aqua science engineers inc.

RO 321

March 15, 2005

QUARTERLY GROUNDWATER MONITORING REPORT
JANUARY 2005 GROUNDWATER SAMPLING
ASE JOB NO. 3412

at
Yee Property
726 Harrison Street
Oakland, CA 94602

Prepared by:
AQUA SCIENCE ENGINEERS, INC.
208 W. El Pintado
Danville, CA 94526
(925) 820-9391

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: Ms. Betty Graham
(510) 622-2433

The following is a report detailing the results of the January 2005 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.

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On January 29, 2005, ASE measured the depth to groundwater in all five site monitoring wells and one site extraction well 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 or sheen was observed in any site well. ASE generally coordinates 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. However, it is our understanding from speaking with Cambria that groundwater sampling at this site has been halted at the request of their client and therefore the sampling was not coordinated with Cambria this quarter. 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 0.034-feet/foot.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

On January 29, 2005, ASE collected groundwater samples from monitoring wells MW-1, MW-3, MW-4 and MW-5. With ACHCSA approval, quarterly groundwater sampling of 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. Previous analytical data for the former ARCO station is summarized in Table Four.

4.0 CONCLUSIONS

There was a notable decrease in TPH-G and MTBE concentrations in groundwater samples collected from monitoring well MW-3 this quarter. There was also a decrease in MTBE concentrations in groundwater samples collected from monitoring well MW-1, and an increase in MTBE concentrations in groundwater samples collected from monitoring well MW-4. All of the other hydrocarbon concentrations detected were generally similar to previous results.

The TPH-G, BTEX and/or MTBE concentrations detected in the groundwater samples collected from all five 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 April 2005.

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.

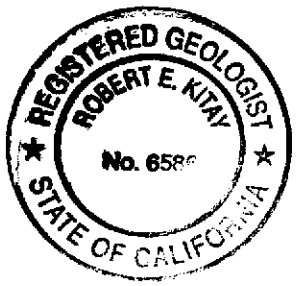
6.0 REPORT LIMITATIONS

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.

