Alameda-Contra Costa Transit District

RO296

April 2, 2004

Mr. Barney Chan
Alameda County Health Division
Division of Environmental Protection
Department of Environmental Health
1131 Harbor Bay Parkway, Second Floor
Alameda, CA 94502

Dear Mr. Chan:

Subject: Quarterly Groundwater Monitoring Report – August 2003 Sampling
AC Transit, 1100 Seminary Avenue, Oakland, CA

AC Transit hereby submits the enclosed quarterly groundwater monitoring report for the February 2004 sampling event at the 1100 Seminary Avenue, Oakland, facility. The diesel, gasoline and benzene concentrations decreased substantially in well MW-2 when the depth to groundwater decreased from 4.68 feet to 2.94 feet. The free phase product in well MW-2 has still not been observed to be present since the second quarter of 2002.

Groundwater sampling of monitoring wells MW-1 through MW-3 and MW-9 through MW-11 was performed by Cameron-Cole in accordance with directives from your office. Groundwater samples were collected from the six on-site monitoring wells and analyzed for total petroleum hydrocarbons (TPH) as gasoline and diesel using EPA Method 8015, benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl-tert butyl ether (MTBE) using EPA Method 8260B and nitrate and sulfate using Standard Methods 300.0A. Field parameters collected during sampling included pH, temperature, electrical conductivity, dissolved oxygen, ferrous iron and oxidation reduction potential. In addition, monitoring well MW-2 is being purged dry monthly and during each quarterly sampling event.

If you have any questions regarding this report or other matters pertaining to this site, please call me at (510) 577-8869.

Sincerely,

Suzanne Patton

Suzanne Patton, P.E.
Environmental Engineer
enclosure

10626 International Boulevard • Oakland, CA 94603 • TEL (510) 891-4777 • www.actransit.org

MONITORING REPORT FOR THE AC TRANSIT FACILITY LOCATED AT 1100 SEMINARY AVENUE, OAKLAND, CALIFORNIA

March 2004

Ms. Suzanne Patton
AC Transit
10626 E. 14th Street
Oakland, California 94603

Prepared By:
Cameron-Cole
101 W. Atlantic, Building 90
Alameda, California 94501

Project No: 2016

CAMERON-COLE

MONITORING REPORT FOR THE AC TRANSIT FACILITY LOCATED AT 1100 SEMINARY AVENUE, OAKLAND, CALIFORNIA

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Prepared For:
Ms. Suzanne Patton
AC Transit
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101 W. Atlantic Avenue, Building 90
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CAMERON-COLE

Written By
Emily Waters
Environmental Scientist

Approved By
Brad Wright, RG, CHG
Principle Hydrogeologist

STATE OF CALIFORNIA
REGISTERED GEOLOGIST
BRADLEY D. WRIGHT
REGISTERED GEOLOGIST

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INTRODUCTION

This report presents the results of the February 2004 sampling event for the AC Transit facility located at 1100 Seminary Avenue, Oakland, California (Site) (Figure 1). Groundwater sampling of monitor wells MW-1 through MW-3 and MW-9 through MW-11 was performed by Cameron-Cole, in accordance with directives from the Alameda County Health Care Services Agency (ACHCS).

OBJECTIVES AND SCOPE OF WORK

Work performed during quarterly sampling included measuring depth to water and presence of free phase hydrocarbons in the monitor wells and collecting water samples. Field parameters collected during sampling included pH, temperature, electric conductivity, dissolved oxygen (DO), ferrous iron (Fe^{2+}) and oxygen reduction potential (ORP). Groundwater samples were collected for laboratory analysis using United States Environmental Protection Agency (USEPA) Method 8015 for total petroleum hydrocarbons (TPH) gasoline/diesel, USEPA Method 8260B for benzene, toluene, ethylbenzene, and xylene (BTEX) and methyl-tert butyl ether (MTBE) and methods of chemical analysis for water and waste (MCAWW) 300.0A for nitrate and sulfate.

Chain-of-custody documents and certified analytical reports are presented in Appendix A. Field data sheets are included in Appendix B.

Groundwater Elevations and Flow Direction

Prior to purging and sample collection, all six Site monitor wells were inspected and measured for presence of free phase hydrocarbons and depth to groundwater. Measurements of depths to groundwater are presented on Table 1 and were used to construct the groundwater elevation contours shown in Figure 2. As shown, groundwater flow is to the west at a gradient of 0.004 feet/foot.

Groundwater Sampling Activities

The monitor wells were purged a minimum of three casing volumes, using a centrifugal pump and samples were collected using disposable polyethylene bailers. During well purging, field parameters for pH, electrical conductivity, DO, ORP, Fe^{2+} and temperature were monitored using calibrated field meters.

In addition, MW-2 is now being purged of ten casing volumes monthly and during all quarterly sampling events to expedite the removal of free phase hydrocarbons from the vicinity of the well. Field data sheets of the over-purge events are included in Appendix B.

Groundwater samples were transferred to appropriate laboratory supplied and preserved containers and placed in an ice-filled cooler for shipment under chain-of-custody to a State of California certified laboratory.

Groundwater Analytical Results

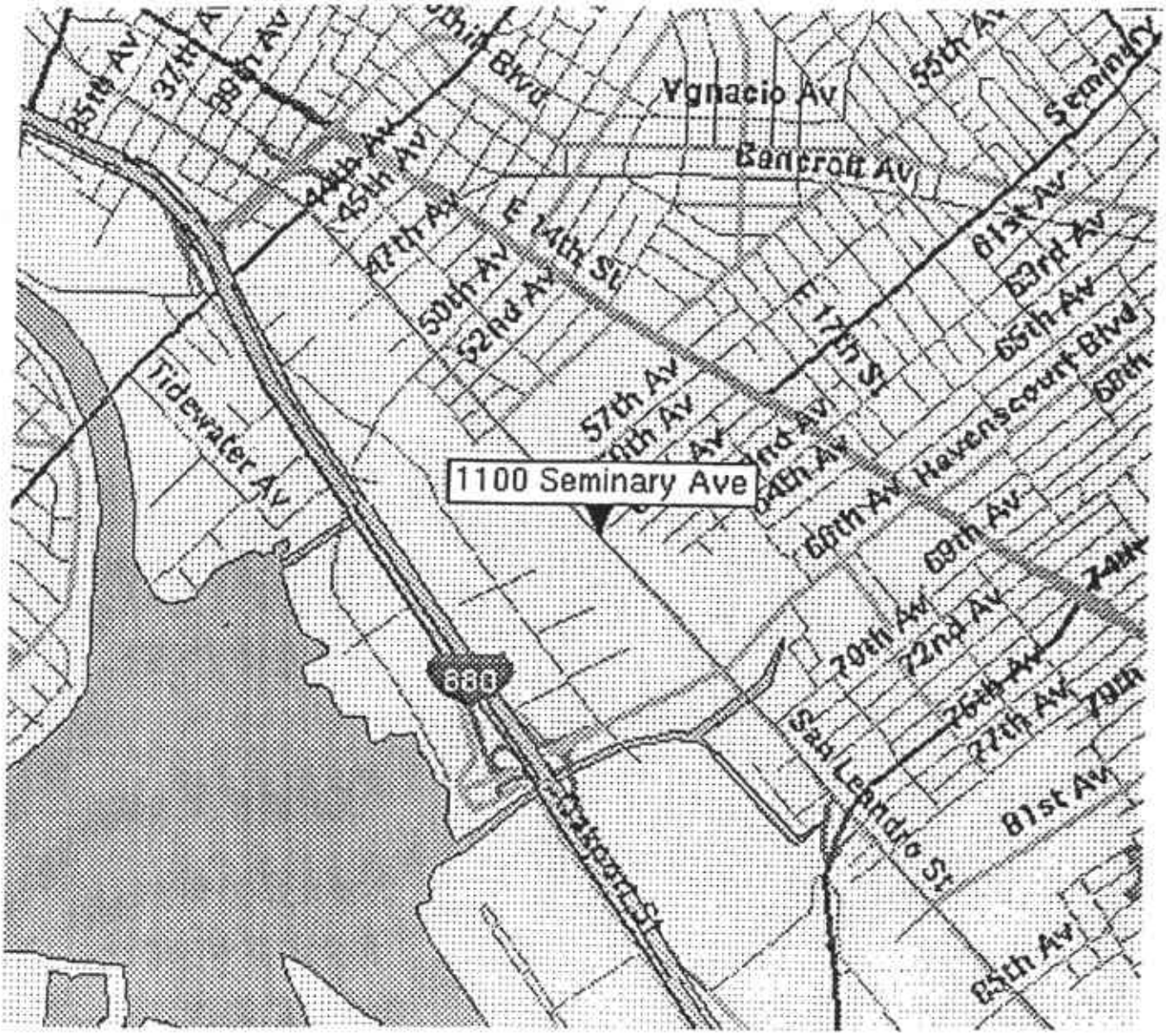
Table 2 presents groundwater historic and first quarter 2004 analytical results. Concentrations of benzene above the State of California maximum contaminant level (MCL) of 1.0 part per billion (ppb) were detected in monitor wells MW-2 and MW-3. Toluene detected above the MCL of 150 ppb in monitor well MW-2. Ethylbenzene was detected above the MCL of 700 ppb in monitor well MW-2. Total xylenes were detected above the MCL of 1,750 ppb in MW-2. TPH-Gas was detected above the reporting limit in monitor wells MW-1, MW-2 and MW-3. TPH-Diesel was detected above the reporting limit in all monitor wells. A lab control spike and lab control spike duplicate passed the USEPA's criteria for acceptance.

