Alameda-Contra Costa Transit District

February 2, 2012

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

Dear Mr. Detterman:

Subject: Groundwater Monitoring Report – Fourth Quarter 2011
AC Transit, 1100 Seminary Ave., Oakland

AC Transit hereby submits the enclosed groundwater monitoring report for the AC Transit facility located at 1100 Seminary Avenue in Oakland. The report was prepared by our consultant, Cameron-Cole, and contains the results of groundwater monitoring performed on November 30 and December 1, 2011, from six monitoring wells.

Sampling results indicated total petroleum hydrocarbons (TPH) as gasoline was measured in monitoring wells MW-1 at 742 µg/l, and MW-2 at 37,000 µg/l, and MW-3 at 63.7 µg/l. TPH as diesel was measured in monitoring wells MW-1 at 118 µg/l and MW-2 at 10,700 µg/l. Benzene was detected above the Maximum Contaminant Level (MCL) of 1 µg/l in MW-1 at 1.2 µg/l,MW-2 at 11,100 µg/l and MW-3 at 5.3 µg/l.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

If you have any questions or comments regarding the enclosed report, please call me at (510) 891-4863.

Sincerely,

Suzanne Chaewsky

Suzanne Chaewsky, P.E.
Manager, Safety and Environmental Engineering

Enclosure

1600 Franklin Street, Oakland, CA 94603•(510) 891-4863•schaewsk@actransit.org

SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR THE AC TRANSIT FACILITY LOCATED AT 1100 SEMINARY AVENUE, OAKLAND, CALIFORNIA

February 2012

Prepared For:

Ms. Suzanne Chaewsky
AC Transit
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Oakland, California 94603

Prepared By:

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Oakland, California 94621

Project No: 2036

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REGISTERED GEOLOGIST
#6276
Exp. 2012
BRADLEY D. WRIGHT
REGISTERED GEOLOGIST

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

INTRODUCTION

This report presents the results of the semi-annual 2011 sampling event for the AC Transit facility located at 1100 Seminary Avenue, Oakland, California (Figure 1). Cameron-Cole performed groundwater sampling of monitor wells MW-1 through MW-3 and MW-9 through MW-11 on November 30 and December 1, 2011, in accordance with directives from the Alameda County Health Care Services Agency (ACHCS).

SCOPE OF WORK

Work performed included measuring the depth to water, measuring presence of free phase hydrocarbons, and collecting groundwater samples from all site monitor wells. Groundwater samples were submitted for laboratory analysis using United States Environmental Protection Agency (USEPA) Method 8015 Modified with silica gel cleanup for total petroleum hydrocarbons (TPH) as diesel and motor oil, and USEPA Method 8260B for gasoline and benzene, toluene, ethylbenzene, and xylene (BTEX) and methyl tertiary-butyl ether (MTBE).

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, the six site monitor wells were measured for free phase hydrocarbons and depth to groundwater. No free phase hydrocarbon layers were found in wells. Depth to groundwater measurements (Table 1) were used to construct the groundwater elevation contours shown in Figure 2. As shown, groundwater flow is to the west at a gradient of 0.003 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, turbidity, and temperature were monitored using calibrated field meters.

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. A trip blank was submitted for analysis by EPA Method 8260B.

Groundwater Analytical Results

Table 2 presents November and December 2011 and historic analytical results of groundwater testing. Concentrations of benzene above the State of California maximum contaminant level (MCL) of 1.0 microgram per liter (ug/l) were detected in monitor wells MW-1, MW-2, and MW-3. Ethylbenzene was detected above the MCL of 300 ug/l in monitor well MW-2. TPH-gasoline and diesel was detected above the Environmental Screening Limit (ESL) of 100 ug/l in monitor wells MW-1 and MW-2. No analytes were detected in the trip blanks or method blanks. A lab control spike and lab control spike duplicate passed the USEPA's criteria for acceptance.

SUMMARY OF RESULTS

- Groundwater flow direction is to the west at a gradient of 0.003 feet/foot.

- Chemical concentrations in excess of MCLs were limited to benzene in wells MW-1 (1.2 ug/l), MW-2 (11,100 ug/l) and MW-3 (5.3 ug/l), and ethylbenzene in well MW-2 (981 ug/l).

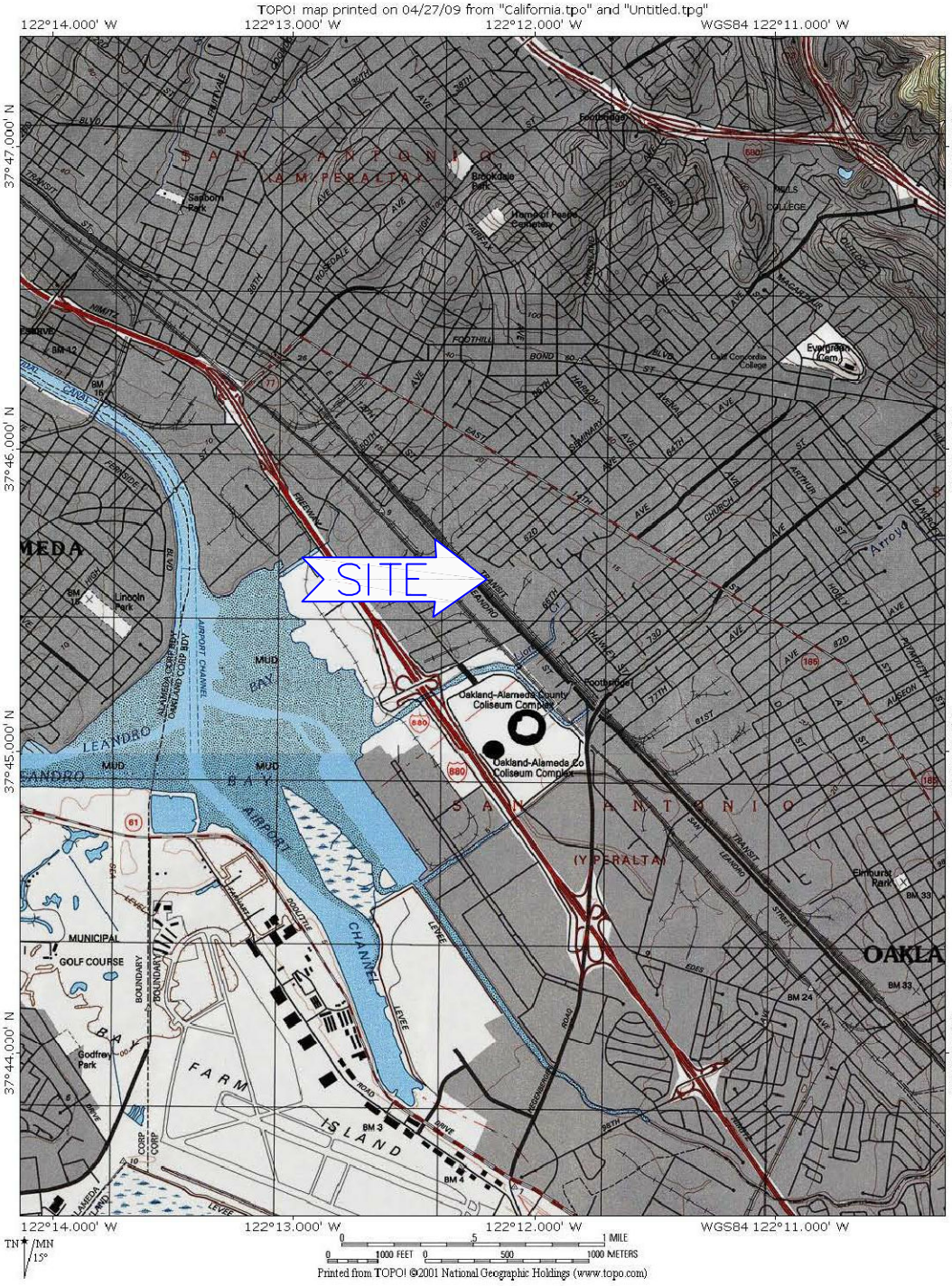
- Gasoline concentrations in excess of ESLs of 100 ug/l were present in groundwater samples taken from wells MW-1 (742 ug/l) and MW-2 (37,000 ug/l).

- Diesel was found to be present in the groundwater sample taken from MW-1 (118 ug/l) and MW-2 (10,700 ug/l).

PROJECTED WORK AND RECOMMENDATIONS

Semiannual groundwater monitoring of wells MW-1 through MW-3 and MW-9 through MW-11 is scheduled for May 2012.

Figures



Cameron-Cole
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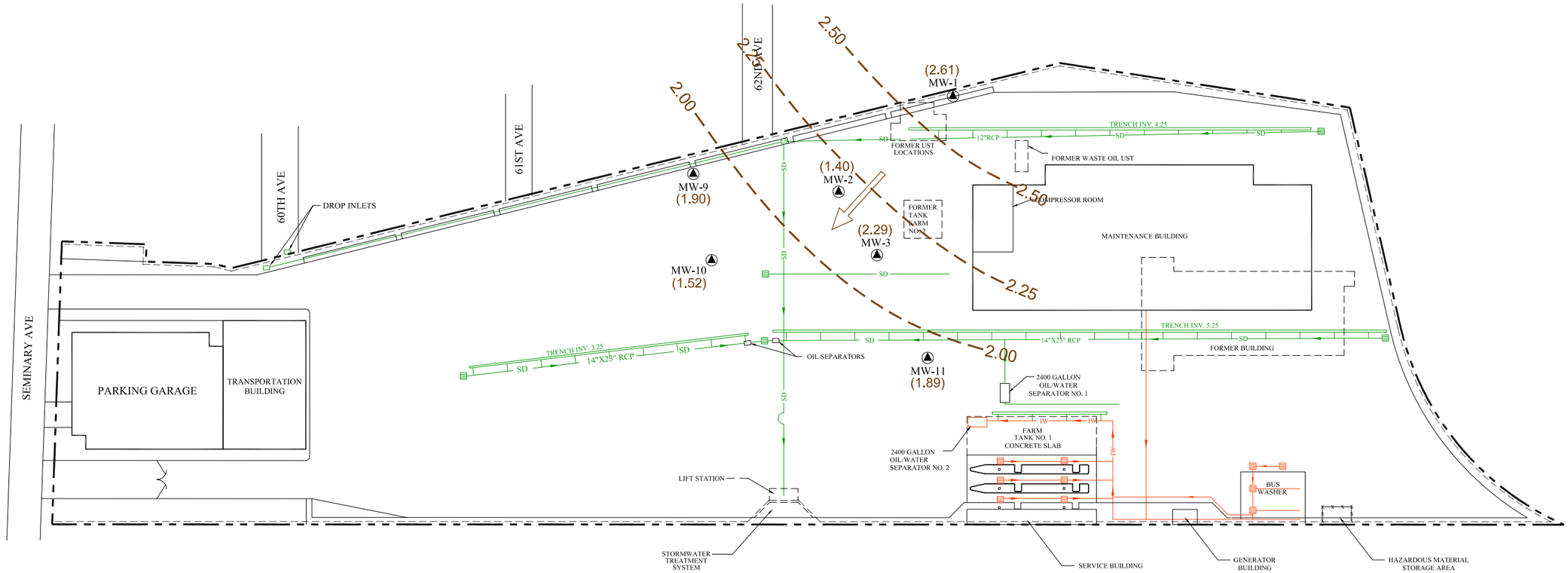
FIGURE 1