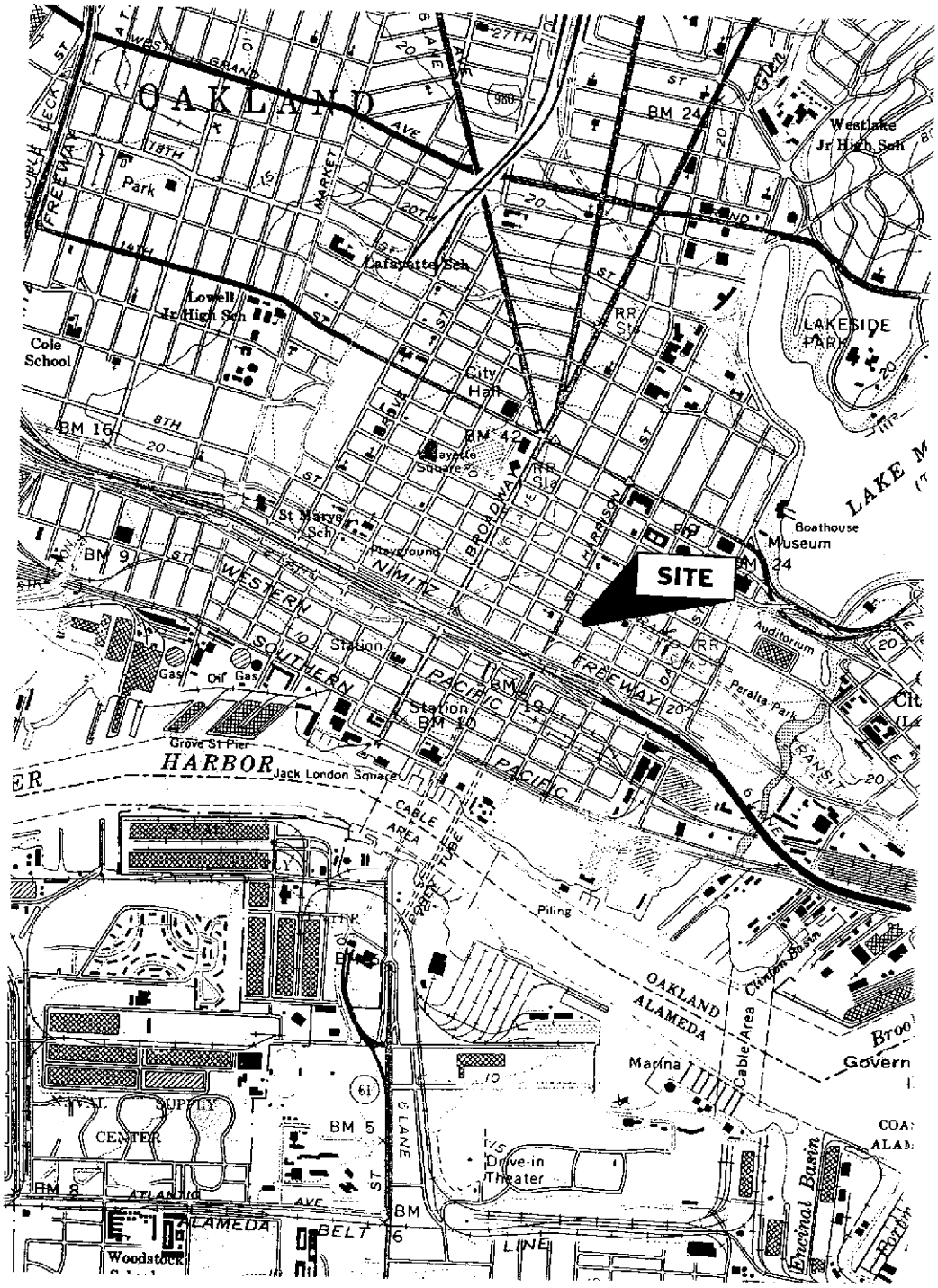


Robert E. Kitay, R.G., R.E.A.
Senior Geologist

Attachments: Figures 1 and 2
Appendices A and B

cc: Mr. Barney Chan, Alameda County Health Care Services
Ms. Betty Graham, RWQCB, San Francisco Bay Region

NORTH



SITE LOCATION MAP

YEE PROPERTY
726 HARRISON STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS | Figure 1