SUMMARY OF RESULTS

- Groundwater flow direction is towards the west at a gradient of 0.004 feet/foot.
- Chemical concentrations in excess of MCLs were limited to benzene in wells MW-2 and MW-3 and toluene, ethylbenzene and xylenes in well MW-2.
- The free phase product level previously measured in well MW-2 has not been detected since the second quarter 2002.

PROJECTED WORK AND RECOMMENDATIONS

- Quarterly groundwater monitoring is scheduled for May 2004.
- Continued monthly over purges of MW-2.

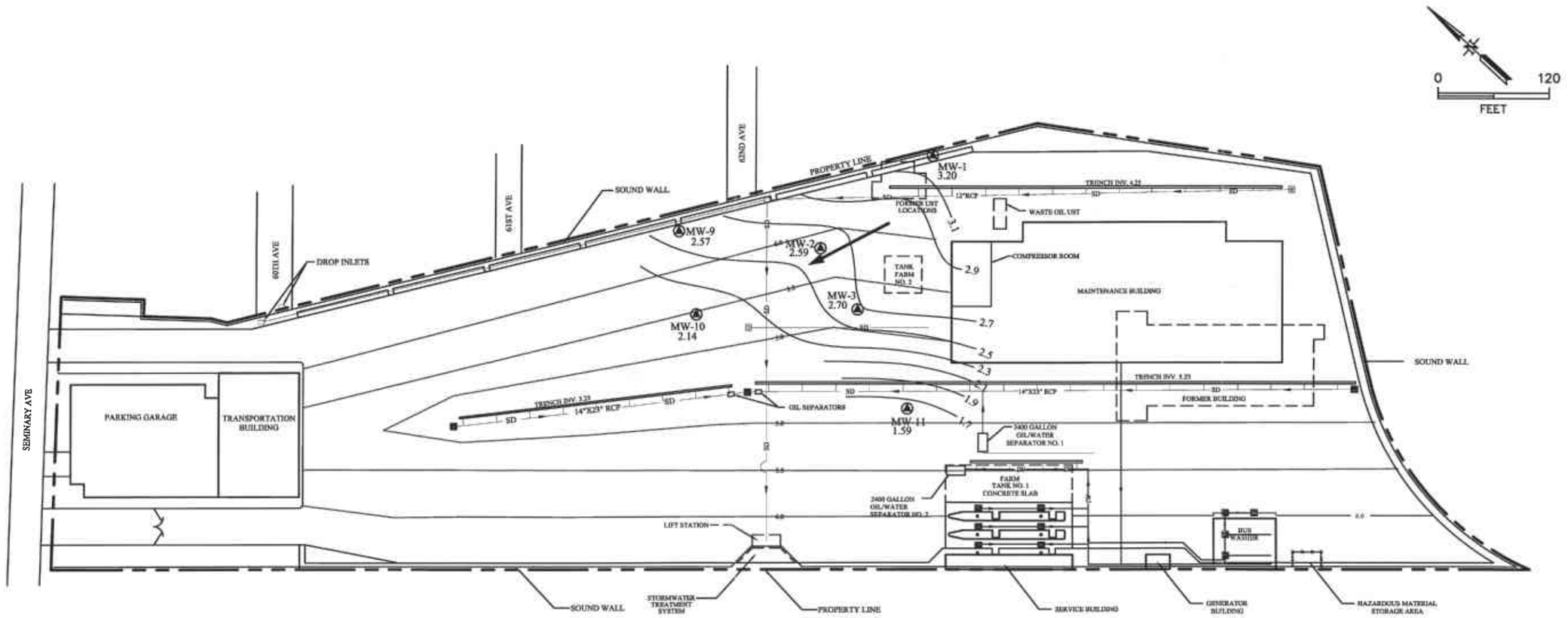


CAMERON-COLE

AC TRANSIT - OAKLAND, CALIFORNIA

FIGURE 1
SITE LOCATION MAP
1100 SEMINARY ROAD

SCALE	DATE
NO SCALE	3/22/00



LEGEND

1.0 — GROUNDWATER ELEVATION CONTOUR	EXISTING MONITORING WELL
1.59 GROUNDWATER ELEVATION (FT. MSL)	MANHOLE
REPORTED GROUNDWATER FLOW	CATCH BASIN
SD STORM DRAIN PIPELINE	
6.0 CONTOUR	
IW INDUSTRIAL WASTE PIPELINE	
SURFACE DRAINAGE TRENCH	

	BY	DATE
DRAWN	WRB	3/5/04
CHECKED		
APPROVED		
APPROVED		
APPROVED		

CAMERON-COLE

FIGURE 2

AC TRANSIT - OAKLAND, CALIFORNIA

1100 SEMINARY ROAD-POTENTIOMETRIC SURFACE MAP
FEBRUARY 9, 2004

SCALE: 1" = 120'

DWG. NO.: 2011-10

TABLE 1
GROUNDWATER LEVEL MEASUREMENTS
AC Transit Facility
1100 Seminary Avenue, Oakland, California

Well	Date	Top of Casing Elevation (ft-msl)*	Product Thickness (feet)	DTW (feet)	Measured Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected for Product Thickness**
MW-1	7-Jan-99	6.25	None	5.13	1.12	
	7-Feb-00		None	3.75	2.5	
	25-May-00		None	3.69	2.56	
	22-Aug-00		None	4.79	1.46	
	20-Nov-00		None	4.92	1.33	
	1-Mar-01		None	2.75	3.50	
	14-May-01		None	3.67	2.58	
	26-Jul-01		None	4.73	1.52	
	16-Oct-01		None	5.35	0.90	
	21-Feb-02		None	3.30	2.95	
	29-May-02		None	3.70	2.55	
	17-Sep-02		None	4.85	1.40	
	14-Nov-02		None	4.59	1.66	
	5-Feb-03		None	3.37	2.88	
	14-May-03		None	3.17	3.08	
	22-Aug-03		None	4.52	1.73	
	20-Nov-03		None	4.61	1.64	
	9-Feb-04		**None**	**3.05**	**3.20**	
MW-2	7-Jan-99	5.53	2.27	6.91	-1.38	0.44
	8-Jun-99		2.23	5.83	-0.3	1.48
	9-Jun-99		0	3.9	1.63	1.63
	10-Jun-99		0	3.9	1.63	1.63
	15-Jun-99		0.42	3.92	1.61	1.95
	8-Jul-99		0.2	4.3	1.23	1.39
	7-Feb-00		Sheen	3.8	1.73	
	25-May-00		0.12	3.23	2.3	2.40
	22-Aug-00		0.23	4.45	1.08	1.10
	20-Nov-00		0.23	4.70	0.83	0.85
	1-Mar-01		0.13	2.75	2.78	2.79
	14-May-01		Sheen	3.30	2.23	
	26-Jul-01		None	3.27	2.26	
	16-Oct-01		0.02	5.25	0.28	0.28
	21-Feb-02		0.01	3.32	2.21	2.21
	29-May-02		0.02	2.98	2.55	2.55
	17-Sep-02		None	4.83	0.70	
	14-Nov-02		None	5.43	0.10	
	5-Feb-03		None	3.85	1.68	
	14-May-03		None	2.94	2.59	
	22-Aug-03		None	4.20	1.33	
	20-Nov-03		None	4.68	0.85	
	9-Feb-04		**None**	**2.94**	**2.59**	

TABLE 1
GROUNDWATER LEVEL MEASUREMENTS
AC Transit Facility
1100 Seminary Avenue, Oakland, California