SITE LOCATION MAP
AC TRANSIT – SEMINARY
OAKLAND, CALIFORNIA

SCALE: AS NOTED

DATE: 4–28–09

2036–001A



LEGEND:

- PROPERTY BOUNDARY
- SOUNDWALL
- CATCH BASIN
- SD — STORM DRAIN
- SURFACE DRAIN TRENCH
- IW — INDUSTRIAL WASTE PIPELINE
- MONITORING WELL
- (2.61) GROUNDWATER ELEVATION (ft msl)
- POTENTIOMETRIC SURFACE ELEVATION CONTOUR
- INFERRED DIRECTION OF GROUNDWATER FLOW

0 120
FEET

	BY	DATE
DRAWN	AJW	01/18/12
CHECKED		
APPROVED		
APPROVED		
APPROVED		

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OAKLAND, CALIFORNIA 94621
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FIGURE 3
AC TRANSIT - OAKLAND, CALIFORNIA
1100 SEMINARY AVENUE
POTENTIOMETRIC SURFACE MAP, NOVEMBER 29, 2011

SCALE: 1" = 120'

DWG. NO.: SITE0112.DWG

Tables

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** (ft-msl)
MW-1	1/7/1999	6.25	None	5.13	1.12	
	2/7/2000		None	3.75	2.5	
	5/25/2000		None	3.69	2.56	
	8/22/2000		None	4.79	1.46	
	11/20/2000		None	4.92	1.33	
	3/1/2001		None	2.75	3.50	
	5/14/2001		None	3.67	2.58	
	7/26/2001		None	4.73	1.52	
	10/16/2001		None	5.35	0.90	
	2/21/2002		None	3.30	2.95	
	5/29/2002		None	3.70	2.55	
	9/17/2002		None	4.85	1.40	
	11/14/2002		None	4.59	1.66	
	2/5/2003		None	3.37	2.88	
	5/14/2003		None	3.17	3.08	
	8/22/2003		None	4.52	1.73	
	11/20/2003		None	4.61	1.64	
	2/9/2004		None	3.05	3.20	
	5/25/2004		None	3.22	3.03	
	8/16/2004		None	4.65	1.60	
	11/18/2004		None	3.81	2.44	
	2/22/2005		None	2.62	3.63	
	5/5/2005		None	3.44	2.81	
	10/9/2005***		None	4.75	1.50	
	5/28/2006***		None	3.50	2.75	
	11/13/2006***		None	4.00	2.25	
	5/27/2007***		None	3.61	2.64	
	11/10/2007***		None	3.30	2.95	
	5/24/2008***		None	3.76	2.49	
	3/26/2009		None	3.08	3.17	
	6/12/2009		None	3.70	2.55	
	11/23/2009		None	3.94	2.31	
	5/14/2010		None	3.36	2.89	
	11/29/2010		None	3.66	2.59	
	5/25/2011		None	3.35	2.90	
	11/29/2011		**None**	**3.64**	**2.61**	

TABLE 1
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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** (ft-msl)
MW-2	1/7/1999	5.53	2.27	6.91	-1.38	0.44
	6/8/1999		2.23	5.83	-0.3	1.48
	6/9/1999		0	3.9	1.63	1.63
	6/10/1999		0	3.9	1.63	1.63
	6/15/1999		0.42	3.92	1.61	1.95
	7/8/1999		0.2	4.3	1.23	1.39
	2/7/2000		Sheen	3.8	1.73	
	5/25/2000		0.12	3.23	2.3	2.40
	8/22/2000		0.23	4.45	1.08	1.10
	11/20/2000		0.23	4.70	0.83	0.85
	3/1/2001		0.13	2.75	2.78	2.79
	5/14/2001		Sheen	3.30	2.23	
	7/26/2001		None	3.27	2.26	
	10/16/2001		0.02	5.25	0.28	0.28
	2/21/2002		0.01	3.32	2.21	2.21
	5/29/2002		0.02	2.98	2.55	2.55
	9/17/2002		None	4.83	0.70	
	11/14/2002		None	5.43	0.10	
	2/5/2003		None	3.85	1.68	
	5/14/2003		None	2.94	2.59	
	8/22/2003		None	4.20	1.33	
	11/20/2003		None	4.68	0.85	
	2/9/2004		None	2.94	2.59	
	5/25/2004		None	2.90	2.63	
	8/16/2004		None	4.30	1.23	
	11/18/2004		None	4.67	0.86	
	2/22/2005		None	5.48	0.05	
	5/5/2005		None	3.02	2.51	
	10/9/2005***		0.083	6.91	-1.38	-1.37
	5/28/2006***		0.1	3.45	2.08	2.09
	11/13/2006***		None	2.60	2.93	
	5/27/2007***		None	3.30	2.23	
	11/10/2007***		None	3.10	2.43	
	5/24/2008***		None	3.36	2.17	
	3/26/2009		None	2.82	2.71	
	6/12/2009		None	3.65	1.88	
	11/23/2009		None	5.57	-0.04	
	5/14/2010		None	4.94	0.59	
	12/1/2010		Sheen	3.77	1.76	
	5/25/2011		None	3.72	1.81	
	11/29/2012		**None**	**4.13**	**1.40**	

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** (ft-msl)
MW-3	1/7/1999	4.76	None	4.11	0.65	
	2/7/2000		None	3.1	1.66	
	5/25/2000		None	2.41	2.35	
	8/22/2000		None	3.45	1.31	
	11/20/2000		None	3.42	1.34	
	3/1/2001		None	2.00	2.76	
	5/14/2001		None	2.64	2.12	
	7/26/2001		None	3.17	1.59	
	10/16/2001		None	3.97	0.79	
	2/21/2002		None	2.20	2.56	
	5/29/2002		None	2.52	2.24	
	9/17/2002		None	3.65	1.11	
	11/14/2002		None	3.47	1.29	
	2/5/2003		None	2.19	2.57	
	5/14/2003		None	2.12	2.64	
	8/22/2003		None	3.25	1.51	
	11/20/2003		None	3.40	1.36	
	2/9/2004		None	2.06	2.70	
	5/25/2004		None	2.10	2.66	
	8/16/2004		None	3.36	1.40	
	11/18/2004		None	2.68	2.08	
	2/22/2005		None	1.90	2.86	
	5/5/2005		None	2.38	2.38	
	10/9/2005***		None	3.36	1.40	
	5/28/2006***		None	2.32	2.44	
	11/13/2006***		None	3.00	1.76	
	5/27/2007***		None	2.45	2.31	
	11/10/2007***		None	2.70	2.06	
	5/24/2008***		None	2.65	2.11	
	3/26/2009		None	2.18	2.58	
	6/12/2009		None	2.61	2.15	
	11/23/2009		None	2.92	1.84	
	5/14/2010		None	2.31	2.45	
	11/29/2010		None	2.55	2.21	
	5/11/2011		None	2.21	2.55	
	11/29/2011		**None**	**2.47**	**2.29**	

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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** (ft-msl)
MW-9	2/7/2000	5.8	None	4.37	1.43	
	5/25/2000		None	4.95	0.85	
	8/22/2000		None	5.18	0.62	
	11/20/2000		None	4.70	1.10	
	3/1/2001		None	3.03	2.77	
	5/14/2001		None	4.56	1.24	
	7/26/2001		None	5.17	0.63	
	10/16/2001		None	5.19	0.61	
	2/21/2002		None	4.79	1.01	
	5/29/2002		None	4.07	1.73	
	9/17/2002		None	4.94	0.86	
	11/14/2002		None	4.87	0.93	
	2/5/2003		None	3.88	1.92	
	5/14/2003		None	3.77	2.03	
	8/22/2003		None	4.73	1.07	
	11/20/2003		None	4.46	1.34	
	2/9/2004		None	3.23	2.57	
	5/25/2004		None	3.53	2.27	
	8/16/2004		None	4.20	1.60	
	11/18/2004		None	3.91	1.89	
	2/22/2005		None	2.75	3.05	
	5/5/2005		None	3.21	2.59	
	10/9/2005***		None	4.45	1.35	
	5/28/2006***		None	3.33	2.47	
	11/13/2006***		None	4.35	1.45	
	5/27/2007***		None	3.75	2.05	
	11/10/2007***		None	4.25	1.55	
	5/24/2008***		None	4.05	1.75	
	3/26/2009		None	3.31	2.49	
	6/12/2009		None	4.04	1.76	
	11/23/2009		None	4.27	1.53	
	5/14/2010		None	4.33	1.47	
	11/29/2010		None	3.49	2.31	
	5/25/2011		None	3.79	2.01	
	11/29/2011		**None**	**3.90**	**1.90**	