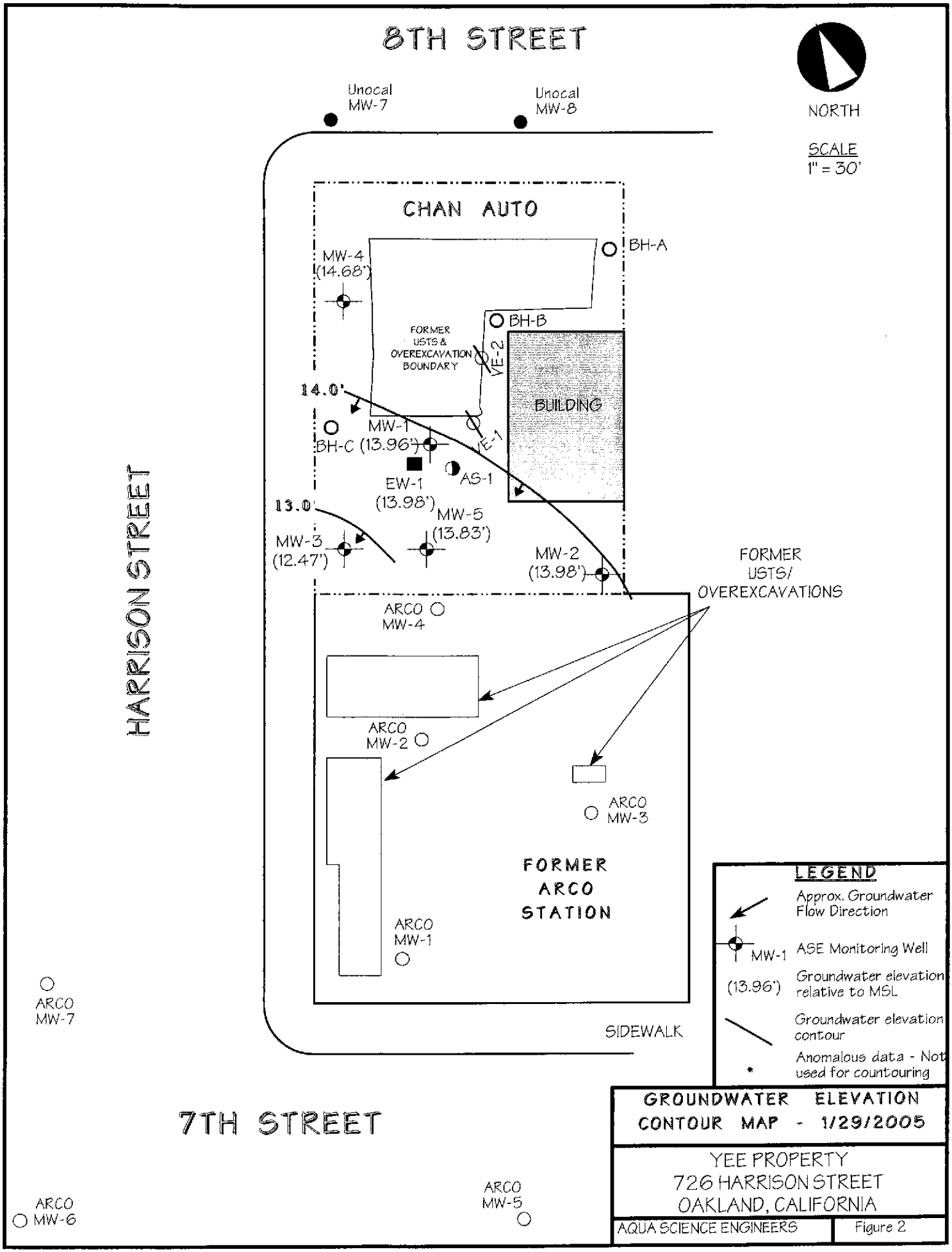

8TH STREET
Unocal MW-7
Unocal MW-8
NORTH
SCALE 1" = 30'
CHAN AUTO
MW-4 (14.68')
BH-A
BH-B
FORMER USTS & OVEREXCAVATION BOUNDARY
VE-2
VE-1
BUILDING
14.0'
BH-C
MW-1 (13.96')
EW-1 (13.98')
AS-1
13.0'
MW-5 (13.83')
MW-3 (12.47')
MW-2 (13.98')
FORMER USTS/ OVEREXCAVATIONS
HARRISON STREET
ARCO MW-4
ARCO MW-2
ARCO MW-3
FORMER ARCO STATION
ARCO MW-1
SIDEWALK
ARCO MW-7
7TH STREET
ARCO MW-6
ARCO MW-5
LEGEND
Approx. Groundwater Flow Direction
MW-1 ASE Monitoring Well
(13.96') Groundwater elevation relative to MSL
Groundwater elevation contour
Anomalous data - Not used for countouring
GROUNDWATER ELEVATION CONTOUR MAP - 1/29/2005
YEE PROPERTY
726 HARRISON STREET
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS
Figure 2

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
	10/12/04		17.73	11.25
	1/29/05		**15.02**	**13.96**
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		
	10/12/04		17.31	12.13
	1/29/05		**15.46**	**13.98**

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
	10/12/04		16.63	12.01
	1/29/05		**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
	10/12/04	Inaccessible		
	1/29/05		**14.90**	**14.68**

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
	7/8/02		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**
EW-1	1/18/02	28.89	15.35	13.54
	4/11/02		15.73	13.16
	7/8/02		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
	10/12/04		16.46	12.43
	1/29/05		**14.91**	**13.98**