Well	Date	Top of Casing Elevation (ft-msl)*	Product Thickness (feet)	DTW (feet)	Measured Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected for Product Thickness**
MW-3	7-Jan-99	4.76	None	4.11	0.65	
	7-Feb-00		None	3.1	1.66	
	25-May-00		None	2.41	2.35	
	22-Aug-00		None	3.45	1.31	
	20-Nov-00		None	3.42	1.34	
	1-Mar-01		None	2.00	2.76	
	14-May-01		None	2.64	2.12	
	26-Jul-01		None	3.17	1.59	
	16-Oct-01		None	3.97	0.79	
	21-Feb-02		None	2.20	2.56	
	29-May-02		None	2.52	2.24	
	17-Sep-02		None	3.65	1.11	
	14-Nov-02		None	3.47	1.29	
	5-Feb-03		None	2.19	2.57	
	14-May-03		None	2.12	2.64	
	22-Aug-03		None	3.25	1.51	
	20-Nov-03		None	3.40	1.36	
	9-Feb-04		**None**	**2.06**	**2.70**	
MW-9	7-Feb-00	5.8	None	4.37	1.43	
	25-May-00		None	4.95	0.85	
	22-Aug-00		None	5.18	0.62	
	20-Nov-00		None	4.70	1.10	
	1-Mar-01		None	3.03	2.77	
	14-May-01		None	4.56	1.24	
	26-Jul-01		None	5.17	0.63	
	16-Oct-01		None	5.19	0.61	
	21-Feb-02		None	4.79	1.01	
	29-May-02		None	4.07	1.73	
	17-Sep-02		None	4.94	0.86	
	14-Nov-02		None	4.87	0.93	
	5-Feb-03		None	3.88	1.92	
	14-May-03		None	3.77	2.03	
	22-Aug-03		None	4.73	1.07	
	20-Nov-03		None	4.46	1.34	
	9-Feb-04		**None**	**3.23**	**2.57**	

TABLE 1
GROUNDWATER LEVEL MEASUREMENTS
AC Transit Facility
1100 Seminary Avenue, Oakland, California

Well	Date	Top of Casing Elevation (ft-msl)*	Product Thicknes s (feet)	DTW (feet)	Measured Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected for Product Thickness**
MW-10	7-Feb-00	4.65	None	3.19	1.46	
	25-May-00		None	3.11	1.54	
	22-Aug-00		None	4.35	0.30	
	20-Nov-00		None	4.18	0.47	
	1-Mar-01		None	3.14	1.51	
	14-May-01		None	3.27	1.38	
	26-Jul-01		None	3.95	0.70	
	16-Oct-01		None	4.57	0.08	
	21-Feb-02		None	3.29	1.36	
	29-May-02		None	3.30	1.35	
	17-Sep-02		None	4.11	0.54	
	14-Nov-02		None	3.86	0.79	
	5-Feb-03		None	3.36	1.29	
	14-May-03		None	3.23	1.42	
	22-Aug-03		None	4.52	0.13	
	20-Nov-03		None	3.56	1.09	
	9-Feb-04		**None**	**2.51**	**2.14**	
MW-11	7-Feb-00	4.19	None	4.97	-0.78	
	25-May-00		None	7.58	-3.39	
	22-Aug-00		None	3.01	1.18	
	20-Nov-00		None	2.88	1.31	
	1-Mar-01		None	1.91	2.28	
	14-May-01		None	4.49	-0.3	
	26-Jul-01		None	2.95	1.24	
	16-Oct-01		None	3.35	0.84	
	21-Feb-02		None	1.85	2.34	
	29-May-02		None	2.36	1.83	
	17-Sep-02		None	3.11	1.08	
	14-Nov-02		None	2.55	1.64	
	5-Feb-03		None	2.75	1.44	
	14-May-03		None	1.98	2.21	
	22-Aug-03		None	2.86	1.33	
	20-Nov-03		None	2.73	1.46	
	9-Feb-04		**None**	**2.60**	**1.59**	

Notes:

* ft-msl: feet-mean sea level
** used 0.8 specific gravity of product
DTW: Depth to Water

TABLE 2
ANALYTICAL RESULTS OF GROUNDWATER SAMPLES (ppb)
AC Transit Facility
1100 Seminary Avenue, Oakland, California

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	Nitrate	Sulfate	DO	Fe
	MCL (ppb)				1.0	150	700	1,750	13				
MW-1	7-Jan-99	<100	470	NA	17.0	2	31.0	18	<50	150	3,400	360	53
	7-Feb-00	390	<60	1,300	13.0	<10	<10	<10	<20	<50	1,200	1,220	11,800
	25-May-00	<50	<50	1,000	12.0	<1.0	<1.0	<1.0	<2.0	140	1,500	1,950	1,380
	22-Aug-00	<50	<50	600	6.3	<1.0	2.3	<1.0	<2.0	75	2,100	6,850	2,350
	20-Nov-00	<50	<50	630	2.8	<1.0	1.1	<1.0	<2.0	<50	4,500	11,210	1,170
	1-Mar-01	<50	<50	900	29.0	1.2	16.0	6	<2.0	<50	2,800	6,020	2,920
	14-May-01	<50	<50	540	4.1	<1.0	3.1	<1.0	<2.0	<50	2,500	13,970	1,870
	26-Jul-01	190	<50	500	<1.0	<1.0	<1.0	<1.0	<2.0	75	3,700	8,480	1,950
	16-Oct-01	<50	<50	650	16.0	1.1	4.6	1.6	<2.0	<50	3,600	9,480	2,560
	21-Feb-02	560	<50	550	21	1.0	19	15	<2.0	<50	3,000	5,890	2,200
	29-May-02	130	<50	510	<1.0	<1.0	<1.0	<1.0	<2.0	<50	2,300	6,820	1,300
	17-Sep-02	140	<50	330	<1.0	<1.0	<1.0	<1.0	<2.0	<50	5,200	5,840	>3300
	14-Nov-02	150	570	NA	4.8	0.57	2.7	1.1	<1.0	<200	12,000	4,720	>3300
	5-Feb-03	250	210	NA	16.0	<0.5	0.93	<1.0	<1.0	<200	6,500	5,630	>3300
	14-May-03	220	<50	NA	9.9	<0.5	1.6	<1.0	<1.0	<200	5,200	3,280	2,750
	22-Aug-03	150	770	NA	<0.5	<1.0	<1.0	<1.0	<1.0	<200	6,300	2,980	2,570
	20-Nov-03	300	320	NA	3.0	<0.5	0.56	<1.0	<1.0	<200	7,900	3,030	2,680
	9-Feb-04	**210**	**370**	**NA**	**<0.5**	**0.50**	**0.52**	**<1.0**	**<1.0**	**<200**	**7,000**	**4,190**	**>3300**
MW-2	8-Jun-99	11,000	434,000	117,000	1,000,000	<100,000	260,000	<300,000	<5,000,000	NA	NA	NA	NA
	7-Feb-00	51,000	160,000	<5000	19,000	<500	920	<500	<1000	51	<1000	6,660	7,300
	25-May-00	<1200	<50000	65,000	11,000	<500	670	530	<1000	330	<1000	5,670	0
	22-Aug-00	<2500	<2500	150,000	23,000	<500	1,100	1,100	<1000	370	<1000	4,530	3,680
	20-Nov-00	<1200	<25000	430,000	18,000	<500	840	610	<1000	<250	<500	1,700	3,300
	3-Mar-01	<500	<25000	610,000	14,000	<830	<830	<830	<1700	<250	<5000	7,880	3,300
	14-May-01	<1000	280,000	51,000	19,000	240	1,100	1,200	<330	<50	<1000	3,330	>3300
	26-Jul-01	54,000	590,000	<25000	19,000	<500	1,300	1,500	<1000	<50	<1000	9,960	>3300
	16-Oct-01	43,000	560,000	<25000	18,000	280	1,100	1,300	<100	<50	1,500	17,630	>3300
	21-Feb-02	46,000	180,000	<12000	18,000	<500	950	1,500	<1000	<100	<2000	3,650	>3300
	29-May-02	49,000	130,000	<5000	17,000	350	970	1,700	<500	<50	1,000	2,220	>3300
	17-Sep-02	60,000	<25000	470,000	21,000	<500	1,600	2,700	<1000	<50	<1000	4,270	>3300
	14-Nov-02	36,000	490,000	NA	14,000	280	970	2,200	<400	<200	<500	6,050	>3300
	5-Feb-03	47,000	28,000	NA	15,000	360	1,200	2,100	<100	<200	<500	6,940	>3300
	14-May-03	39,000	200,000	NA	13,000	370	1,000	2,000	<100	<200	<500	2,140	>3300
	22-Aug-03	43,000	480,000	NA	22,000	490	1,500	2,100	<400	<200	<500	1,960	>3300
	20-Nov-03	59,000	320,000	NA	22,000	<100	1,700	3,200	<200	<200	<500	2,100	>3300
	9-Feb-04	**19,000**	**55,000**	**NA**	**5,400**	**160**	**800**	**1,800**	**<100**	**<200**	**1,200**	**4,730**	**>3300**

TABLE 2
ANALYTICAL RESULTS OF GROUNDWATER SAMPLES (ppb)
AC Transit Facility
1100 Seminary Avenue, Oakland, California