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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** (ft-msl)
MW-10	2/7/2000	4.65	None	3.19	1.46	
	5/25/2000		None	3.11	1.54	
	8/22/2000		None	4.35	0.30	
	11/20/2000		None	4.18	0.47	
	3/1/2001		None	3.14	1.51	
	5/14/2001		None	3.27	1.38	
	7/26/2001		None	3.95	0.70	
	10/16/2001		None	4.57	0.08	
	2/21/2002		None	3.29	1.36	
	5/29/2002		None	3.30	1.35	
	9/17/2002		None	4.11	0.54	
	11/14/2002		None	3.86	0.79	
	2/5/2003		None	3.36	1.29	
	5/14/2003		None	3.23	1.42	
	8/22/2003		None	4.52	0.13	
	11/20/2003		None	3.56	1.09	
	2/9/2004		None	2.51	2.14	
	5/25/2004		None	2.90	1.75	
	8/16/2004		None	3.90	0.75	
	11/18/2004		None	2.52	2.13	
	2/22/2005		None	2.66	1.99	
	5/5/2005		None	3.18	1.47	
	10/9/2005***		None	3.88	0.77	
	5/28/2006***		None	2.78	1.87	
	11/13/2006***		None	3.70	0.95	
	5/27/2007***		None	3.15	1.50	
	11/10/2007***		None	3.20	1.45	
	5/24/2008***		None	3.20	1.45	
	3/26/2009		None	2.51	2.14	
	6/12/2009		None	3.38	1.27	
	11/23/2009		None	3.74	0.91	
	5/14/2010		None	3.01	1.64	
	11/29/2010		None	3.23	1.42	
	5/25/2011		None	2.75	1.90	
	11/29/2011		**None**	**3.13**	**1.52**	

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** (ft-msl)
MW-11	2/7/2000	4.19	None	4.97	-0.78	
	5/25/2000		None	7.58	-3.39	
	8/22/2000		None	3.01	1.18	
	11/20/2000		None	2.88	1.31	
	3/1/2001		None	1.91	2.28	
	5/14/2001		None	4.49	-0.3	
	7/26/2001		None	2.95	1.24	
	10/16/2001		None	3.35	0.84	
	2/21/2002		None	1.85	2.34	
	5/29/2002		None	2.36	1.83	
	9/17/2002		None	3.11	1.08	
	11/14/2002		None	2.55	1.64	
	2/5/2003		None	2.75	1.44	
	5/14/2003		None	1.98	2.21	
	8/22/2003		None	2.86	1.33	
	11/20/2003		None	2.73	1.46	
	2/9/2004		None	2.60	1.59	
	5/25/2004		None	2.06	2.13	
	8/16/2004		None	2.91	1.28	
	11/18/2004		None	2.75	1.44	
	2/22/2005		None	3.06	1.13	
	5/5/2005		None	2.89	1.3	
	10/9/2005***		None	3.04	1.15	
	5/28/2006***		None	1.30	2.89	
	11/13/2006***		None	2.30	1.89	
	5/27/2007***		None	2.20	1.99	
	11/10/2007***		None	1.60	2.59	
	5/24/2008***		None	2.31	1.88	
	3/26/2009		None	2.01	2.18	
	6/12/2009		None	2.30	1.89	
	11/23/2009		None	2.58	1.61	
	5/14/2010		None	2.73	1.46	
	11/29/2010		None	2.56	1.63	
	5/25/2011		None	2.08	2.11	
	11/29/2011		**None**	**2.30**	**1.89**	

Notes:

* ft-msl: feet-mean sea level

** used 0.8 specific gravity of product

DTW: Depth to Water

*** Essel Technology Services, Inc. data.

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

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
MCL (ug/l)		**None**	**None**	**None**	**1.0**	**150**	**300**	**1,750**	**13**
ESL (ug/l)		**100**	**100**	**100**	**1.0**	**40**	**30**	**20**	**5**
MW-1	1/7/1999	<100	470	NA	17.0	2	31.0	18	<50
	2/7/2000	390	<60	1,300	13.0	<10	<10	<10	<20
	5/25/2000	<50	<50	1,000	12.0	<1.0	<1.0	<1.0	<2.0
	8/22/2000	<50	<50	600	6.3	<1.0	2.3	<1.0	<2.0
	11/20/2000	<50	<50	630	2.8	<1.0	1.1	<1.0	<2.0
	3/1/2001	<50	<50	900	29.0	1.2	16.0	6	<2.0
	5/14/2001	<50	<50	540	4.1	<1.0	3.1	<1.0	<2.0
	7/26/2001	190	<50	500	<1.0	<1.0	<1.0	<1.0	<2.0
	10/16/2001	<50	<50	650	16.0	1.1	4.6	1.6	<2.0
	2/21/2002	560	<50	550	21	1.0	19	15	<2.0
	5/29/2002	130	<50	510	<1.0	<1.0	<1.0	<1.0	<2.0
	9/17/2002	140	<50	330	<1.0	<1.0	<1.0	<1.0	<2.0
	11/14/2002	150	570	NA	4.8	0.57	2.7	1.1	<1.0
	2/5/2003	250	210	NA	16.0	<0.5	0.93	<1.0	<1.0
	5/14/2003	220	<50	NA	9.9	<0.5	1.6	<1.0	<1.0
	8/22/2003	150	770	NA	<0.5	<1.0	<1.0	<1.0	<1.0
	11/20/2003	300	320	NA	3.0	<0.5	0.56	<1.0	<1.0
	2/9/2004	210	370	NA	<0.5	0.50	0.52	<1.0	<1.0
	5/26/2004	470	<50	NA	5.0	<0.5	7.2	1.9	<1.0
	8/16/2004	75	<50	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	11/18/2004	207	200	NA	6.8	<0.5	2.80	1.0	<0.5
	2/22/2005	325	170	NA	17.3	<0.5	3.80	5.0	<0.5
	5/5/2005	512	670	NA	47.2	1.2	42.4	18.9	<0.5
	10/9/2005*	2,800	840	NA	200.0	5.0	85.0	26.0	<5.0
	5/29/2006*	1,900	580	NA	33.0	4.3	23.0	16.0	<5.0
	11/13/2006*	<50	230	NA	<0.5	<0.5	<0.5	<0.5	<5.0
	5/27/2007*	1,400	4,700	NA	46.0	5.5	7.4	8.8	<15
	11/10/2007*	<50	1,900	NA	<0.5	<0.5	<0.5	<0.5	<5.0
	5/25/2008*	1,200	550	NA	3.9	5.4	2.2	1.5	<5.0
	3/26/2009	1,510	167	NA	32.4	<5.0	40.4	<10	<5.0
	6/12/2009	1,640	170	NA	20.9	<5.0	35.6	<10	<5.0
	11/23/2009	1,520	<98	NA	12.6	<2.5	25.0	<5.0	<2.5
	5/14/2010	1,830	<98	NA	15.4	<3.3	24.7	7.7	<3.3
	11/29/2010	328	143	NA	2.2	<1.0	1.3	<2.0	<1.0
	5/25/2011	1,570	158	NA	<5.0	<5.0	7.9	<10	<5.0
	11/30/2011	**742**	**118**	NA	**1.2**	<1.0	**3.5**	<2.0	<1.0

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

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
MCL (ug/l)		**None**	**None**	**None**	**1.0**	**150**	**300**	**1,750**	**13**
ESL (ug/l)		**100**	**100**	**100**	**1.0**	**40**	**30**	**20**	**5**
MW-2	6/8/1999	11,000	434,000	117,000	1,000,000	<100,000	260,000	<300,000	<5,000,000
	2/7/2000	51,000	160,000	<5000	19,000	<500	920	<500	<1000
	5/25/2000	<1200	<50000	65,000	11,000	<500	670	530	<1000
	8/22/2000	<2500	<2500	150,000	23,000	<500	1,100	1,100	<1000
	11/20/2000	<1200	<25000	430,000	18,000	<500	840	610	<1000
	3/3/2001	<500	<25000	610,000	14,000	<830	<830	<830	<1700
	5/14/2001	<1000	280,000	51,000	19,000	240	1,100	1,200	<330
	7/26/2001	54,000	590,000	<25000	19,000	<500	1,300	1,500	<1000
	10/16/2001	43,000	560,000	<25000	18,000	280	1,100	1,300	<100
	2/21/2002	46,000	180,000	<12000	18,000	<500	950	1,500	<1000
	5/29/2002	49,000	130,000	<5000	17,000	350	970	1,700	<500
	9/17/2002	60,000	<25000	470,000	21,000	<500	1,600	2,700	<1000
	11/14/2002	36,000	490,000	NA	14,000	280	970	2,200	<400
	2/5/2003	47,000	28,000	NA	15,000	360	1,200	2,100	<100
	5/14/2003	39,000	200,000	NA	13,000	370	1,000	2,000	<100
	8/22/2003	43,000	480,000	NA	22,000	490	1,500	2,100	<400
	11/20/2003	59,000	320,000	NA	22,000	<100	1,700	3,200	<200
	2/9/2004	19,000	55,000	NA	5,400	160	800	1,800	<100
	5/26/2004	60,000	520,000	NA	22,000	410	1,700	2,800	<250
	8/16/2004	63,000	42,000	NA	20,000	520	1,600	2,400	<250
	11/18/2004	38,200	126,000	NA	21,900	430	1,400	3,700	<2.5
	2/22/2005	55,200	42,000	NA	26,400	389	2,020	3,430	<50
	5/5/2005	38,600	18,300	NA	8,060	177	1,200	2,310	<50
	10/9/2005*	42,000	12,000	NA	19,000	<250	1,300	1,800	<250
	5/29/2006*	20,000	170,000	NA	5,900	88	190	660	<170
	11/13/2006*	3,000	7,200	NA	560	13	46	140	<80
	5/27/2007*	6,900	45,000	NA	1,800	28	110	270	<130
	11/10/2007*	19,000	14,000	NA	5,800	79	360	660	<500
	5/25/2008*	33,000	5,900	NA	9,100	170	700	880	<250
	3/26/2009	36,900	169,000	NA	15,000	229	841	854	<200
	6/12/2009	40,200	15,300	NA	16,800	<200	1,340	1,340	<200
	11/23/2009	45,200	35,600	NA	18,200	<400	1,160	1,010	<400
	5/14/2010	26,300	12,700	NA	7,500	<170	779	631	<170
	12/1/2010	18,600	16,700	NA	7,730	<200	582	483	<200
	5/25/2011	24,000	4,640	NA	6,840	<200	877	704	<200
	11/30/2011	**37,000**	**10,700**	NA	**11,100**	**210**	**981**	**734**	<200