* 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
	10/12/04		16.30	9.87
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
	10/12/04		17.87	9.66
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
	10/12/04		16.58	10.21
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
	10/12/04		18.05	10.15
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
	10/12/04		15.88	9.19
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
	10/12/04		17.27	8.86
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
	10/12/04		16.90	9.80

* 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
7/8/02	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**
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
7/17/01		No longer sampled				
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
7/8/02	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**

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
7/8/02	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**
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
7/8/02	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**
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
7/8/02	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
4/7/04	No longer sampled					
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
10/12/04	< 50	2.5	1.5	< 0.5	0.86	< 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
10/12/04	75,000	2,600	13,000	2,300	11,000	< 1,300
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
10/12/04	150	0.86	< 0.5	< 0.5	0.97	< 10
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.

APPENDIX A

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: YEL
Job #: 3412
Well Name: MW-1
Date of sampling: 1-29-2005
Total depth of well (feet): 27.2
Sampled by: DH
Depth to water before sampling (feet): 15.02
Well diameter (inches): 2
Thickness of floating product if any: —
Depth of well casing in water (feet): 12.18
Number of gallons per well casing volume (gallons): 1.95
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): ~~6~~ 5.85
Equipment used to purge the well: BAILER
Time Evacuation Began: 0745
Time Evacuation Finished: 0815
Approximate volume of groundwater purged: ~~5~~ 6
After how many gallons: —
Did the well go dry?: NO
Time samples were collected: 0820
Depth to water at time of sampling: 15.05
Percent recovery at time of sampling: —
Samples collected with: BAILER
Sample color: CLEAR
Odor: SLIGHT HC
Description of sediment in sample: —

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
C	65.2	6.67	586
2	65.0	6.70	631
4	64.8	6.71	650
6	64.6	6.73	655

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	3	40 ML VOA	HCL	Y	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: VEE
Job #: 3412 Date of sampling: 1-29-2005
Well Name: MW-2 Sampled by: DH
Total depth of well (feet): - Well diameter (inches): 2
Depth to water before sampling (feet): 15.46
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: Odor:
Description of sediment in sample:

NOT SAMPLED THIS QUARTER

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

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

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: YEZ
Job #: 3412
Well Name: MW-3
Date of sampling: 1-29-2005
Sampled by: DH
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: ~~13.05~~
Depth of well casing in water (feet): 13.05
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: BAILER
Time Evacuation Began: 0915
Time Evacuation Finished: 0915
Approximate volume of groundwater purged: 6.3
Did the well go dry?: NO
After how many gallons: —
Time samples were collected: 0950
Depth to water at time of sampling: 16.17
Percent recovery at time of sampling: —
Samples collected with: BAILER
Sample color: —
Odor: SLIGHT HC
Description of sediment in sample: —

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
0	65.5	6.64	586
2.1	65.7	6.65	512
4.2	65.8	6.65	491
6.3	65.6	6.69	486

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	3	40 ml VOA	HCl	Y	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: ~~[redacted]~~ 3412
Job #: 3412
Well Name: MW-4
Date of sampling: 1-29-2005
Sampled by: DH
Total depth of well (feet): 29.7
Well diameter (inches): 2
Depth to water before sampling (feet): 14.90
Thickness of floating product if any:
Depth of well casing in water (feet): 14.80
Number of gallons per well casing volume (gallons): 2.4
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 7.1
Equipment used to purge the well: BAILER
Time Evacuation Began: 0830
Time Evacuation Finished: 0900
Approximate volume of groundwater purged: 7.1
Did the well go dry?: NO
After how many gallons: —
Time samples were collected: 0905
Depth to water at time of sampling: 14.95
Percent recovery at time of sampling:
Samples collected with: BAILER
Sample color: —
Odor: SLIGHT HC
Description of sediment in sample:

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
0	61.9	6.82	398
2.4	61.8	6.71	482
4.8	61.5	6.68	520
7.1	61.3	6.63	538