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	Nitrate	Sulfate	DO	Fe
	MCL (ppb)				1.0	150	700	1,750	13				
MW-3	7-Jan-99	199	2,680	NA	450	<10	250	190	<500	170	3,300	880	0
	7-Feb-00	2,000	<150	3,100	26	<2	5	2	<4	<50	47,300	6,480	17,800
	25-May-00	<50	<50	1,000	35	<1.0	6	4	<2.0	<50	21,700	4,640	600
	22-Aug-00	<50	<50	2,400	240	<10	<10	<10	<20	<50	19,300	3,970	20
	20-Nov-00	<50	<50	2,400	<25	<25	<25	<25	<50	<50	26,500	4,120	20
	1-Mar-01	<50	<50	1,200	100	<5.0	8.3	<5.0	<10	<50	27,000	1,510	50
	14-May-01	<50	<50	860	8.4	<1.0	1.2	<1.0	<2.0	<50	21,100	9,800	0
	26-Jul-01	1,200	<50	790	140	<5.0	12	<5.0	<10	<50	18,700	8,650	80
	16-Oct-01	1,000	<50	1,600	5.1	<1.0	4.3	<1.0	<2.0	<50	29,800	11,360	640
	21-Feb-02	1,700	<50	990	200	<10	29.0	12	<20	<50	20,500	5,730	0
	29-May-02	630	<50	840	68	<1.0	4.2	3.3	<2.0	<50	14,300	5,870	1,070
	17-Sep-02	<50	<50	1,100	4.1	<1.0	1.8	1.0	<2.0	<50	17,000	6,820	2,820
	14-Nov-02	2,800	460	NA	200	1.1	28	9.0	<2.0	<200	19,000	9,780	1,210
	5-Feb-03	720	270	NA	55	<0.5	20	7.1	<1.0	<200	22,000	8,320	>3300
	14-May-03	540	130	NA	18	<0.5	3.6	1.0	<1.0	<200	19,000	8,460	1,980
	22-Aug-03	400	540	NA	2.7	<1.0	1.6	<1.0	<1.0	<200	18,000	6,620	190
	20-Nov-03	240	520	NA	8.8	<0.5	2.2	<1.0	<1.0	<200	16,000	5,820	100
	9-Feb-04	**700**	**700**	**NA**	**5.6**	**<0.5**	**3.8**	**1.3**	**<1.0**	**<200**	**17,000**	**4,080**	**0**
MW-9	7-Feb-00	<50	<50	240	<1	<1	<1	<1	<2	230	183,000	6,940	9,000
	25-May-00	<50	<50	130	<1.0	<1.0	<1.0	<1.0	<2.0	250	172,000	6,020	1,200
	22-Aug-00	<50	<50	120	<1.0	<1.0	<1.0	<1.0	<2.0	280	157,000	7,250	0
	20-Nov-00	<50	<50	130	<1.0	<1.0	<1.0	<1.0	<2.0	340	147,000	9,690	0
	1-Mar-01	<50	<50	150	<1.0	<1.0	<1.0	<1.0	<2.0	230	116,000	4,210	0
	14-May-01	<50	<50	110	<1.0	<1.0	<1.0	<1.0	<2.0	100	140,000	8,290	0
	26-Jul-01	<50	<50	71	<1.0	<1.0	<1.0	<1.0	<2.0	130	143,000	7,560	0
	16-Oct-01	<50	<50	120	<1.0	<1.0	<1.0	<1.0	<2.0	89	141,000	967	50
	21-Feb-02	<50	<50	89	<1.0	<1.0	<1.0	<1.0	<2.0	94	137,000	3,500	70
	29-May-02	<50	<50	95	<1.0	<1.0	<1.0	<1.0	<2.0	94	141,000	4,590	90
	17-Sep-02	<50	<50	96	<1.0	<1.0	<1.0	<1.0	<2.0	100	143,000	3,860	2,130
	14-Nov-02	<50	82	NA	<0.5	<0.5	<0.5	<1.0	<1.0	<200	130,000	10,120	670
	5-Feb-03	<50	82	NA	<0.5	<0.5	<0.5	<1.0	<1.0	<200	140,000	8,630	2,870
	14-May-03	<50	140	NA	<0.5	<0.5	<0.5	<1.0	1.3	<200	130,000	8,760	2,570
	22-Aug-03	<50	220	NA	<0.5	<1.0	<1.0	<1.0	<1.0	<200	140,000	6,140	0
	20-Nov-03	<50	80	NA	<0.5	<0.5	<0.5	<1.0	1.8	<200	140,000	6,030	200
	9-Feb-04	**<50**	**65**	**NA**	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**<1.0**	**<200**	**98,000**	**5,800**	**0**

TABLE 2
ANALYTICAL RESULTS OF GROUNDWATER SAMPLES (ppb)
AC Transit Facility
1100 Seminary Avenue, Oakland, California

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	Nitrate	Sulfate	DO	Fe
	MCL (ppb)				1.0	150	700	1,750	13				
MW-10	7-Feb-00	<50	<50	470	<1	<1	<1	<1	<2	53	114,000	1,200	55,000
	25-May-00	<50	<50	220	<1.0	<1.0	<1.0	<1.0	<2.0	480	136,000	1,940	0
	22-Aug-00	<50	<50	140	<1.0	<1.0	<1.0	<1.0	<2.0	69	126,000	4,350	0
	20-Nov-00	<50	<50	300	<1.0	<1.0	<1.0	<1.0	<2.0	<50	76,200	3,790	0
	1-Mar-01	<50	<50	250	<1.0	<1.0	<1.0	<1.0	<2.0	<250	106,000	7,440	0
	14-May-01	<50	<50	74	<1.0	<1.0	<1.0	<1.0	<2.0	<50	135,000	6,790	0
	26-Jul-01	<50	<50	120	<1.0	<1.0	<1.0	<1.0	<2.0	<50	125,000	9,680	1,970
	16-Oct-01	<50	<50	190	<1.0	<1.0	<1.0	<1.0	<2.0	<50	90,100	28,000	570
	21-Feb-02	<50	<50	190	<1.0	<1.0	<1.0	<1.0	<2.0	<50	77,700	4,280	0
	29-May-02	<50	<50	110	<1.0	<1.0	<1.0	<1.0	<2.0	<50	126,000	7,230	270
	17-Sep-02	<50	<50	170	<1.0	<1.0	<1.0	<1.0	<2.0	<50	107,000	4,230	>3300
	14-Nov-02	<50	270	NA	<0.5	<0.5	<0.5	<1.0	1.5	<200	64,000	1,680	1,400
	5-Feb-03	<50	160	NA	<0.5	<0.5	<0.5	<1.0	<1.0	<200	110,000	5,260	>3300
	14-May-03	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	<1.0	<200	93,000	2,990	1,720
	22-Aug-03	<50	320	NA	<0.5	<1.0	<1.0	<1.0	<1.0	<200	120,000	1,950	0
	20-Nov-03	<50	300	NA	<0.5	<0.5	<0.5	<1.0	1.7	<200	65,000	1,750	0
	9-Feb-04	**<50**	**250**	**NA**	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**1.1**	**<200**	**110,000**	**1,650**	**0**

TABLE 2
ANALYTICAL RESULTS OF GROUNDWATER SAMPLES (ppb)
AC Transit Facility
1100 Seminary Avenue, Oakland, California

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	Nitrate	Sulfate	DO	Fe
	MCL (ppb)				1.0	150	700	1,750	13				
MW-11	7-Feb-00	<50	<50	400	<1	<1	<1	<1	25	800	167,000	7,300	16,200
	25-May-00	<50	<50	200	<1.0	<1.0	<1.0	<1.0	16	480	207,000	6,540	0
	22-Aug-00	<50	<50	170	<1.0	<1.0	<1.0	<1.0	9.3	610	168,000	4,640	20
	20-Nov-00	<50	<50	190	<1.0	<1.0	<1.0	<1.0	7.5	550	143,000	2,380	0
	1-Mar-01	<50	<50	250	<1.0	<1.0	<1.0	<1.0	15.0	170	80,300	5,860	0
	14-May-01	<50	<50	160	<1.0	<1.0	<1.0	<1.0	14.0	230	103,000	6,060	2,910
	26-Jul-01	<50	<50	220	5.9	<1.0	<1.0	2.7	20.0	180	71,300	7,360	>3300
	16-Oct-01	<50	<50	170	<1.0	<1.0	<1.0	<1.0	12.0	190	101,000	8,810	>3300
	21-Feb-02	<50	<50	170	<1.0	<1.0	<1.0	<1.0	2.2	110	75,600	4,280	0
	29-May-02	<50	<50	290	<1.0	<1.0	<1.0	<1.0	2.3	140	98,700	8,350	0
	17-Sep-02	<50	<500	1,900	<1.0	<1.0	<1.0	<1.0	3.8	54	141,000	6,260	90
	14-Nov-02	<50	740	NA	0.88	<0.5	<0.5	1.2	5.3	<200	120,000	8,380	0
	5-Feb-03	<50	410	NA	<0.5	<0.5	<0.5	<1.0	3.4	<200	8,800	9,590	0
	14-May-03	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	2.5	<200	91,000	1,560	1,960
	22-Aug-03	<50	540	NA	<0.5	<1.0	<1.0	<1.0	2.2	<200	130,000	2,210	1,720
	20-Nov-03	<50	290	NA	<0.5	<0.5	<0.5	<1.0	1.8	<200	120,000	2,300	1,910
	9-Feb-04	**<50**	**270**	**NA**	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**<1.0**	**<200**	**120,000**	**10,400**	**0**

