



Alameda-Contra Costa Transit District

RECEIVED

10:37 am, Feb 08, 2010

Alameda County
Environmental Health

February 5, 2009

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

Dear Mr. Plunkett:

Subject: Groundwater Monitoring Report – November 2009
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 23, 2009, from six on-site monitoring wells.

Sampling results indicate that diesel was present in the sample collected from monitoring well MW-2 at a concentration of 35,600 ppb. Gasoline was detected in the three wells at concentrations of 1,520 ppb (MW-1), 45,200 ppb (MW-2) and 999 ppb (MW-3). Chemical concentrations in excess of Maximum Contaminant Levels (MCLs) for benzene was measured in wells MW-1, MW-2 and MW-3 and ethyl benzene and xylenes in well MW-2.

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) 577-8869.

Sincerely,

Suzanne Chaewsky, P.E.
Environmental Engineer

enclosure

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

February 2010

Prepared For:

Ms. Sue Chaewsky
AC Transit
10626 E. 14th Street
Oakland, California 94603



Prepared By:

Cameron-Cole
50 Hegenberger Loop
Oakland, California 94621



Project No: 2036

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

February 2010

Prepared For:

Ms. Sue Chaewsky
AC Transit
10626 E. 14th Street
Oakland, California 94603



Prepared By:

Cameron-Cole
50 Hegenberger Loop
Oakland, California 94621



Dennis C. Baker

Written By
Dennis Baker
Environmental Scientist

Brad Wright

Approved By
Brad Wright, PG, CHG
Principle Hydrogeologist



TABLE OF CONTENTS

INTRODUCTION	1
OBJECTIVES AND SCOPE OF WORK	1
Groundwater Elevations and Flow Direction	1
Groundwater Sampling Activities.....	1
Groundwater Analytical Results	2
SUMMARY OF RESULTS	2
PROJECTED WORK AND RECOMMENDATIONS.....	2

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Potentiometric Surface Map

LIST OF TABLES

Table 1	Groundwater Level Measurements
Table 2	Analytical Results of Groundwater Samples

LIST OF APPENDICES

APPENDIX A	Certified Analytical Reports and Chain-of-Custody Documentation
APPENDIX B	Sampling Event Data Sheets

INTRODUCTION

This report presents the results of the November 2009 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, in accordance with directives from the Alameda County Health Care Services Agency (ACHCS).

OBJECTIVES AND SCOPE OF WORK

Work performed during quarterly monitoring included measuring depth to water and presence of free phase hydrocarbons in the monitor wells and collecting groundwater samples. Field parameters collected during sampling included pH, temperature, and electric conductivity. Groundwater samples were collected 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 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, all six site monitor wells were measured for free phase hydrocarbon layers and depth to groundwater. Depth to groundwater measurements shown in 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, 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 fourth quarter 2009 and historic analytical results of groundwater testing. Concentrations of benzene above the State of California maximum contaminant level (MCL) of 1.0 micrograms 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 reporting limit in monitor wells MW-1, MW-2, and MW-3. 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.