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

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
MCL (ug/l)		**None**	**None**	**None**	**1.0**	**150**	**300**	**1,750**	**13**
ESL (ug/l)		**100**	**100**	**100**	**1.0**	**40**	**30**	**20**	**5**
MW-3	1/7/1999	199	2,680	NA	450	<10	250	190	<500
	2/7/2000	2,000	<150	3,100	26	<2	5	2	<4
	5/25/2000	<50	<50	1,000	35	<1.0	6	4	<2.0
	8/22/2000	<50	<50	2,400	240	<10	<10	<10	<20
	11/20/2000	<50	<50	2,400	<25	<25	<25	<25	<50
	3/1/2001	<50	<50	1,200	100	<5.0	8.3	<5.0	<10
	5/14/2001	<50	<50	860	8.4	<1.0	1.2	<1.0	<2.0
	7/26/2001	1,200	<50	790	140	<5.0	12	<5.0	<10
	10/16/2001	1,000	<50	1,600	5.1	<1.0	4.3	<1.0	<2.0
	2/21/2002	1,700	<50	990	200	<10	29.0	12	<20
	5/29/2002	630	<50	840	68	<1.0	4.2	3.3	<2.0
	9/17/2002	<50	<50	1,100	4.1	<1.0	1.8	1.0	<2.0
	11/14/2002	2,800	460	NA	200	1.1	28	9.0	<2.0
	2/5/2003	720	270	NA	55	<0.5	20	7.1	<1.0
	5/14/2003	540	130	NA	18	<0.5	3.6	1.0	<1.0
	8/22/2003	400	540	NA	2.7	<1.0	1.6	<1.0	<1.0
	11/20/2003	240	520	NA	8.8	<0.5	2.2	<1.0	<1.0
	2/9/2004	700	700	NA	5.6	<0.5	3.8	1.3	<1.0
	5/26/2004	700	<100	NA	83.0	<0.5	11.0	1.7	<1.0
	8/16/2004	440	<500	NA	6.0	<0.5	1.6	<1.0	<1.0
	11/18/2004	728	230	NA	44.8	1.1	14.9	8.4	<0.5
	2/22/2005	3,480	390	NA	1130	1.9	174	89.4	<0.5
	5/5/2005	2,920	670	NA	1,360	2.8	199	100	<0.5
	10/9/2005*	8,400	1,400	NA	4,500	<100	330	<100	<100
	5/29/2006*	340	330	NA	6.2	1.3	<0.5	1.1	<5.0
	11/13/2006*	410	170	NA	2.7	2.1	1.2	1.0	<5.0
	5/27/2007*	600	620	NA	15	<0.5	15	4.7	<10
	11/10/2007*	330	600	NA	16	0.8	7.6	1.4	<5.0
	5/25/2008*	810	1,300	NA	84	1.1	21	5.4	<5.0
	3/26/2009	1,160	380	NA	19.0	<1.0	19.2	3.7	<1.0
	6/12/2009	694	2,610	NA	168.0	<2.0	17.4	4.4	<2.0
	11/23/2009	999	<95	NA	78.0	<1.0	23.6	3.5	<1.0
	5/14/2010	254	490	NA	36.8	<1.0	7.9	<2.0	<1.0
	11/29/2010	312	<96	NA	37.9	<1.0	9.4	<2.0	<1.0
	5/25/2011	724	<290	NA	56.9	<1.0	25.1	2.9	<1.0
	11/30/2011	**63.7**	<95	NA	**5.3**	<1.0	<1.0	<2.0	<1.0

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

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
MCL (ug/l)		**None**	**None**	**None**	**1.0**	**150**	**300**	**1,750**	**13**
ESL (ug/l)		**100**	**100**	**100**	**1.0**	**40**	**30**	**20**	**5**
MW-9	2/7/2000	<50	<50	240	<1	<1	<1	<1	<2
	5/25/2000	<50	<50	130	<1.0	<1.0	<1.0	<1.0	<2.0
	8/22/2000	<50	<50	120	<1.0	<1.0	<1.0	<1.0	<2.0
	20-Nov-00	<50	<50	130	<1.0	<1.0	<1.0	<1.0	<2.0
	3/1/2001	<50	<50	150	<1.0	<1.0	<1.0	<1.0	<2.0
	5/14/2001	<50	<50	110	<1.0	<1.0	<1.0	<1.0	<2.0
	7/26/2001	<50	<50	71	<1.0	<1.0	<1.0	<1.0	<2.0
	10/16/2001	<50	<50	120	<1.0	<1.0	<1.0	<1.0	<2.0
	2/21/2002	<50	<50	89	<1.0	<1.0	<1.0	<1.0	<2.0
	5/29/2002	<50	<50	95	<1.0	<1.0	<1.0	<1.0	<2.0
	9/17/2002	<50	<50	96	<1.0	<1.0	<1.0	<1.0	<2.0
	11/14/2002	<50	82	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	2/5/2003	<50	82	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	5/14/2003	<50	140	NA	<0.5	<0.5	<0.5	<1.0	1.3
	8/22/2003	<50	220	NA	<0.5	<1.0	<1.0	<1.0	<1.0
	11/20/2003	<50	80	NA	<0.5	<0.5	<0.5	<1.0	1.8
	2/9/2004	<50	65	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	5/26/2004	<50	<250	NA	<0.5	<0.5	<0.5	<1.5	<1.0
	8/16/2004	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	1.3
	11/18/2004	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	2.8
	2/22/2005	<50	<0.5	NA	<0.5	<0.5	<0.5	<1.0	1.5
	5/5/2005	<50	190	NA	1.1	<0.5	<0.5	<1.0	1.6
	10/9/2005*	<50	87	NA	2.8	<0.5	<0.5	<0.5	1.2
	5/29/2006*	<50	1,100	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	11/13/2006*	<50	56	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	5/27/2007*	<50	170	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	11/10/2007*	<50	1,300	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	5/25/2008*	<50	250	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	3/26/2009	<50	<990	NA	<1.0	<1.0	<1.0	<2.0	1.2
	6/12/2009	<50	<94	NA	<1.0	<1.0	<1.0	<2.0	2.1
	11/23/2009	<50	<190	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	5/14/2010	<50	<96	NA	<1.0	<1.0	<1.0	<2.0	1.6
	11/29/2010	<50	<96	NA	<1.0	<1.0	<1.0	<2.0	1.6
	5/25/2011	<50	<94	NA	<1.0	<1.0	<1.0	<2.0	2.9
	11/30/2011	<50	<95	NA	<1.0	<1.0	<1.0	<2.0	**3.7**

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

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
MCL (ug/l)		**None**	**None**	**None**	**1.0**	**150**	**300**	**1,750**	**13**
ESL (ug/l)		**100**	**100**	**100**	**1.0**	**40**	**30**	**20**	**5**
MW-10	2/7/2000	<50	<50	470	<1	<1	<1	<1	<2
	5/25/2000	<50	<50	220	<1.0	<1.0	<1.0	<1.0	<2.0
	8/22/2000	<50	<50	140	<1.0	<1.0	<1.0	<1.0	<2.0
	11/20/2000	<50	<50	300	<1.0	<1.0	<1.0	<1.0	<2.0
	3/1/2001	<50	<50	250	<1.0	<1.0	<1.0	<1.0	<2.0
	5/14/2001	<50	<50	74	<1.0	<1.0	<1.0	<1.0	<2.0
	7/26/2001	<50	<50	120	<1.0	<1.0	<1.0	<1.0	<2.0
	10/16/2001	<50	<50	190	<1.0	<1.0	<1.0	<1.0	<2.0
	2/21/2002	<50	<50	190	<1.0	<1.0	<1.0	<1.0	<2.0
	5/29/2002	<50	<50	110	<1.0	<1.0	<1.0	<1.0	<2.0
	9/17/2002	<50	<50	170	<1.0	<1.0	<1.0	<1.0	<2.0
	11/14/2002	<50	270	NA	<0.5	<0.5	<0.5	<1.0	1.5
	2/5/2003	<50	160	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	5/14/2003	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	8/22/2003	<50	320	NA	<0.5	<1.0	<1.0	<1.0	<1.0
	11/20/2003	<50	300	NA	<0.5	<0.5	<0.5	<1.0	1.7
	2/9/2004	<50	250	NA	<0.5	<0.5	<0.5	<1.0	1.1
	5/26/2004	<500	<50	NA	<0.5	<0.5	<0.5	<1.5	<1.0
	8/16/2004	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	11/18/2004	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	0.9
	2/22/2005	<50	<50	NA	1.0	<0.5	<0.5	<1.0	0.9
	5/5/2005	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	<0.5
	10/9/2005*	<50	<50	NA	0.92	<0.5	<0.5	<0.5	0.66
	5/29/2006*	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	11/13/2006*	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	5/27/2007*	<50	550	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	11/10/2007*	<50	130	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	5/25/2008*	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	3/26/2009	<50	<100	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	6/12/2009	<50	<94	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	11/23/2009	<50	<95	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	5/14/2010	<50	<96	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	11/29/2010	<50	<97	NA	<1.0	<1.0	<1.0	<2.0	1.0
	5/25/2011	<50	<95	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	12/1/2011	<50	<95	NA	<1.0	<1.0	<1.0	<2.0	<1.0