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	3	40 ml VOA	HCl	Y	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: YEE
Job #: 3412
Well Name: MW-5
Date of sampling: 1-27-2005
Total depth of well (feet): 28.5
Sampled by: DH
Depth to water before sampling (feet): 15.23
Well diameter (inches): 2
Thickness of floating product if any: —
Depth of well casing in water (feet): 13.27
Number of gallons per well casing volume (gallons): 2.2
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 6.4
Equipment used to purge the well: BAILER
Time Evacuation Began: 0700
Time Evacuation Finished: 0730
Approximate volume of groundwater purged: 6.4
Did the well go dry?: NO
After how many gallons: —
Time samples were collected: 0735
Depth to water at time of sampling: 15.23
Percent recovery at time of sampling: —
Samples collected with: BAILER
Sample color: CLEAR
Odor: STRONG HC
Description of sediment in sample: —

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
~~2.20~~	6.9	6.72	1024
2.2	6.25	6.65	1012
4.4	6.38	6.60	1010
6.4	6.41	6.59	1006

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-5	3	40 mL VOA	HCl	✓	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: YEE
Job #: 3412
Well Name: EW-1
Date of sampling: 1-29-2004
Sampled by: DH
Total depth of well (feet): —
Well diameter (inches): 2
Depth to water before sampling (feet): 14.91
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: Odor:
Description of sediment in sample:

NOT SAMPLED THIS QUARTER

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

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

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

SEVERN TRENT STL

Submission#: 2005-01-0825

Aqua Science Engineers, Inc.

February 08, 2005

208 West El Pintado
Danville, CA 94526

Attn.: Damian Hriciga

Project#: 3412
Project: Yee

Dear Mr. Hriciga,

Attached is our report for your samples received on 01/31/2005 12:35
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 03/17/2005 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

Surinder Sidhu
Project Manager

SEVERN TRENT STL

Submission: 2005-01-0825

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: 3412
Yee

Received: 01/31/2005 12:35

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	01/29/2005 08:20	Water	1
MW-3	01/29/2005 09:50	Water	2
MW-4	01/29/2005 09:05	Water	3
MW-5	01/29/2005 07:35	Water	4

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: 3412
Yee

Received: 01/31/2005 12:35

Prep(s): 5030B
Sample ID: **MW-1**
Sampled: 01/29/2005 08:20
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0825 - 1
Extracted: 2/4/2005 16:25
QC Batch#: 2005/02/04-01.62

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	24000	10000	ug/L	200.00	02/04/2005 16:25	
Methyl tert-butyl ether (MTBE)	19000	100	ug/L	200.00	02/04/2005 16:25	
Benzene	1600	100	ug/L	200.00	02/04/2005 16:25	
Toluene	ND	100	ug/L	200.00	02/04/2005 16:25	
Ethylbenzene	160	100	ug/L	200.00	02/04/2005 16:25	
Total xylenes	ND	200	ug/L	200.00	02/04/2005 16:25	
Surrogate(s)						
1,2-Dichloroethane-d4	104.0	73-130	%	200.00	02/04/2005 16:25	
Toluene-d8	94.6	81-114	%	200.00	02/04/2005 16:25	

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: 3412
Yee

Received: 01/31/2005 12:35

Prep(s): 5030B
Sample ID: **MW-3**
Sampled: 01/29/2005 09:50
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0825 - 2
Extracted: 2/3/2005 09:52
QC Batch#: 2005/02/03-01.62

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/L	20.00	02/03/2005 09:52	Q6
Methyl tert-butyl ether (MTBE)	3100	10	ug/L	20.00	02/03/2005 09:52	
Benzene	ND	10	ug/L	20.00	02/03/2005 09:52	
Toluene	ND	10	ug/L	20.00	02/03/2005 09:52	
Ethylbenzene	ND	10	ug/L	20.00	02/03/2005 09:52	
Total xylenes	ND	20	ug/L	20.00	02/03/2005 09:52	
Surrogate(s)						
1,2-Dichloroethane-d4	112.4	73-130	%	20.00	02/03/2005 09:52	
Toluene-d8	95.4	81-114	%	20.00	02/03/2005 09:52	