Notes:
ppb: parts per billion
TPH-G: total petroleum hydrocarbons as gasoline
TPH-D: total petroleum hydrocarbons as diesel
TPH: total petroleum hydrocarbons as motor oil or unknown hydrocarbon
MCL: Maximum Contaminant Level
MTBE: Methyl-tert,butylether
DO: Dissolved Oxygen
Fe: Ferrous Iron
NA: Not Analyzed

APPENDIX A

CERTIFIED ANALYTICAL REPORTS

CHAIN-OF-CUSTODY DOCUMENTS

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

February 26, 2004

Brad Wright
Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501

Order:	37757	**Date Collected:**	2/9/2004
Project Name:	ACTransit	**Date Received:**	2/9/2004
Project Number:	2016	**P.O. Number:**	2016- Seminary
Project Notes:			

On February 09, 2004, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Liquid	BTEX+MTBE by EPA 8260B	EPA 8260B
	EDD	EDD
	Nitrate as N	EPA 300.0
	PDF	PDF
	Sulfate by IC	EPA 300.0
	TPH as Diesel	EPA 8015 MOD. (Extractable)
	TPH as Gasoline	EPA 8015 MOD. (Purgeable)

Case Narrative: Due to a sample log in error, sample 37757-005 (MW-10) was analyzed 24 hours outside of recommended holding time for TPH as Gasoline (GRO). This sample is not subject to invoicing for GRO.

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-588-0200.

Sincerely,

Patti Sandrock
QA/QC Manager

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/23/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By:

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-001 **Client Sample ID:** MW-1
Sample Time: 1:35 PM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Nitrate as N	ND	1	0.2	0.2	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0
Sulfate	7.0	1	0.5	0.5	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0

Order ID: 37757 **Lab Sample ID:** 37757-002 **Client Sample ID:** MW-3
Sample Time: 12:45 PM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Nitrate as N	ND	1	0.2	0.2	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0
Sulfate	17	1	0.5	0.5	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0

Order ID: 37757 **Lab Sample ID:** 37757-003 **Client Sample ID:** MW-2
Sample Time: 10:55 AM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Nitrate as N	ND	1	0.2	0.2	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0
Sulfate	1.2	1	0.5	0.5	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0

Order ID: 37757 **Lab Sample ID:** 37757-005 **Client Sample ID:** MW-10
Sample Time: 11:45 AM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Nitrate as N	ND	1	0.2	0.2	mg/L	N/A	2/10/2004	WIC040209B	EPA 300.0
Sulfate	110	5	0.5	2.5	mg/L	N/A	2/10/2004	WIC040209B	EPA 300.0

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst 2/23/04 Date

Supervisor 2/23/04 Date

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/23/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-006 **Client Sample ID:** MW-11
Sample Time: 2:00 PM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Nitrate as N	ND	1	0.2	0.2	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0
Sulfate	120	5	0.5	2.5	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0

Order ID: 37757 **Lab Sample ID:** 37757-007 **Client Sample ID:** MW-9
Sample Time: 2:25 PM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Nitrate as N	ND	1	0.2	0.2	mg/L	N/A	2/9/2004	WIC040209	EPA 300.0
Sulfate	98	5	0.5	2.5	mg/L	N/A	2/10/2004	WIC040209	EPA 300.0

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst 2/23/04 Date

Supervisor 2/23/04 Date

Entech Analytical Labs, Inc.

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Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/13/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By:

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-001 **Client Sample ID:** MW-1
Sample Time: 1:35 PM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	370	x	1	50	50	µg/L	2/10/04	2/11/04	DW4700A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	97	16 - 137

Comment: Reported TPH-Diesel value is the result of possible gasoline compounds and overlapping Hydraulic Oil into the Diesel quantitation range.

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: JZ Reviewed by: ACC

Order ID: 37757 **Lab Sample ID:** 37757-002 **Client Sample ID:** MW-3
Sample Time: 12:45 PM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	700	x	1	50	50	µg/L	2/10/04	2/11/04	DW4700A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	82	16 - 137

Comment: Reported TPH-Diesel value is the result of possible gasoline compounds and overlapping Hydraulic Oil into the Diesel quantitation range.

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: JZ Reviewed by: ACC

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/13/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-003 **Client Sample ID:** MW-2
Sample Time: 10:55 AM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	55000		50	50	2500	µg/L	2/10/04	2/13/04	DW4700A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	NR	16 - 137

Comment: NR=Not Reportable. Surrogate recovery not reportable due to dilution.

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: JZ Reviewed by: [illegible]

Order ID: 37757 **Lab Sample ID:** 37757-005 **Client Sample ID:** MW-10
Sample Time: 11:45 AM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	250	x	1	50	50	µg/L	2/10/04	2/11/04	DW4700A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	98	16 - 137

Comment: Reported TPH-Diesel value is the result of overlapping Hydraulic Oil into the Diesel quantitation range.

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: JZ Reviewed by: [illegible]

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

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Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/13/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-006 **Client Sample ID:** MW-11
Sample Time: 2:00 PM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	270	x	1	50	50	µg/L	2/10/04	2/11/04	DW4700A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	90	16 - 137

Comment: Reported TPH-Diesel value is the result of overlapping Hydraulic Oil into the Diesel quantitation range.

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: JZ Reviewed by: [signature]

Order ID: 37757 **Lab Sample ID:** 37757-007 **Client Sample ID:** MW-9
Sample Time: 2:25 PM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	65	x	1	50	50	µg/L	2/10/04	2/11/04	DW4700A	EPA 8015 MOD. (Extractable)

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	83	16 - 137

Comment: Reported TPH-Diesel value is the result of overlapping Hydraulic Oil into the Diesel quantitation range.

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: JZ Reviewed by: [signature]

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/20/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By:

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-001 **Client Sample ID:** MW-1

Sample Time: 1:35 PM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Ethyl Benzene	0.52		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	2/18/2004	WMS210522B	EPA 8260B
Toluene	0.50		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Xylenes, Total	ND		1	1	1	µg/L	2/18/2004	WMS210522B	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	101.3	64 - 126
Dibromofluoromethane	97.2	23 - 172
Toluene-d8	100.6	70 - 134

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: _____ Reviewed by: _____

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

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Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/11/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By:

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-001 **Client Sample ID:** MW-1

Sample Time: 1:35 PM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	210	x	1	50	50	µg/L	N/A	2/10/04	WGC63056C	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	71.6	65 - 135

Comment: Reported TPH as Gasoline value is the atypical Gasoline pattern within the TPH as Gasoline quantitation range.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

MR 2/11/04
Analyst Date

WCS 02/11/04
Supervisor Date

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/20/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-002 **Client Sample ID:** MW-3

Sample Time: 12:45 PM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	5.6		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Ethyl Benzene	3.8		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	2/18/2004	WMS210522B	EPA 8260B
Toluene	ND		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Xylenes, Total	1.3		1	1	1	µg/L	2/18/2004	WMS210522B	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99.6	64 - 126
Dibromofluoromethane	95.7	23 - 172
Toluene-d8	101.1	70 - 134

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: _____ Reviewed by: _____

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/11/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-002 **Client Sample ID:** MW-3

Sample Time: 12:45 PM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	700	x	2	50	100	µg/L	N/A	2/10/04	WGC63056C	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99.5	65 - 135

Comment: Reported TPH as Gasoline value is the atypical Gasoline pattern within the TPH as Gasoline quantitation range.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst 02/11/04 Date

Supervisor 02/11/04 Date

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/23/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-003 **Client Sample ID:** MW-2

Sample Time: 10:55 AM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	5400		100	0.5	50	µg/L	2/19/2004	WMS210527	EPA 8260B
Ethyl Benzene	800		100	0.5	50	µg/L	2/19/2004	WMS210527	EPA 8260B
Methyl-t-butyl Ether	ND		100	1	100	µg/L	2/19/2004	WMS210527	EPA 8260B
Toluene	160		100	0.5	50	µg/L	2/19/2004	WMS210527	EPA 8260B
Xylenes, Total	1800		100	1	100	µg/L	2/19/2004	WMS210527	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	103.5	64 - 126
Dibromofluoromethane	93.9	23 - 172
Toluene-d8	97.5	70 - 134