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

Well	Date	TPH-G	TPH-D	TPH	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
MCL (ug/l)		**None**	**None**	**None**	**1.0**	**150**	**300**	**1,750**	**13**
ESL (ug/l)		**100**	**100**	**100**	**1.0**	**40**	**30**	**20**	**5**
MW-11	2/7/2000	<50	<50	400	<1	<1	<1	<1	25
	5/25/2000	<50	<50	200	<1.0	<1.0	<1.0	<1.0	16
	8/22/2000	<50	<50	170	<1.0	<1.0	<1.0	<1.0	9.3
	11/20/2000	<50	<50	190	<1.0	<1.0	<1.0	<1.0	7.5
	3/1/2001	<50	<50	250	<1.0	<1.0	<1.0	<1.0	15.0
	5/14/2001	<50	<50	160	<1.0	<1.0	<1.0	<1.0	14.0
	7/26/2001	<50	<50	220	5.9	<1.0	<1.0	2.7	20.0
	10/16/2001	<50	<50	170	<1.0	<1.0	<1.0	<1.0	12.0
	2/21/2002	<50	<50	170	<1.0	<1.0	<1.0	<1.0	2.2
	5/29/2002	<50	<50	290	<1.0	<1.0	<1.0	<1.0	2.3
	9/17/2002	<50	<500	1,900	<1.0	<1.0	<1.0	<1.0	3.8
	11/14/2002	<50	740	NA	0.88	<0.5	<0.5	1.2	5.3
	2/5/2003	<50	410	NA	<0.5	<0.5	<0.5	<1.0	3.4
	5/14/2003	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	2.5
	8/22/2003	<50	540	NA	<0.5	<1.0	<1.0	<1.0	2.2
	11/20/2003	<50	290	NA	<0.5	<0.5	<0.5	<1.0	1.8
	2/9/2004	<50	270	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	5/26/2004	<50	<50	NA	<0.5	<0.5	<0.5	<1.5	<1.0
	8/16/2004	<50	100	NA	<0.5	<0.5	<0.5	<1.0	<1.0
	11/18/2004	70	<50	NA	3.3	<0.5	0.80	1.7	0.7
	2/22/2005	114	<5.0	NA	<0.5	<0.5	2.20	3.9	<0.5
	5/5/2005	<50	<50	NA	<0.5	0.60	<0.5	<1.0	<0.5
	10/9/2005*	<50	82	NA	3.0	<0.5	<0.5	0.57	0.83
	5/29/2006*	<50	150	NA	2.9	<0.5	<0.5	<0.5	<0.5
	11/13/2006*	<50	150	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	5/27/2007*	<50	330	NA	1.8	<0.5	<0.5	<0.5	<0.5
	11/10/2007*	110	890	NA	19	<0.5	2.5	4.0	<0.5
	5/25/2008*	300	790	NA	52	1.5	9.5	11	<10
	3/26/2009	<50	<95	NA	<1.0	<1.0	<1.0	<2.0	4.1
	6/12/2009	<50	<95	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	11/23/2009	<50	<95	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	5/14/2010	<50	<97	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	11/30/2010	<50	<98	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	5/25/2011	<50	<97	NA	<1.0	<1.0	<1.0	<2.0	<1.0
	12/1/2011	<50	<95	NA	<1.0	<1.0	<1.0	<2.0	<1.0

Notes:
ug/l: micrograms per liter
TPH-G: total petroleum hydrocarbons as gasoline
TPH-D: total petroleum hydrocarbons as diesel
TPH: total petroleum hydrocarbons as motor oil or unknown hydrocarbon
MTBE: Methyl-tert,butylether
MCL: Maximum Contaminant Level
ESL: Environmental Screening Level
NA: Not Analyzed

References:
California Regional Water Quality Control Board, "Screening for Environmental concerns at Sites with Contaminated Soil and Groundwater," Interim Final - November 2007 (Revised May 2008).

* Essel TechnologyServices, Inc. data.

APPENDIX A

CERTIFIED ANALYTICAL REPORTS

CHAIN-OF-CUSTODY DOCUMENTS

Northern California ACCUTEST LABORATORIES

12/08/11

Technical Report for

Cameron-Cole

T0600102158-AC Transit Seminary, Oakland, CA

2036-002

Accutest Job Number: C19207

Sampling Dates: 11/30/11 - 12/01/11

Report to:

Cameron-Cole
50 Hegenberger Loop
Oakland, CA 94621
dmetz@cameron-cole.com; ssurani@cameron-cole.com;
dbaker@cameron-cole.com
ATTN: Shaun Surani

Total number of pages in report: **34**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Kesavalu M. Bagawandoss, Ph.D., J.D., Lab Director

Client Service contact: Laurie Glantz-Murphy 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

Sections: 1 2 3 4 5 6

Table of Contents

-1-

Sample Summary

Cameron-Cole

Job No: C19207

T0600102158-AC Transit Seminary, Oakland, CA
Project No: 2036-002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
C19207-1	11/30/11	10:00	DB	12/01/11	AQ	Trip Blank Water	TB-01
C19207-2	11/30/11	10:45	DB	12/01/11	AQ	Ground Water	MW-2
C19207-3	11/30/11	11:15	DB	12/01/11	AQ	Ground Water	MW-1
C19207-4	11/30/11	11:50	DB	12/01/11	AQ	Ground Water	MW-9
C19207-5	11/30/11	12:30	DB	12/01/11	AQ	Ground Water	MW-3
C19207-6	12/01/11	08:30	DB	12/01/11	AQ	Ground Water	MW-10
C19207-7	12/01/11	09:00	DB	12/01/11	AQ	Ground Water	MW-11

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Cameron-Cole	**Job No**	C19207
Site:	T0600102158-AC Transit Seminary, Oakland, CA	**Report Date**	12/8/2011 3:52:32 PM

6 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected between 11/30/2011 and 12/01/2011 and were received at Accutest on 12/01/2011 properly preserved, at 3.3 Deg. C and intact. These Samples received an Accutest job number of C19207. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** VR223

- Sample(s) C19207-4MS, C19207-4MSD were used as the QC samples indicated.

Matrix AQ **Batch ID:** VR224

- Sample(s) C19207-7MS, C19207-7MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015B M

Matrix AQ **Batch ID:** OP5003

- Sample(s) C19181-2MS, C19181-2MSD were used as the QC samples indicated.

Accutest Laboratories Northern California (ALNCA) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALNCA and as stated on the COC. ALNCA certifies that the data meets the Data QualityObjectives for precision, accuracy and completeness as specified in the ALNCA Quality Manual except as noted above. This report is to be used in its entirety. ALNCA is not responsible for any assumptions of data quality if partial data packages are used

Northern California ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TB-01		
Lab Sample ID:	C19207-1	**Date Sampled:**	11/30/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/01/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6336.D	1	12/02/11	BD	n/a	n/a	VR223
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
	TPH-GRO (C6-C10)	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	97%		60-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	C19207-2	**Date Sampled:**	11/30/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6349.D	200	12/02/11	BD	n/a	n/a	VR223
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	11100	200	ug/l	
108-88-3	Toluene	210	200	ug/l	
100-41-4	Ethylbenzene	981	200	ug/l	
1330-20-7	Xylene (total)	734	400	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	200	ug/l	
	TPH-GRO (C6-C10)	37000	10000	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		60-130%
2037-26-5	Toluene-D8	106%		60-130%
460-00-4	4-Bromofluorobenzene	97%		60-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	C19207-2	**Date Sampled:**	11/30/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG30350.D	10	12/03/11	JH	12/02/11	OP5003	GGG812
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	Units	Q
	TPH (Diesel)	10.7	0.95	mg/l	
	TPH (Motor Oil)	ND	1.9	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	81%		45-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	C19207-3	**Date Sampled:**	11/30/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6362.D	1	12/05/11	BD	n/a	n/a	VR224
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	1.2	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	3.5	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
	TPH-GRO (C6-C10)	742	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	95%		60-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	C19207-3	**Date Sampled:**	11/30/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG30328.D	1	12/02/11	JH	12/02/11	OP5003	GGG811
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	Units	Q
	TPH (Diesel)	0.118	0.095	mg/l	
	TPH (Motor Oil)	ND	0.19	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	86%		45-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	C19207-4	**Date Sampled:**	11/30/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6342.D	1	12/02/11	BD	n/a	n/a	VR223
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3.7	1.0	ug/l	
	TPH-GRO (C6-C10)	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		60-130%
2037-26-5	Toluene-D8	106%		60-130%
460-00-4	4-Bromofluorobenzene	98%		60-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	C19207-4	**Date Sampled:**	11/30/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG30329.D	1	12/02/11	JH	12/02/11	OP5003	GGG811
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	Units	Q
	TPH (Diesel)	ND	0.095	mg/l	
	TPH (Motor Oil)	0.356	0.19	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	74%		45-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	C19207-5	**Date Sampled:**	11/30/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6343.D	1	12/02/11	BD	n/a	n/a	VR223
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	5.3	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
	TPH-GRO (C6-C10)	63.7	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	97%		60-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	C19207-5	**Date Sampled:**	11/30/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG30330.D	1	12/02/11	JH	12/02/11	OP5003	GGG811
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	Units	Q
	TPH (Diesel)	ND	0.095	mg/l	
	TPH (Motor Oil)	0.777	0.19	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	73%		45-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	C19207-6	**Date Sampled:**	12/01/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6351.D	1	12/02/11	BD	n/a	n/a	VR223
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
	TPH-GRO (C6-C10)	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	96%		60-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	C19207-6	**Date Sampled:**	12/01/11
Matrix:	AQ - Ground Water	**Date Received:**	12/01/11
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102158-AC Transit Seminary, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG30331.D	1	12/02/11	JH	12/02/11	OP5003	GGG811
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	Units	Q
	TPH (Diesel)	ND	0.095	mg/l	
	TPH (Motor Oil)	ND	0.19	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	77%		45-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-11
Lab Sample ID: C19207-7
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: T0600102158-AC Transit Seminary, Oakland, CA

Date Sampled: 12/01/11
Date Received: 12/01/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6363.D	1	12/05/11	BD	n/a	n/a	VR224
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
	TPH-GRO (C6-C10)	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		60-130%
2037-26-5	Toluene-D8	105%		60-130%
460-00-4	4-Bromofluorobenzene	96%		60-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-11
Lab Sample ID: C19207-7
Matrix: AQ - Ground Water
Method: SW846 8015B M SW846 3510C
Project: T0600102158-AC Transit Seminary, Oakland, CA

Date Sampled: 12/01/11
Date Received: 12/01/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG30333.D	1	12/02/11	JH	12/02/11	OP5003	GGG811
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	Units	Q
	TPH (Diesel)	ND	0.095	mg/l	
	TPH (Motor Oil)	ND	0.19	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	79%		45-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Northern California ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST LABORATORIES
2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

CCCAA1842

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest NC Job #: C C19207

Client / Reporting Information

Company Name: CAMERON-COLE
Address: 50 HEGENBERGER LOOP
City, State, Zip: OAKLAND, CA 94621
Project Contact: DENNIS BAKER
Phone #: 510-872-2156
Sampler's Name: DENNIS BAKER