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: 3412
Yee

Received: 01/31/2005 12:35

Prep(s): 5030B
Sample ID: **MW-4**
Sampled: 01/29/2005 09:05
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0825 - 3
Extracted: 2/3/2005 10:18
QC Batch#: 2005/02/03-01.62

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1300	ug/L	25.00	02/03/2005 10:18	Q6
Methyl tert-butyl ether (MTBE)	3900	13	ug/L	25.00	02/03/2005 10:18	
Benzene	ND	13	ug/L	25.00	02/03/2005 10:18	
Toluene	ND	13	ug/L	25.00	02/03/2005 10:18	
Ethylbenzene	ND	13	ug/L	25.00	02/03/2005 10:18	
Total xylenes	ND	25	ug/L	25.00	02/03/2005 10:18	
Surrogate(s)						
1,2-Dichloroethane-d4	107.5	73-130	%	25.00	02/03/2005 10:18	
Toluene-d8	96.2	81-114	%	25.00	02/03/2005 10:18	

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: 3412
Yee

Received: 01/31/2005 12:35

Prep(s): 5030B
Sample ID: **MW-5**
Sampled: 01/29/2005 07:35
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0825 - 4
Extracted: 2/1/2005 22:31
QC Batch#: 2005/02/01-02.68

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	29000	2500	ug/L	50.00	02/01/2005 22:31	
Methyl tert-butyl ether (MTBE)	2200	25	ug/L	50.00	02/01/2005 22:31	
Benzene	4600	25	ug/L	50.00	02/01/2005 22:31	
Toluene	2500	25	ug/L	50.00	02/01/2005 22:31	
Ethylbenzene	750	25	ug/L	50.00	02/01/2005 22:31	
Total xylenes	1400	50	ug/L	50.00	02/01/2005 22:31	
Surrogate(s)						
1,2-Dichloroethane-d4	112.8	73-130	%	50.00	02/01/2005 22:31	
Toluene-d8	113.0	81-114	%	50.00	02/01/2005 22:31	

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B
Method Blank
MB: 2005/02/01-02.68-030

Water

Test(s): 8260B
QC Batch # 2005/02/01-02.68
Date Extracted: 02/01/2005 16:30

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/01/2005 16:30	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	02/01/2005 16:30	
Benzene	ND	0.5	ug/L	02/01/2005 16:30	
Toluene	ND	0.5	ug/L	02/01/2005 16:30	
Ethylbenzene	ND	0.5	ug/L	02/01/2005 16:30	
Total xylenes	ND	1.0	ug/L	02/01/2005 16:30	
Surrogates(s)					
1,2-Dichloroethane-d4	105.4	73-130	%	02/01/2005 16:30	
Toluene-d8	111.0	81-114	%	02/01/2005 16:30	

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B
Method Blank

Water

Test(s): 8260B
QC Batch # 2005/02/03-01.62

MB: 2005/02/03-01.62-028

Date Extracted: 02/03/2005 08:28

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/03/2005 08:28	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	02/03/2005 08:28	
Benzene	ND	0.5	ug/L	02/03/2005 08:28	
Toluene	ND	0.5	ug/L	02/03/2005 08:28	
Ethylbenzene	ND	0.5	ug/L	02/03/2005 08:28	
Total xylenes	ND	1.0	ug/L	02/03/2005 08:28	
Surrogates(s)					
1,2-Dichloroethane-d4	96.8	73-130	%	02/03/2005 08:28	
Toluene-d8	96.4	81-114	%	02/03/2005 08:28	