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: _____ Reviewed by: _____

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

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Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/11/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-003 **Client Sample ID:** MW-2

Sample Time: 10:55 AM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	19000	x	25	50	1250	µg/L	N/A	2/10/04	WGC63056C	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	69.6	65 - 135

Comment: Reported TPH as Gasoline value is the atypical Gasoline pattern and high concentration of benzene within the TPH as Gasoline quantitation range.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

MR 02/11/04
Analyst Date

MCS 2/11/04
Supervisor Date

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/20/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-004 **Client Sample ID:** Trip Blank

Sample Time: 10:25 AM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Ethyl Benzene	ND		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	2/18/2004	WMS210522B	EPA 8260B
Toluene	ND		1	0.5	0.5	µg/L	2/18/2004	WMS210522B	EPA 8260B
Xylenes, Total	ND		1	1	1	µg/L	2/18/2004	WMS210522B	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	102.9	64 - 126
Dibromofluoromethane	97.8	23 - 172
Toluene-d8	101.3	70 - 134

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: _____ Reviewed by: _____

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/23/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-005 **Client Sample ID:** MW-10

Sample Time: 11:45 AM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Ethyl Benzene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Methyl-t-butyl Ether	1.1		1	1	1	µg/L	2/19/2004	WMS210527	EPA 8260B
Toluene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Xylenes, Total	ND		1	1	1	µg/L	2/19/2004	WMS210527	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	101.1	64 - 126
Dibromofluoromethane	94.3	23 - 172
Toluene-d8	100.1	70 - 134

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: _____ Reviewed by: _____

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/24/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-005 **Client Sample ID:** MW-10

Sample Time: 11:45 AM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	2/24/04	WGC43067C	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	101.0	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst — Date: 2/24/04

Supervisor — Date: 02/24/04

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/23/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-006 **Client Sample ID:** MW-11

Sample Time: 2:00 PM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Ethyl Benzene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	2/19/2004	WMS210527	EPA 8260B
Toluene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Xylenes, Total	ND		1	1	1	µg/L	2/19/2004	WMS210527	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	98.5	64 - 126
Dibromofluoromethane	101.7	23 - 172
Toluene-d8	99.9	70 - 134

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: _____ Reviewed by: _____

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Entech Analytical Labs, Inc.

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Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/11/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-006 **Client Sample ID:** MW-11

Sample Time: 2:00 PM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	2/10/04	WGC63056C	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	78.9	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst 2/11/04 Date

Supervisor 02/11/04 Date

Environmental Analysis Since 1983

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Attn: Brad Wright

Date: 2/23/2004
Date Received: 2/9/2004
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-007 **Client Sample ID:** MW-9

Sample Time: 2:25 PM **Sample Date:** 2/9/2004 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Ethyl Benzene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	2/19/2004	WMS210527	EPA 8260B
Toluene	ND		1	0.5	0.5	µg/L	2/19/2004	WMS210527	EPA 8260B
Xylenes, Total	ND		1	1	1	µg/L	2/19/2004	WMS210527	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	100.0	64 - 126
Dibromofluoromethane	100.2	23 - 172
Toluene-d8	99.7	70 - 134

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346) Analyzed by: _____ Reviewed by: _____

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

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Cameron-Cole
101 W. Atlantic Ave.,Bldg#90
Alameda, CA 94501
Attn: Brad Wright

Date: 2/11/04
Date Received: 2/9/04
Project Name: ACTransit
Project Number: 2016
P.O. Number: 2016- Seminary
Sampled By: Client

Certified Analytical Report

Order ID: 37757 **Lab Sample ID:** 37757-007 **Client Sample ID:** MW-9

Sample Time: 2:25 PM **Sample Date:** 2/9/04 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	2/10/04	WGC63056C	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	79.0	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst 02/11/04 Date

Supervisor 02/11/04 Date

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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Quality Control Results Summary

QC Batch #: DW4700A

Matrix: Liquid **Units:** µg/L **Date Analyzed:** 2/11/2004

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Diesel											
TPH as Diesel	EPA 8015 M	ND		1000.		608.45	LCS	60.8			29 - 130
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
o-Terphenyl			83.0			16 - 137					
Test: TPH as Diesel											
TPH as Diesel	EPA 8015 M	ND		1000.		689.68	LCSD	69.0	12.5	25	29 - 130
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
o-Terphenyl			99.0			16 - 137					

Entech Analytical Labs, Inc.

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Quality Control Results Summary

QC Batch #: WGC63056C

Date Analyzed: 2/10/2004

Matrix: Liquid **Units:** µg/L

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250.		215.36	LCS	86.1			65 - 135

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	87.7	65 - 135

Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250.		221.06	LCSD	88.4	2.6	25	65 - 135

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	87.0	65 - 135

Entech Analytical Labs, Inc.

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Quality Control Results Summary

QC Batch #: WMS210522B

Date Analyzed: 2/18/2004

Matrix: Liquid **Units:** µg/L

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: BTEX+MTBE by EPA 8260B											
Benzene	EPA 8260B	ND		20.		21.539	LCS	107.7			77 - 154
Methyl-t-butyl Ether	EPA 8260B	ND		20.		19.814	LCS	99.1			58 - 127
Toluene	EPA 8260B	ND		20.		19.206	LCS	96.0			47 - 137

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	101.1	64 - 126
Dibromofluoromethane	99.4	23 - 172
Toluene-d8	98.5	70 - 134

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: BTEX+MTBE by EPA 8260B											
Benzene	EPA 8260B	ND		20.		19.642	LCSD	98.2	9.2	25	77 - 154
Methyl-t-butyl Ether	EPA 8260B	ND		20.		19.16	LCSD	95.8	3.4	25	58 - 127
Toluene	EPA 8260B	ND		20.		18.056	LCSD	90.3	6.2	25	47 - 137

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99.7	64 - 126
Dibromofluoromethane	97.1	23 - 172
Toluene-d8	98.0	70 - 134

Entech Analytical Labs, Inc.

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Quality Control Results Summary

QC Batch #: WMS210527

Date Analyzed: 2/19/2004

Matrix: Liquid **Units:** µg/L

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: BTEX+MTBE by EPA 8260B											
Benzene	EPA 8260B	ND		20.		18.099	LCS	**90.5**			**77 - 154**
Methyl-t-butyl Ether	EPA 8260B	ND		20.		16.071	LCS	**80.4**			**58 - 127**
Toluene	EPA 8260B	ND		20.		17.742	LCS	**88.7**			**47 - 137**

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	95.2	64 - 126
Dibromofluoromethane	94.9	23 - 172
Toluene-d8	96.3	70 - 134

Test: BTEX+MTBE by EPA 8260B											
Benzene	EPA 8260B	ND		20.		20.49	LCSD	**102.4**	**12.4**	**25**	**77 - 154**
Methyl-t-butyl Ether	EPA 8260B	ND		20.		19.242	LCSD	**96.2**	**18.0**	**25**	**58 - 127**
Toluene	EPA 8260B	ND		20.		19.386	LCSD	**96.9**	**8.9**	**25**	**47 - 137**

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99.9	64 - 126
Dibromofluoromethane	92.4	23 - 172
Toluene-d8	98.3	70 - 134

Entech Analytical Labs, Inc.