Project Information

Project Name: AC TRANSIT-SEMINARY
Street: 1100 SEMINARY AVENUE
City, State: OAKLAND, CA
Project #: 2036-002
EMAIL: dbaker@cameron-cole.com
Client Purchase Order #:

Requested Analysis: BTEX, MTBE, TPH-g by 8260B; TPH-d/mo by 8015 mod with silica gel cleanup

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	BTEX, MTBE, TPH-g by 8260B	TPH-d/mo by 8015 mod with silica gel cleanup	LAB USE ONLY
1	TB-01	11-30-11	1000	DB	W	3	X								X		5-Vials (all HCl) 2-1-lt Amber (U)
2	MW-2	↓	1045	↓	GW	5	3				2				X	X	
3	MW-1	↓	1115	↓	↓	↓	↓				↓				↓	↓	
4	MW-9	↓	1150	↓	↓	↓	↓				↓				↓	↓	
5	MW-3	↓	1230	↓	↓	↓	↓				↓				↓	↓	
6	MW-11	12-1-11	0830	↓	↓	↓	↓				↓				↓	↓	
-7	MW-11	12-1-11	9:00	↓	↓	↓	↓				↓				X	X	added as per dennis Baker (EK) 12/1/11

Matrix Codes: WW- Wastewater; GW- Ground Water; SW- Surface Water; SO- Soil; OI-Oil; WP-Wipe; LIQ - Non-aqueous Liquid; AIR; DW- Drinking Water (Perchlorate Only)

Turnaround Time (Business days) — Approved By:/ Date:
- [X] Standard TAT 15 Business Days
- [ ] 10 Day (Workload dependent)
- [ ] 5 Day (Workload dependent)
- [ ] 3 Day (125% markup)
- [ ] 2 Day (150% markup)
- [ ] 1 Day (200% markup)
- [ ] Same Day (300% markup)

Emergency T/A data available VIA Lablink

Data Deliverable Information
- [ ] Commercial "A" - Results only
- [X] Commercial "B" - Results with QC summaries
- [ ] Commercial "B+" - Results, QC, and chromatograms
- [ ] FULT1 - Level 4 data package
- [X] EDF for Geotracker [X] EDD Format ______
- Provide EDF Global ID T0600102158
- Provide EDF Logcode:

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Dennis C. Baker	12/1/11 11:00	1 Mike Moorefield	2 Mike Moorefield	12/1/11 12:00	2 [signature] 1201 12-01-11
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Appropriate Bottle / Pres (Y)/N; Labels match Coc (Y)/N; Headspace Y/(N); Separate Receiving Check List used (Y)/N; On Ice (Y)/N	Cooler Temp. 3.7-0.4=3.3 °C

C19207: Chain of Custody
Page 1 of 2

Accutest Laboratories Northern California Sample Receiving Check List Job# : C19207 Initial: JM/LS

Review Chain of Custody — Chain of Custody is to be complete and legible.

- ☑ Are these regulatory (NPDES) samples? CWA — (Yes) / No
- ☑ Is pH requested? — Yes / (No)
  - ☐ Was Client informed that hold time is 15 min? Yes / No — Continue Yes / No
  - ☐ Was ortho-Phosphate filtered with in 15 min? Yes / No — Continue Yes / No
- ☑ Are sample within hold time? — (Yes) / No
  - Are sample in danger of exceeding hold-time — Yes / (No)
- ☑ Existing Client? (Yes) / No — Existing Project? (Yes) / No
  - If No: Is Report to info complete and legible, including;
    - ☐ deliverable ☐ Name ☐ Address ☐ phone ☐ e-mail
  - Is Bill to info complete and legible, including;
    - ☐ PO# ☐ Credit card ☐ Contact ☐ address ☐ phone ☐ e-mail
  - Is Contact and/or Project Manager identified, including;
    - ☐ phone ☐ e-mail
    - ☐ Project name / number
- ☑ Special requirements? — Yes / (No)
- ☑ Sample IDs / date & time of collection provided? — (Yes) / No
- ☑ Is Matrix listed and correct? — (Yes) / No
- ☑ Analyses listed, we do, or client has authorized a subcontract? — (Yes) / No
- ☑ Chain is signed and dated by both client and sample custodian? — (Yes) / No
- ☑ TAT requested available? (Yes) / No — Approved by PM

Review Coolers:

- ☑ Were all Coolers temperatures measured at ≤6°C? — (Yes) / No
  - If cooler is outside the ≤6°C; note down the affected bottles in that cooler on the left
- ☑ Are samples on Ice? — (Yes) / No

Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)

- ☑ Shipment Received Method AC
- ☑ Custody Seals: Present: Yes / (No) — If Yes; Unbroken: Yes / No

Review of Sample Bottles: If you answer no, explain to the side

- ☑ Chain matches bottle labels? (Yes) / No — ☑ Sample bottle intact? (Yes) / No
- ☑ Is there enough sample volume in proper bottle for requested analyses? — (Yes) / No
- ☑ Proper Preservatives? (Yes) / No
  - Check pH on preserved samples except 1664, 625, 8270 and VOAs; make notes on left.
- ☑ Headspace-VOAs? **Greater than 6mm in diameter** — Yes / (No)
  - **List sample ID and affected container**

Client Sample ID	pH Check	Other Comments/Issues

Non-Compliance issues and discrepancies on the COC are forwarded to Project Management

\\Accunca.accutest.com\depts\qa\sops\sop_completelist_2010\current_active_sop_oct_2010\sc001f1_0_form1_samplecontrol_samplereceivingchecklist_2009-01-01.doc

C19207: Chain of Custody
Page 2 of 2

Northern California ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR223-MB	R6335.D	1	12/02/11	BD	n/a	n/a	VR223

The QC reported here applies to the following samples: **Method:** SW846 8260B

C19207-1, C19207-2, C19207-4, C19207-5, C19207-6

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	
	TPH-GRO (C6-C10)	ND	50	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	89%	60-130%
2037-26-5	Toluene-D8	105%	60-130%
460-00-4	4-Bromofluorobenzene	96%	60-130%

Method Blank Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR224-MB	R6361.D	1	12/05/11	BD	n/a	n/a	VR224

The QC reported here applies to the following samples: **Method:** SW846 8260B

C19207-3, C19207-7

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	
	TPH-GRO (C6-C10)	ND	50	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	87%	60-130%
2037-26-5	Toluene-D8	104%	60-130%
460-00-4	4-Bromofluorobenzene	96%	60-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR223-BS	R6331.D	1	12/02/11	BD	n/a	n/a	VR223
VR223-BSD	R6332.D	1	12/02/11	BD	n/a	n/a	VR223

The QC reported here applies to the following samples: **Method:** SW846 8260B

C19207-1, C19207-2, C19207-4, C19207-5, C19207-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	19.1	96	18.6	93	3	60-130/30
100-41-4	Ethylbenzene	20	21.8	109	21.5	108	1	60-130/30
1634-04-4	Methyl Tert Butyl Ether	20	17.9	90	17.5	88	2	60-130/30
108-88-3	Toluene	20	20.3	102	20.0	100	1	60-130/30
1330-20-7	Xylene (total)	60	61.1	102	60.1	100	2	60-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	90%	90%	60-130%
2037-26-5	Toluene-D8	104%	105%	60-130%
460-00-4	4-Bromofluorobenzene	96%	97%	60-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR224-BS	R6357.D	1	12/05/11	BD	n/a	n/a	VR224
VR224-BSD	R6358.D	1	12/05/11	BD	n/a	n/a	VR224

The QC reported here applies to the following samples: **Method:** SW846 8260B

C19207-3, C19207-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	18.8	94	19.3	97	3	60-130/30
100-41-4	Ethylbenzene	20	21.5	108	21.7	109	1	60-130/30
1634-04-4	Methyl Tert Butyl Ether	20	17.2	86	17.9	90	4	60-130/30
108-88-3	Toluene	20	20.0	100	20.2	101	1	60-130/30
1330-20-7	Xylene (total)	60	60.4	101	60.6	101	0	60-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	89%	90%	60-130%
2037-26-5	Toluene-D8	103%	103%	60-130%
460-00-4	4-Bromofluorobenzene	95%	96%	60-130%

Laboratory Control Sample Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR223-LCS	R6334.D	1	12/02/11	BD	n/a	n/a	VR223

The QC reported here applies to the following samples: **Method:** SW846 8260B

C19207-1, C19207-2, C19207-4, C19207-5, C19207-6

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	135	108	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	89%	60-130%
2037-26-5	Toluene-D8	105%	60-130%
460-00-4	4-Bromofluorobenzene	97%	60-130%

Laboratory Control Sample Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR224-LCS	R6360.D	1	12/05/11	BD	n/a	n/a	VR224

The QC reported here applies to the following samples: **Method:** SW846 8260B

C19207-3, C19207-7

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	129	103	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	88%	60-130%
2037-26-5	Toluene-D8	104%	60-130%
460-00-4	4-Bromofluorobenzene	95%	60-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C19207-4MS	R6352.D	1	12/02/11	BD	n/a	n/a	VR223
C19207-4MSD	R6353.D	1	12/02/11	BD	n/a	n/a	VR223
C19207-4	R6342.D	1	12/02/11	BD	n/a	n/a	VR223

The QC reported here applies to the following samples: **Method:** SW846 8260B

C19207-1, C19207-2, C19207-4, C19207-5, C19207-6

CAS No.	Compound	C19207-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.2	96	18.9	95	2	60-130/25
100-41-4	Ethylbenzene	ND		20	21.9	110	21.8	109	0	60-130/25
1634-04-4	Methyl Tert Butyl Ether	3.7		20	19.7	80	19.7	80	0	60-130/25
108-88-3	Toluene	ND		20	20.6	103	20.4	102	1	60-130/25
1330-20-7	Xylene (total)	ND		60	61.2	102	60.8	101	1	60-130/25

CAS No.	Surrogate Recoveries	MS	MSD	C19207-4	Limits
1868-53-7	Dibromofluoromethane	88%	90%	89%	60-130%
2037-26-5	Toluene-D8	105%	105%	106%	60-130%
460-00-4	4-Bromofluorobenzene	97%	97%	98%	60-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C19207-7MS	R6380.D	1	12/05/11	BD	n/a	n/a	VR224
C19207-7MSD	R6381.D	1	12/05/11	BD	n/a	n/a	VR224
C19207-7	R6363.D	1	12/05/11	BD	n/a	n/a	VR224