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B
Method Blank

Water

Test(s): 8260B
QC Batch # 2005/02/04-01.62

MB: 2005/02/04-01.62-046

Date Extracted: 02/04/2005 12:46

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/04/2005 12:46	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	02/04/2005 12:46	
Benzene	ND	0.5	ug/L	02/04/2005 12:46	
Toluene	ND	0.5	ug/L	02/04/2005 12:46	
Ethylbenzene	ND	0.5	ug/L	02/04/2005 12:46	
Total xylenes	ND	1.0	ug/L	02/04/2005 12:46	
Surrogates(s)					
1,2-Dichloroethane-d4	95.0	73-130	%	02/04/2005 12:46	
Toluene-d8	98.4	81-114	%	02/04/2005 12:46	

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/02/01-02.68**

LCS 2005/02/01-02.68-012 Extracted: 02/01/2005 Analyzed: 02/01/2005 16:12
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	28.6		25.0	114.4			65-165	20		
Benzene	28.4		25.0	113.6			69-129	20		
Toluene	30.8		25.0	123.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	438		500	87.6			73-130			
Toluene-d8	552		500	110.4			81-114			

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/02/03-01.62**

LCS 2005/02/03-01.62-002 Extracted: 02/03/2005 Analyzed: 02/03/2005 08:02
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	28.0		25.0	112.0			65-165	20		
Benzene	24.4		25.0	97.6			69-129	20		
Toluene	25.8		25.0	103.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	448		500	89.6			73-130			
Toluene-d8	485		500	97.0			81-114			

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/02/04-01.62**

LCS 2005/02/04-01.62-020 Extracted: 02/04/2005 Analyzed: 02/04/2005 12:20
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	23.5		25.0	94.0			65-165	20		
Benzene	20.8		25.0	83.2			69-129	20		
Toluene	22.3		25.0	89.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	444		500	88.8			73-130			
Toluene-d8	494		500	98.8			81-114			

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/02/01-02.68**

MS/MSD

Lab ID: 2005-01-0839 - 004

MS: 2005/02/01-02.68-036 Extracted: 02/01/2005 Analyzed: 02/01/2005 17:36
Dilution: 1.00

MSD: 2005/02/01-02.68-054 Extracted: 02/01/2005 Analyzed: 02/01/2005 17:54
Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	21.6	27.3	ND	25.0	86.4	109.2	23.3	65-165	20		R1
Benzene	24.2	27.4	ND	25.0	96.8	109.6	12.4	69-129	20		
Toluene	25.4	29.7	ND	25.0	101.6	118.8	15.6	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	449	448		500	89.9	89.6		73-130			
Toluene-d8	557	564		500	111.5	112.9		81-114			

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/02/03-01.62**

MS/MSD

MS: 2005/02/03-01.62-029 Extracted: 02/03/2005 Lab ID: 2005-02-0053 - 001
Analyzed: 02/03/2005 13:18
Dilution: 1.00

MSD: 2005/02/03-01.62-030 Extracted: 02/03/2005
Analyzed: 02/03/2005 13:44
Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	28.0	29.3	ND	25.0	112.0	117.2	4.5	65-165	20		
Benzene	23.0	23.4	ND	25.0	92.0	93.6	1.7	69-129	20		
Toluene	23.7	25.3	ND	25.0	94.8	101.2	6.5	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	477	481		500	95.4	96.2		73-130	0		
Toluene-d8	473	500		500	94.6	100.0		81-114	0		

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: 3412
Yee

Received: 01/31/2005 12:35

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/02/04-01.62**

MS/MSD

Lab ID: 2005-01-0771 - 004

MS: 2005/02/04-01.62-024 Extracted: 02/04/2005 Analyzed: 02/04/2005 19:24

Dilution: 1.00

MSD: 2005/02/04-01.62-050 Extracted: 02/04/2005 Analyzed: 02/04/2005 19:50

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	37.4	37.0	9.96	25.0	109.8	108.2	1.5	65-165	20		
Benzene	23.0	24.6	ND	25.0	92.0	98.4	6.7	69-129	20		
Toluene	25.5	26.4	ND	25.0	102.0	105.6	3.5	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	479	481		500	95.8	96.2		73-130			
Toluene-d8	495	515		500	99.0	103.0		81-114			

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: 3412
Yee

Received: 01/31/2005 12:35

Legend and Notes

Sample Comment

Lab ID: 2005-01-0825-2

Sample has mtbe.

