of Containers:	Signature: <u>[Signature]</u> Time: <u>1600</u>	Signature: <u>[Signature]</u> Time: <u>1810</u>	Signature: _____ Time: _____
Project#: _____	Head Space:	Printed Name: <u>DAMIAN HRICIGA</u> Date: <u>7/28/04</u>	Printed Name: <u>[Signature]</u> Date: <u>7/28/04</u>	Printed Name: _____ Date: _____
PO#: _____	Temp: <u>40</u>	Company: <u>RSE</u>	Company: <u>STL-SF</u>	Company: _____
Credit Card#: _____	Conforms to record:	Company: _____	Company: _____	Company: _____
T A T	5 (Day) 72h 48h 24h Other:	1) Received by: <u>[Signature]</u> Time: <u>1125</u>	2) Received by: <u>[Signature]</u> Time: <u>1830</u>	3) Received by: _____
Report: <input type="checkbox"/> Routine <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> EDD <input type="checkbox"/> Site Tank Fund EDD <input type="checkbox"/> Special Instructions / Comments: _____	Special Instructions / Comments: _____	Signature: <u>[Signature]</u> Time: _____	Signature: <u>[Signature]</u> Time: _____	Signature: _____ Time: _____
		Printed Name: <u>T. Bullock</u> Date: <u>7/29/04</u>	Printed Name: <u>T. Bullock</u> Date: <u>7/29/04</u>	Printed Name: _____ Date: _____
		Company: <u>STL-SF</u>	Company: <u>STL-SF</u>	Company: _____

See Terms and Conditions on reverse
 *STL-SF records 80150A (cont. Co. Co. Industry) (cont.) (Detail for 80150A is C...)