The QC reported here applies to the following samples: **Method:** SW846 8260B

C19207-3, C19207-7

CAS No.	Compound	C19207-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.2	96	18.7	94	3	60-130/25
100-41-4	Ethylbenzene	ND		20	22.0	110	21.4	107	3	60-130/25
1634-04-4	Methyl Tert Butyl Ether	0.73		20	17.6	84	17.2	82	2	60-130/25
108-88-3	Toluene	ND		20	20.6	103	19.8	99	4	60-130/25
1330-20-7	Xylene (total)	ND		60	61.7	103	60.1	100	3	60-130/25

CAS No.	Surrogate Recoveries	MS	MSD	C19207-7	Limits
1868-53-7	Dibromofluoromethane	87%	86%	86%	60-130%
2037-26-5	Toluene-D8	104%	101%	105%	60-130%
460-00-4	4-Bromofluorobenzene	95%	94%	96%	60-130%

Northern California ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5003-MB	GG30322.D	1	12/02/11	JH	12/02/11	OP5003	GGG811

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C19207-2, C19207-3, C19207-4, C19207-5, C19207-6, C19207-7

CAS No.	Compound	Result	RL	Units	Q
	TPH (Diesel)	ND	0.10	mg/l	
	TPH (Motor Oil)	ND	0.20	mg/l	

CAS No.	Surrogate Recoveries		Limits
630-01-3	Hexacosane	87%	45-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5003-BS	GG30323.D	1	12/02/11	JH	12/02/11	OP5003	GGG811
OP5003-BSD	GG30324.D	1	12/02/11	JH	12/02/11	OP5003	GGG811

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C19207-2, C19207-3, C19207-4, C19207-5, C19207-6, C19207-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (Diesel)	1	0.957	96	0.911	91	5	45-140/30
	TPH (Motor Oil)	1	0.856	86	0.864	86	1	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	94%	95%	45-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C19207
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5003-MS	HH19213.D	1	12/02/11	JH	12/02/11	OP5003	GHH619
OP5003-MSD	HH19214.D	1	12/02/11	JH	12/02/11	OP5003	GHH619
C19181-2	GG30335.D	1	12/02/11	JH	12/02/11	OP5003	GGG811

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C19207-2, C19207-3, C19207-4, C19207-5, C19207-6, C19207-7

CAS No.	Compound	C19181-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (Diesel)	ND		0.952	0.784	82	0.799	84	2	45-140/25
	TPH (Motor Oil)	ND		0.952	0.680	71	0.688	72	1	45-140/25

CAS No.	Surrogate Recoveries	MS	MSD	C19181-2	Limits
630-01-3	Hexacosane	74%	80%	89%	45-140%

CHAIN OF CUSTODY

ACCUTEST® LABORATORIES
2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest NC Job #: C

Client / Reporting Information

Company Name	Project Name:
CAMERON-COLE	AC TRANSIT - SEMINARY
Address	**Street**
50 HEGENBERGER LOOP	1100 SEMINARY AVENUE
City State Zip	**City State**
OAKLAND CA 94621	OAKLAND CA
Project Contact:	**Project #**
DENNIS BAKER	2036-002
Phone #	**EMAIL:**
510-832-2156	dbaker@cameron-cole.com
Samplers's Name	**Client Purchase Order #**
DENNIS BAKER	

Requested Analysis

BTEX, MTBE, TPH-g by 8260

TPH-diesel by 8015 (MOD) with silica gel cleanup

Matrix Codes

WW- Wastewater
GW- Ground Water
SW- Surface Water
SO- Soil
OI-Oil
WP-Wipe
LIQ - Non-aqueous Liquid
AIR
DW- Drinking Water (Perchlorate Only)

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	BTEX, MTBE, TPH-g by 8260	TPH-diesel by 8015 (MOD) with silica gel cleanup								LAB USE ONLY
	TB-01	11-30-11	1000	DB	W	3	X								X									
	MW-2		1045		GW	5	3				2				X	X								
	MW-1		1115																					
	MW-9		1150																					
	MW-3		1230																					
	MW-10	12-1-11	0830																					

Turnaround Time (Business days)

- [x] Standard TAT 15 Business Days — Approved By:/ Date: _____
- [ ] 10 Day (Workload dependent) _____
- [ ] 5 Day (Workload dependent) _____
- [ ] 3 Day (125% markup) _____
- [ ] 2 Day (150% markup) _____
- [ ] 1 Day *(200% markup)* _____
- [ ] Same Day (300% markup) _____

Emergency T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" - Results only
- [x] Commercial "B" - Results with QC summaries
- [ ] Commerical "B+" - Results, QC, and chromatograms
- [ ] FULT1 - Level 4 data package
- [x] EDF for Geotracker [x] EDD Format _____
- Provide EDF Global ID T0600102158
- Provide EDF Logcode: _____

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Dennis C. Baker	12/1/11	1	2		2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #		

Appropriate Bottle / Pres. Y / N Headspace Y / N On Ice Y / N Cooler Temp.

Labels match Coc? Y / N Separate Receiving Check List used: Y / N _____ oC

APPENDIX B

SAMPLING EVENT DATA

HYDRODATA

PROJECT:_AC_Transit-Seminary_ EVENT:___2Q2011____ SAMPLER:___DB_____

NO.	WELL OR LOCATION	DATE	TIME	MEASUREMENT	CODE	COMMENTS
1	MW-1	11/29/2011	0730	3.64	SWL	
2	MW-2	11/29/2011	0815	4.13	SWL	
3	MW-3	11/29/2011	0747	2.47	SWL	
4	MW-9	11/29/2011	0736	3.90	SWL	
5	MW-10	11/29/2011	0741	3.13	SWL	
6	MW-11	11/29/2011	0754	2.30	SWL	

CODES:

SWL - Static Water Level

OIL - Oil Level

OWI - Oil/Water Interface

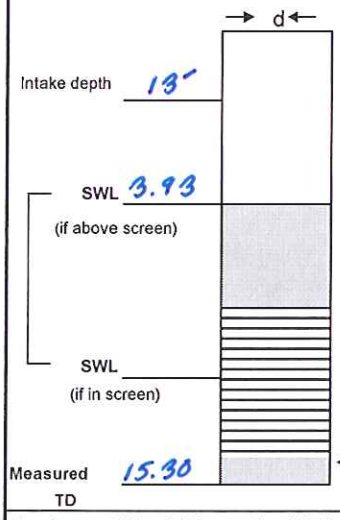
MTD - Measured Total Depth

CAMERON-COLE

SAMPLING EVENT DATA SHEET

WELL OR LOCATION mw-1

PROJECT AC Transit - Seminary EVENT 4Q2011 SAMPLER DB DATE 11-30-11



Well type MW
(MW, EW, PZ, etc.)

Diameter 2"

0.163 gal/ft. casing

=TOP

=BOP

=TD (as built)

ACTION	TIME	PUMP RATE (gpm)	DTW
Start Pump / Begin	1107	1.2	3.93
Stop	1112		4.11
Sampled	1115		
Final IWL			

PURGE CALCULATION

0.163 gal/ft. * 11.37 ft. (SWL to TD) = 1.85 gals. (one volume) X 3 = 5.56 gals. (purge volume - 3 casings)

2" = 0.163 gal/ft. 4" = 0.65 gal/ft. 6" = 1.47 gal/ft.

Equipment Used / Sampling Method / Decription of Event:

Centrifugal pump used to purge;
disposable bailer used to sample.

Actual gallons purged 6

Actual volumes purged 3.24

Well Yield ⊕ HY

COC #

Sample I.D.	Analysis	Lab
mw-1	BTEX, MTBE,TPH-g by 8260B	AT
↓	TPH-diesel/motor oil by 8015 Mod with Silica Gel Cleanup	↓

Additional Comments:

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other	
1. 1.5	20.6	1676	6.48	20.48		
2. 3	21.0	1682	6.44	10.11		
3. 5	21.1	1686	6.42	9.87		
4.						
5.						

*Take measurement at ⊕ approximately each casing volume purged.

HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump LY - Able to purge 3 volumes by returing later or next day. VLY - Minimal recharge - unable to purge 3 volumes.

CAMERON-COLE

SAMPLING EVENT DATA SHEET

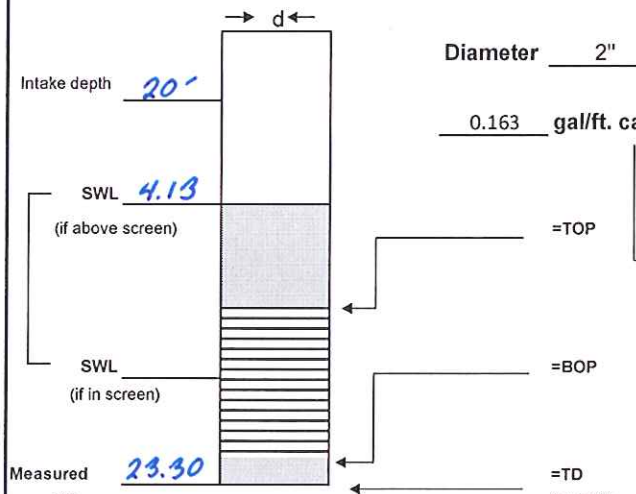
WELL OR LOCATION MW-2

PROJECT AC Transit - Seminary EVENT 4Q2011 SAMPLER DB DATE 11-30-11

Well type MW
(MW, EW, PZ, etc.)

Diameter 2"

0.163 gal/ft. casing



ACTION	TIME	PUMP RATE (gpm)	DTW
Start Pump / Begin	1033	1.25	4.13
		↓	
Stop	1041		4.64
Sampled	1045		
Final IWL			

PURGE CALCULATION

0.163 gal/ft. * 19.17 ft. (SWL to TD) = 3.12 gals. (one volume) X 3 = 9.37 gals. (purge volume - 3 casings)

2" = 0.163 gal/ft. 4" = 0.65 gal/ft. 6" = 1.47 gal/ft.

Equipment Used / Sampling Method / Decription of Event:

Centrifugal pump used to purge;
disposable bailer used to sample.