Lab ID: 2005-01-0825-3

Sample has MTBE.

Analysis Flag

L2

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

Result Flag

Q6

The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.

R1

Analyte RPD was out of QC limits.

STL San Francisco

2005-01-0825

Logged on : 01/31/2005 @ 16:53 by mvillanueva

Due: Monday 02/07/2005 @ 17:00

Client	Bill To	Report To
Aqua Science Engineers, Inc. 208 West El Pintado Danville, CA 94526	Aqua Science Engineers, Inc. 208 West El Pintado Rd Danville, CA 94526	Aqua Science Engineers, Inc. 208 West El Pintado Danville, CA 94526
Contact: Damian Hriciga	Contact: Damian Hriciga	Contact: Damian Hriciga

Project: 3412 Yee
Site:
PO#:

Quote#:

Rcvd: 01/31/2005 @ 12:35
TAT: 5 Day
Disp: 03/17/2005

Temp: 4°C **EDF Global ID:** T0600102122 **PM:** Surinder Sidhu

#	Matrix	Sample Name	Date Sampled	Analysis	BaseMatrix	
1	Water	MW-1 - FieldID: MW-1	01/29/2005 @ 08:20	WA		
		5 Day Due: 02/07/2005 @ 17:00		8260B FO-S	REGULAR	*
2	Water	MW-3 - FieldID: MW-3	01/29/2005 @ 09:50	WA		
		5 Day Due: 02/07/2005 @ 17:00		8260B FO-S	REGULAR	*
3	Water	MW-4 - FieldID: MW-4	01/29/2005 @ 09:05	WA		
		5 Day Due: 02/07/2005 @ 17:00		8260B FO-S	REGULAR	*
4	Water	MW-5 - FieldID: MW-5	01/29/2005 @ 07:35	WA		
		5 Day Due: 02/07/2005 @ 17:00		8260B FO-S	REGULAR	*

Compounds:

* Gasoline, Methyl tert-butyl ether (MTBE), Benzene, Toluene, Ethylbenzene, Total xylenes, 1,2-Dichloroethane-d4, Toluene-d8

Sub-x : Subcontracted Out, MS : Must run Matrix Spike on this Sample, DUP : Must run Duplicate on this Sample

SEVERN TRENT

STL 2005-01-0825

STL San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 484-1096
Email: sflogin@stl-inc.com

Reference #: 97892

Date 1-29-05 Page 1 of 1

Report To

Attn: DAMIAN HERICH
Company: AQUA SCIENCE
Address: 208 W 2ND BIN MOD
Phone: Email:
Bill To:
Sampled By: DH
Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☒ Gas w/ ☒ BTEX ☒ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxyenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease (EPA 1664) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	Number of Containers
MW-1	1-27-05	0820	W	HCl	X																	4
MW-3	↓	0950	↓	↓	X																	4
MW-4		0905			X																	4
MW-5	↓	0735	↓	↓	X																	4

Project Info.

Project Name: YEE
Project#: 3412
PO#:
Credit Card#:

Sample Receipt

of Containers:
Head Space:
Temp: 4°C
Conforms to record:

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

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF ☐ Global ID

Special Instructions / Comments:

TO600102122

*STL SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}.

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 0800	Signature: [signature] Time:	Signature: Time:
Printed Name: DAMIAN HERICH Date: 1-31-05	Printed Name: [signature] Date: 1235	Printed Name: Date:
Company: ASE	Company: 1-31-05 AQUA SCIENCE	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time:	Signature: [signature] Time: 1235	Signature: Time:
Printed Name: [signature] Date: 0910	Printed Name: [signature] Date: 1-31-05	Printed Name: Date:
Company: 01-31-05 STL SF	Company: STL SF	Company:

Rev 06/04