3334 Victor Court (408) 588-0200
Santa Clara, CA 95054 (408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to: Brad Wright	Phone No.: (510) 337-8660	Purchase Order No.:	Invoice to: (If Different)	Phone:	
Company Name: Cameron-Cole	Fax No.: (510) 337-3994	Project No.: 2016	Company:		
Mailing Address: 101 W. Atlantic Ave Bldg 90	Email Address:	Project Name: AC Trans Seminary	Billing Address: (If Different)		
City: Alameda	State: CA / Zip Code: 94501	Project Location: Oakland, CA	City:	State:	Zip:

Sampler: MD, EW | Field Org. Code:

Global ID:

Turn Around Time
- ☐ Same Day ☐ 1 Day
- ☐ 2 Day ☐ 3 Day
- ☐ 4 Day ☐ 5 Day
- ☒ 6-10 Day (std)

Order ID:

Client ID / Field Point	Lab. No.	Sample Date	Sample Time	Matrix	Composite	Grab	Containers	Preservative	Volatile Organics by GCMS: 601/602 ☐ 624 ☐	Oxygenates by 8010 by 8260 ☐ 8260 ☐	MTBE by 8260B ☐ Eth/Meth ☐	TPH as Gas/BTEX ☐ Gas by GCMS ☐	TPH as Gas/BTEX/MTBE ☐	Diesel ☐ w/ Si-gel Standard Cleanup ☐	Motor Oil ☐ w/ Si-gel Column Cleanup ☐	Fuel Scan Extractable ☐ Purgeable ☐	Base/Neutral/Acid Organics 8270 ☐ PAH ☐	Pesticides 8081 ☐ PCBs - 8082 ☐	8270-SIM ☐	8260B	pH ☐ TSS ☐ SC ☐ TOC ☐	TRPH ☐ Oil & Grease ☐	CN ☐ Phenols ☐	Anions: F ☐ Cl ☐ Br ☐ SO4 ☐ NO3 ☐ NO2 ☐ PO4 ☐	Perchlorate ☐	8015 GRO	8015 DRO	Metals - Circle Below Total ☐ Dissolved ☐	SPLP ☐ CAM ☐	TO-14 ☐ TO-15 ☐ (Tedlar Bag Only)	Remarks
MW-1	37757-001	2/9/04	1335	W			3	HCl												X					X							
↓		↓	↓	↓			2	NA																		X						
↓			↓				1	↓																			X					
MW-3	002		1245				3	HCl												X					X							
↓			↓				2	NA																		X						
↓			↓				1	↓																			X					
MW-2	003		1055				3	HCl												X					X							
↓			↓				2	NA																		X						
↓			↓				1	↓																			X					
Trip Blank	604	↓	1025	↓			3	HCl												X												

Relinquished by:	Received by:	Date: 2/9/04	Time: 1600
Relinquished by:	Received by:	Date: 2/9/04	Time: 1725
Relinquished by:	Received by:	Date:	Time:

Special Instructions or Comments

Semi-Conductor Metals: Bi, Ce, Cs, Ga, Ge, In, Li, P, S, Ta, Te, Zr

Metals:
Al, As, Sb, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Sr, Tl, Sn, Ti, Zn, V, W

- ☐ EDD Report ☐ PDF Report
- ☐ EDF Report
- ☐ NPDES Detection Limits
- ☐ LUFT-5 ☐ RCRA-8
- ☐ PPM-13 ☐ CAM-17

Entech Analytical Labs, Inc.

3334 Victor Court
Santa Clara, CA 95054
(408) 588-0200
(408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to: Brad Wright	Phone No.:	Purchase Order No (Reqd).:	Send Invoice to (if Different)	Phone
Company Name:	Fax No.:	Project Number:	Company	
Mailing Address:	email:	Project Name:	Billing Address (if Different)	
City:	State: / Zip:	Project Location:	City:	State / Zip

Sampler:	Field Org. Code:	**Turn Around Time** ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day ☐ 5 Day ☒ Standard (10 Day)
Global ID:		
Order ID:		

Client ID:	Field PT	Lab. No.	Sampling Date	Sampling Time	Matrix	Composite	Grab	Containers	Preservative	Volatile Organics by GCMS: 601/602 ☐ 8260B ☐ 624 ☐ 8010 by 8260 ☐	Fuel Oxygenates by 8260B ☐ MTBE by 8260B ☐	Pesticides-8081 ☐ PCBs - 8082 ☐	Nitrate / Sulfate	TPH as Gas/BTEX ☐	TPH as Gas/BTEX/MTBE ☐ Base/Neutral/Acid Organics 8270 ☐ 8270-SIM ☐ PNA ☐	Fuel Scan Extractable ☐ Purgeable ☐	Diesel ☐ w/ Si-gel Standard Cleanup ☐ Motor Oil ☐ w/ Si-gel Column Cleanup ☐	pH	CN	TRPH ☐ Oil & Grease ☐	8260	8015 GRO	8015 DRO	Metals - Circle Below Total ☐ Dissolved ☐	STLC	TTLC	Remarks
MW-10	37757-005		2/9/04	1145	W			1	NA				⊗														No Sample received [initials] 2/9/04
↓			↓	↓				2	↓														⊗				Rec'd
								3	HCl													⊗					No Rec'd Sample
↓			↓	↓				↓	↓												⊗						No Sample received [initials] 2/9/04
MW-11		-006	2/9/04	1400				1	NA				X														
↓			↓	↓				2	↓														X				
								3	HCl													X					
↓			↓	↓				↓	↓												X						
MW-9		-007	2/9/04	1425				1	NA				X														
↓			↓	↓				2	↓														X				
								3	HCl													X					
↓			↓	↓				↓	↓												X						

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	2/9/04	1600
Relinquished by: [signature]	Received by: Marco [signature]	2/9/04	5:25
Relinquished by:	Received by: [signature]	2/9/04	1825
Relinquished by:	Received by:	Date:	Time:

Special Instructions or Comments

☐ NPDES Detection Limits
☐ EDD Report Required
☐ EDF Report Required
☐ PDF File Required

Metals:
Al, As, Sb, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Sr, Tl, Sn, Ti, V, Zn, W : RCRA-8 ☐ CAM-17 ☐ Plating ☐ PPM-13 ☐ LUFT-5 ☐

Entech Analytical Labs, Inc.

3334 Victor Court (408) 588-0200
Santa Clara, CA 95054 (408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to: Brad Wright	Phone No.: 510 337-81060	Purchase Order No.:	Invoice to: (If Different)	Phone:	
Company Name: Cameron-Cole	Fax No.: 510-337-3994	Project No.: 2016	Company:		
Mailing Address: 101 W. Atlantic Ave Bldg 90	Email Address:	Project Name: AC Trans. Seminary	Billing Address: (If Different)		
City: Alameda	State: CA	Zip Code: 94510	Project Location:	City:	State: Zip:

Sampler: | Field Org. Code:

Global ID:

Turn Around Time
- ☐ Same Day ☐ 1 Day
- ☐ 2 Day ☐ 3 Day
- ☐ 4 Day ☐ 5 Day
- ☒ 6-10 Day (std)

Order ID:

Client ID / Field Point	Lab. No.	Sample Date	Sample Time	Matrix	Composite	Grab	Containers	Preservative	Volatile Organics by GCMS: 601/602 ☐ 624 ☐	Oxygenates by GCMS: 8010 by 8260 ☐ MTBE by 8260 ☐ Eth/Meth ☐	TPH as Gas/BTEX ☐ TPH as Gas/BTEX/MTBE ☐ Gas by GCMS ☐ 8260B ☐	Diesel ☐ Motor Oil ☐ w/ Si-gel Standard Cleanup ☐ w/ Si-gel Column Cleanup ☐	Fuel Scan Extractable ☐ Purgeable ☐	Base/Neutral/Acid Organics 8270 ☐ 8270-SIM ☐ PAH ☐	Pesticides-8081 ☐ PCBs - 8082 ☐	8010	pH ☐ TSS ☐ SC ☐ TOC ☐	~~TRPH~~ ☐ Oil & Grease ☐	Gas ☐ BTEX ☐ MTBE ☐ 8015 GRO	Anions: F ☐ Cl ☐ Br ☐ SO4 ☐ NO3 ☐ NO2 ☐ PO4 ☐	Perchlorate	Nitrate/Sulfate	Metals - Circle Below Total ☐ Dissolved ☐	STLC ☐ TCLP ☐	TO-14 ☐ TO-15 ☐	(Tedlar Bag Only)	Remarks
MW-10	37757-005	2/9/04	1145	W			3	HCl								X											
↓		↓	↓	↓			↓	↓										X									
							1	NA											X								

Relinquished by:	Received by:	Date: 2/10/04	Time: 430
Relinquished by:	Received by:	Date: 2/10/04	Time: 1755
Relinquished by:	Received by:	Date:	Time:

Special Instructions or Comments

- ☐ EDD Report ☐ PDF Report
- ☐ EDF Report
- ☐ NPDES Detection Limits

Semi-Conductor Metals: Bi, Ce, Cs, Ga, Ge, In, Li, P, S, Ta, Te, Zr

Metals:
Al, As, Sb, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Sr, Tl, Sn, Ti, Zn, V, W

- ☐ LUFT-5 ☐ RCRA-8
- ☐ PPM-13 ☐ CAM-17

APPENDIX B

SAMPLING EVENT DATA

DEPTH TO WATER

DATE: 2-9-04

PROJECT AC Transit Seminary EVENT Quarterly TECHNICIAN MD/ME

NO.	WELL OR LOCATION	DATE	TIME	MEASUREMENT	CODE	COMMENTS
1	MW-1	2-9-04	9:37	3.05	SWL	
2	MW-2	2-9-04	9:33	2.94	SWL	
3	~~MW-3~~ MW-11 (ME)		959	2.60		
4	MW-9		9:40	3.23		
5	MW-10		9:50	2.51		
6	~~MW-11~~ MW-5 (MS)		954	2.06		
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

CODES: SWL - Static Water Level
OIL - Oil Level

Project Name: Seminary
Project Number: 2016
Well ID: MW-1
Casing Diameter (in): 2"
Sample Date: 2/9/04
Total Well Depth (ft): 15.32
Sample ID: MW-1
Depth to Water (ft) before purging: 3.03

Development Method:
NA _____Bailer: _____Teflon _____Stainless Steel _____PVC _____ABS Plastic
_____Pump: _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1316	7.16	854	20.7	3.69	2	0.3
1324	7.22	851	21.3	3.39	4	↓
1330	7.24	850	19.5	4.25	6	↓
				Total Vol	6.5	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
15.32 - 3.03 = 12.29 x .165 = 2.03 x 3 = 6.09
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least _____ well casing volumes were removed prior to sampling.