Actual gallons purged 10

Actual volumes purged 3.21

Well Yield ⊕ HY

COC #

Sample I.D.	Analysis	Lab
MW-2	BTEX, MTBE, TPH-g by 8260B	AT
↓	TPH-diesel/motor oil by 8015 Mod with Silica Gel Cleanup	↓
TB-01	BTEX, MTBE, TPH-g by 8260B	↓

Additional Comments:

TB-01
Trip Blank collected @ 1000

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other	
1. 3	19.1	2730	6.49			
2. 6	19.2	2770	6.40			
3. 9	19.5	2780	6.46			
4.						
5.						

*Take measurement at ⊕ approximately each casing volume purged.

HY-Minimal W.L. drop

MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump

LY - Able to purge 3 volumes by returing later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

CAMERON-COLE

SAMPLING EVENT DATA SHEET

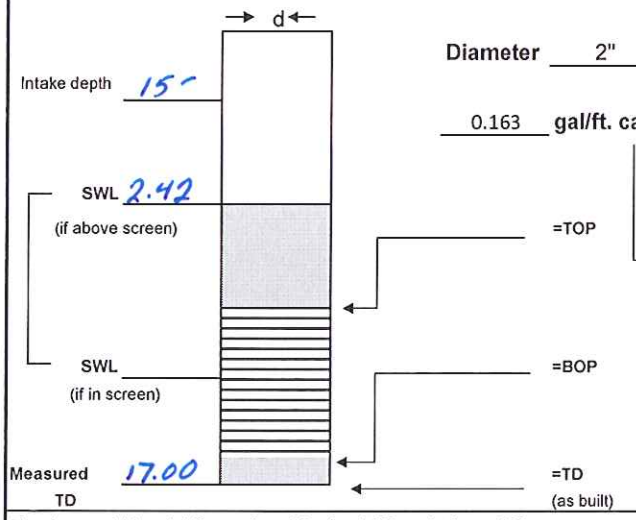
WELL OR LOCATION MW-3

PROJECT AC Transit - Seminary EVENT 4Q2011 SAMPLER DB DATE 11-30-11

Well type MW
(MW, EW, PZ, etc.)

Diameter 2"

0.163 gal/ft. casing



ACTION	TIME	PUMP RATE (gpm)	DTW
Start Pump / Begin	1218	1.14	2.42
Stop	1225		3.12
Sampled	1230		
Final IWL			

PURGE CALCULATION

0.163 gal/ft. * 14.58 ft. = 2.38 gals. X 3 = 7.13 gals.
(SWL to TD; one volume; purge volume - 3 casings)

2" = 0.163 gal/ft. 4" = 0.65 gal/ft. 6" = 1.47 gal/ft.

Equipment Used / Sampling Method / Decription of Event:

Centrifugal pump used to purge;
disposable bailer used to sample.

Actual gallons purged 8

Actual volumes purged 3.36

Well Yield ⊕ HY

COC #

Sample I.D.	Analysis	Lab
MW-3	BTEX, MTBE, TPH-g by 8260B	AT
↓	TPH-diesel/motor oil by 8015 Mod with Silica Gel Cleanup	↓

Additional Comments:

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other	
1. 2	21.3	285	7.34	206.3		
2. 4	21.1	293	7.25	147.8		
3. 7	21.0	303	7.21	52.11		
4.						
5.						

*Take measurement at ⊕ approximately each casing volume purged.

HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump LY - Able to purge 3 volumes by returing later or next day. VLY - Minimal recharge - unable to purge 3 volumes.

CAMERON-COLE

SAMPLING EVENT DATA SHEET

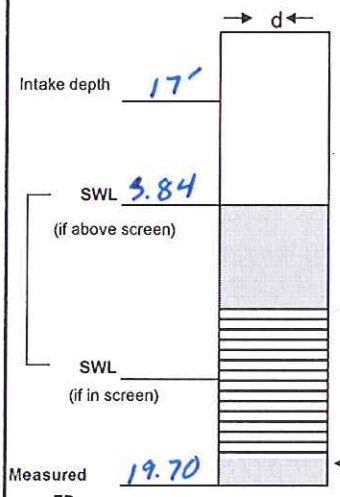
WELL OR LOCATION MW-9

PROJECT AC Transit - Seminary EVENT 4Q2011 SAMPLER DB DATE 11-30-11

Well type MW
(MW, EW, PZ, etc.)

Diameter 2"

0.163 gal/ft. casing



5 =TOP

20 =BOP

20 =TD (as built)

ACTION	TIME	PUMP RATE (gpm)	DTW
Start Pump / Begin	1139	1.14	3.84
		↓	
Stop	1146		
Sampled	1150		
Final IWL			

PURGE CALCULATION

0.163 gal/ft. * 16.16 ft. = 2.63 gals. X 3 = 7.90 gals.
(SWL to TD) (one volume) (purge volume - 3 casings)

2" = 0.163 gal/ft. 4" = 0.65 gal/ft. 6" = 1.47 gal/ft.

Equipment Used / Sampling Method / Decription of Event:

Centrifugal pump used to purge;
disposable bailer used to sample.

Actual gallons purged 8

Actual volumes purged 3.04

Well Yield ⊕ HY

COC #

Sample I.D.	Analysis	Lab
MW-9	BTEX, MTBE, TPH-g by 8260B	AT
↓	TPH-diesel/motor oil by 8015 Mod with Silica Gel Cleanup	↓

Additional Comments:

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other	
1. 2	20.4	1492	6.81	15.44		
2. 4	20.3	1502	6.78	13.98		
3. 7	20.6	1497	6.73	7.16		
4.						
5.						

*Take measurement at ⊕ approximately each casing volume purged.

HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump LY - Able to purge 3 volumes by returing later or next day. VLY - Minimal recharge - unable to purge 3 volumes.

CAMERON-COLE

SAMPLING EVENT DATA SHEET

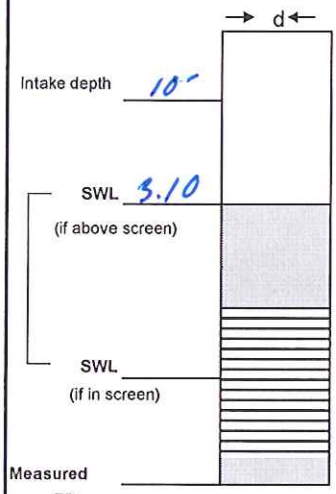
WELL OR LOCATION MW-10

PROJECT AC Transit - Seminary EVENT 4Q2011 SAMPLER DB DATE 12-1-11

Well type MW
(MW, EW, PZ, etc.)

Diameter 2"

0.163 gal/ft. casing



5 =TOP

12 =BOP

12 =TD (as built)

ACTION	TIME	PUMP RATE (gpm)	DTW
Start Pump / Begin	0821	1.25	3.10
	0823	↓	3.27
Stop	0825	↓	3.43
Sampled	0830		
Final IWL			

PURGE CALCULATION

0.163 gal/ft. * 8.90 ft. = 1.45 gals. X 3 = 4.35 gals.
(SWL to TD; one volume; purge volume - 3 casings)

2" = 0.163 gal/ft. 4" = 0.65 gal/ft. 6" = 1.47 gal/ft.

Equipment Used / Sampling Method / Decription of Event:

Centrifugal pump used to purge;
disposable bailer used to sample.

Actual gallons purged 5

Actual volumes purged 3.45

Well Yield ⊕ HY

COC #

Sample I.D.	Analysis	Lab
MW-10	BTEX, MTBE, TPH-g by 8260B	AT
↓	TPH-diesel/motor oil by 8015 Mod with Silica Gel Cleanup	↓

Additional Comments:

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other	
1. 1	19.9	4390	6.76	10.98		
2. 2	19.8	4530	6.77	8.17		
3. 4	19.9	4560	6.78	7.36		
4.						
5.						

*Take measurement at ⊕ approximately each casing volume purged.

HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump LY - Able to purge 3 volumes by returing later or next day. VLY - Minimal recharge - unable to purge 3 volumes.

CAMERON-COLE

SAMPLING EVENT DATA SHEET

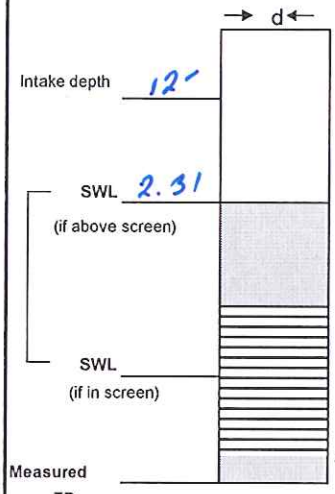
WELL OR LOCATION MW-11

PROJECT AC Transit - Seminary EVENT 4Q2011 SAMPLER DB DATE 12-1-11

Well type MW
(MW, EW, PZ, etc.)

Diameter 2"

0.163 gal/ft. casing



ACTION	TIME	PUMP RATE (gpm)	DTW
Start Pump / Begin	0851	1.20	2.31
		↓	
Stop	0856	↓	11.93
Sampled	0900		
Final IWL			

PURGE CALCULATION

0.163 gal/ft. * 11.69 ft. = 1.91 gals. X 3 = 5.72 gals.
(SWL to TD) (one volume) (purge volume - 3 casings)

2" = 0.163 gal/ft. 4" = 0.65 gal/ft. 6" = 1.47 gal/ft.

Equipment Used / Sampling Method / Decription of Event:

Centrifugal pump used to purge;
disposable bailer used to sample.

Actual gallons purged 6

Actual volumes purged 3.14

Well Yield ⊕ LY

COC #

Sample I.D.	Analysis	Lab
MW-11	BTEX, MTBE,TPH-g by 8260B	AT
↓	TPH-diesel/motor oil by 8015 Mod with Silica Gel Cleanup	↓

Additional Comments:

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other	
1. 1.5	18.6	2950	6.87	15.41		
2. 3	18.4	2920	6.84	13.77		
3. 5	18.4	2860	6.79	12.84		
4.						
5.						

*Take measurement at ⊕ approximately each casing volume purged.

HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump LY - Able to purge 3 volumes by returing later or next day. VLY - Minimal recharge - unable to purge 3 volumes.