Sample Collection Method:
X Bailer: _____Teflon _____Stainless Steel _____PVC _____ABS Plastic
_____Pump: _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

QA/QC Samples if any (Duplicate, Field Blank, Rinse Blank, Etc.):

Parameter Collected: 8260 8015 GRO 8015 DRO Nitrate/sulfate

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe):

Fe: >3.30
DO: 4.19
ORP: -48

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations: Start: 1310
stop: 1332
sample: 1335

Project Name: Seminary
Casing Diameter (in): 2"
Total Well Depth (ft): 23.28
Depth to Water (ft) before purging: 2.94

Project Number:
Sample Date: 2/9/04
Sample ID: MW-2

Well ID: MW-2

Development Method:
NA _____Bailer: _____Teflon _____Stainless Steel _____PVC _____ABS Plastic
_____Pump: _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
10:18	6.81	1007	19.6	8.02	3	
10:27	6.92	1364	20.2	6.57	6	
10:40	6.88	~~1700~~ 1686	20.2	6.27	9	
				Total Vol	10	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
23.28 - 2.94 = 20.34 x 0.165 = 3.36 x 3 = 10.0 gal
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least _____ well casing volumes were removed prior to sampling.

Sample Collection Method:
X **Bailer:** _____Teflon _____Stainless Steel _____PVC _____ABS Plastic
_____**Pump:** _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

QA/QC Samples if any (Duplicate, Field Blank, Rinse Blank, Etc.):

Parameter Collected: 8260 8015 GRO 8015 DRO Nitrate/Sulfate

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe):

Fe: > 3.30 mg/L
DO: 4.73
ORP: -36

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations: start: 1010
stop: 1050
sample: 1055

Trip Blank: 10:25

Project Name: Seminary
Project Number:
Well ID: MW-2
Overpurge

Casing Diameter (in):
Sample Date: 2/9/04
Total Well Depth (ft):
Sample ID:
Depth to Water (ft) before purging:

Development Method:

NA _____**Bailer:** _____Teflon _____Stainless Steel _____PVC _____ABS Plastic

_____**Pump:** _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
				(+10 for MW-2 sampe/purge)		
				total volume 24 gallons		

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
3.36 X 10 = 33.6 - 10 = 23.6
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least _____ well casing volumes were removed prior to sampling.

Sample Collection Method:
X **Bailer:** _____Teflon _____Stainless Steel _____PVC _____ABS Plastic

_____**Pump:** _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

QA/QC Samples if any (Duplicate, Field Blank, Rinse Blank, Etc.):

Parameter Collected: ~~8260~~ @ ~~8015 GRO~~ @ ~~8015 DRO~~ @ ~~Nitrate~~/sulfate @

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe):

Fe: ~~DO~~ @
ORP:

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations:
Start 11:03
Stop ~~11:40~~ 12:05 @

Well ID: MW-3

Project Name: Seminary
Casing Diameter (in): 2"
Total Well Depth (ft): 16.81
Depth to Water (ft) before purging: 2.08

Project Number:
Sample Date: 2/9/04
Sample ID:

Development Method:
NA _____ **Bailer:** _____Teflon _____Stainless Steel _____PVC _____ABS Plastic
_____ **Pump:** _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
	7.90	310	20.5	-	2	
	7.36	333	19.7	8.02	4	
	7.32	359	19.2	8.30	6	
			total volume		7.5gal	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
16.81 - 2.08 = 14.73 x .165 = 2.43 x 3 = 7.29
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least _____ well casing volumes were removed prior to sampling.

Sample Collection Method:
X **Bailer:** _____Teflon _____Stainless Steel _____PVC _____ABS Plastic
_____ **Pump:** _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

QA/QC Samples if any (Duplicate, Field Blank, Rinse Blank, Etc.):

Parameter Collected: 8260 8015 GRO 8015 DRO Nitrate/sulfate

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe):

Fe: 0.00 mg/L
DO: ~~6~~ 4.08 mg/L
ORP: 16 mv

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations:
Start: 12:25
Stop: 1242
Sample: 1245

Project Name: Seminary
Project Number: 2016
Well ID: MW-9
Casing Diameter (in): 2"
Sample Date: 2/9/04
Total Well Depth (ft): 19.71
Sample ID: MW-9
Depth to Water (ft) before purging: 3.18

Development Method:
NA _____Bailer: _____Teflon _____Stainless Steel _____PVC _____ABS Plastic
_____Pump: _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft)	Cum. Vol. (gal)	Pump Rate (GPM)
14.04	7.57	991	20.8	6.33	25	.45
14.10	7.59	973	22.2	7.00	50	↓
1416	7.63	971	24.1	7.14	75	↓

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
19.71 - 3.18 = 16.53 x .165 = 2.73 x 3 = 8.18 gal
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least _____ well casing volumes were removed prior to sampling.

Sample Collection Method:
X **Bailer:** _____Teflon _____Stainless Steel _____PVC _____ABS Plastic
_____**Pump:** _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

QA/QC Samples if any (Duplicate, Field Blank, Rinse Blank, Etc.):

Parameter Collected: 8260 8015 GRO 8015 DRO Nitrate/sulfate

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe):

Fe: 0.00 mg/L
DO: 5.80 mg/L
ORP: 89 mV

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations: Start: 13:58
Stop: 1417
Sample: 14:25

Well ID: MW-10

Project Name: Seminary
Casing Diameter (in): 2"
Total Well Depth (ft): 11.40
Depth to Water (ft) before purging: 2.51

Project Number:
Sample Date: 2/9/04
Sample ID: MW-10

Development Method:
NA
_____**Bailer:** _____Teflon _____Stainless Steel _____PVC _____ABS Plastic

_____**Pump:** _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1133	6.52	2720	25.0	3.7	1	
1135	7.32	3150	20.9	3.70	2	
1137	7.39	2870	21.5	3.65	3	
				Total Vol	3.0	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
(11.40 - 2.51) = 8.89 * 0.165 = 1.46 * 3 = 2.9
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least _____ well casing volumes were removed prior to sampling.

Sample Collection Method:
X **Bailer:** _____Teflon _____Stainless Steel _____PVC _____ABS Plastic

_____**Pump:** _____Dedicated Submersible Pump _____Bladder Pump
_____Non-Dedicated Submersible Pump

QA/QC Samples if any (Duplicate, Field Blank, Rinse Blank, Etc.):

Parameter Collected: 8260 8015 GRO 8015 DRO Nitrate/Sulfate

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe):

Fe: 0 mg/L
DO: 1.65 mg/L
ORP: 130 mV

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations:
START: 1130
STOP 1140
SAMPLE 1145

Project Name: Seminary
Project Number:
Well ID: MW-11

Casing Diameter (in): 2"
Sample Date: 2/9/04
Total Well Depth (ft): 13.43
Sample ID: MW-11
Depth to Water (ft) before purging: 2.41

Development Method:
NA
_____ **Bailer:** _____ Teflon _____ Stainless Steel _____ PVC _____ ABS Plastic
_____ **Pump:** _____ Dedicated Submersible Pump _____ Bladder Pump
_____ Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
12:15	8.04	1391	23.3	6.84	1	
1311	7.4	1327	24.5	9.20	3	
1350	8.5	1352	25.1	11.75	5	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
13.43 - 2.41 = 11.02 x 0.165 = 1.82 x 3 = 5.45 gal
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least _____ well casing volumes were removed prior to sampling.

Sample Collection Method:
X **Bailer:** _____ Teflon _____ Stainless Steel _____ PVC _____ ABS Plastic
_____ **Pump:** _____ Dedicated Submersible Pump _____ Bladder Pump
_____ Non-Dedicated Submersible Pump

QA/QC Samples if any (Duplicate, Field Blank, Rinse Blank, Etc.):

Parameter Collected: 8260 8015 GRO 8015 DRO Nitrate/Sulfate

Sample Appearance
_____ OVA Reading (ppm)
_____ Suspended Solids (describe):

Fe: 0 mg/L
DO: 10.4 mg/L
ORP: 30 mV

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations:
Start: 1205
Stop: 1352
Sample: 1400