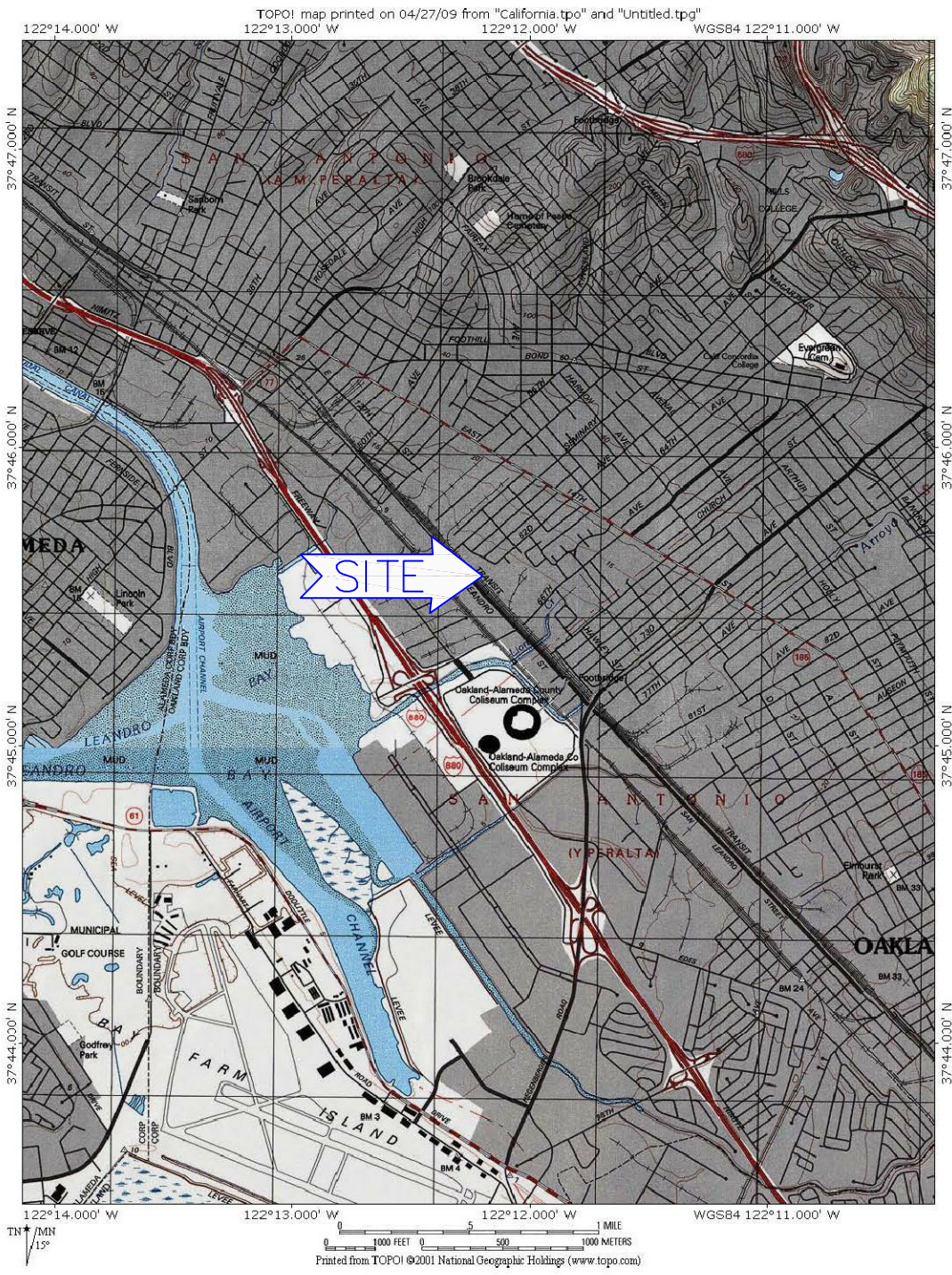
SUMMARY OF RESULTS

- Groundwater flow direction is towards the west at a gradient of 0.003 feet/foot.
- Chemical concentrations in excess of MCLs were limited to benzene in wells MW-1, MW-2, and MW-3, and ethylbenzene in well MW-2.
- Gasoline was found to be present in groundwater samples taken from wells MW-1 (1,520 ug/l), MW-2 (45,200 ug/l), and MW-3 (999 ug/l).
- Diesel was found to be present in the groundwater sample taken from MW-2 at a concentration of 35,600 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 2009.

Figures

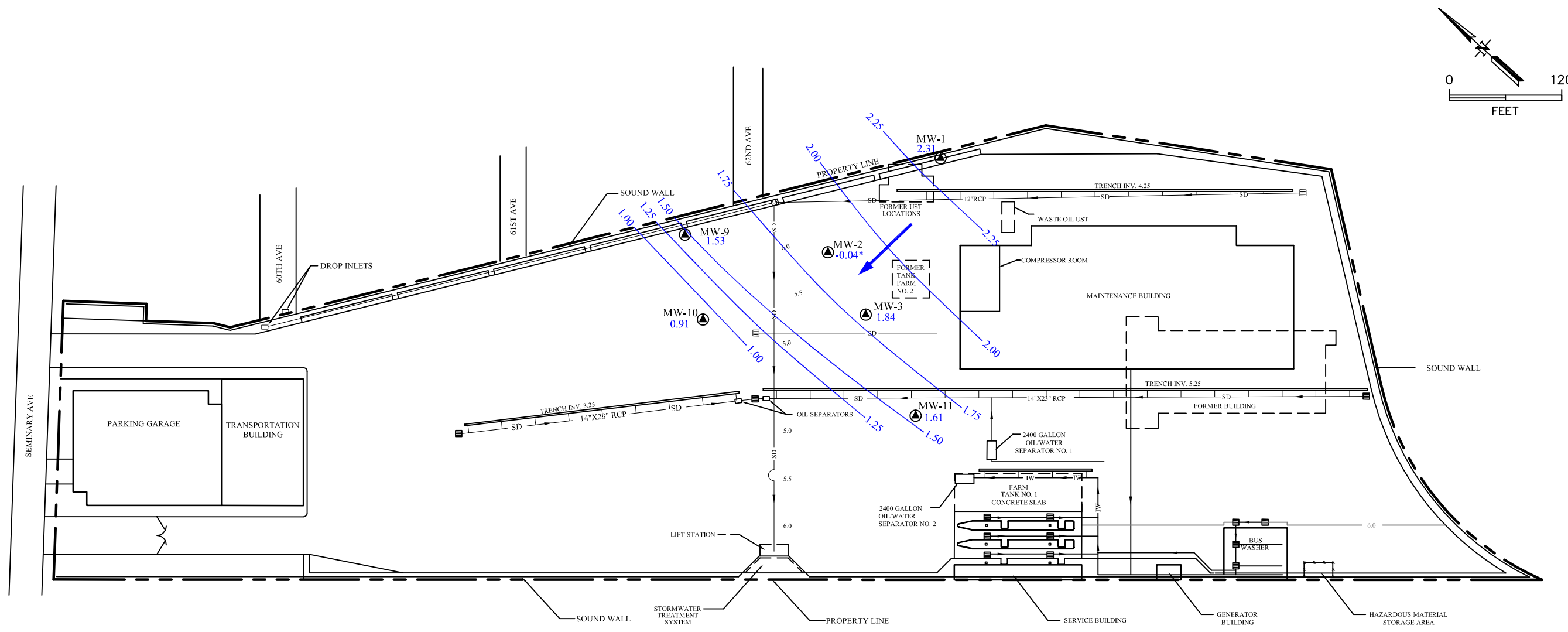


2036-001A



Cameron-Cole
 101 WEST ATLANTIC AVENUE, BUILDING 90
 ALAMEDA, CALIFORNIA 94501
 PHONE: 510-337-8660
 FAX: 510-337-3994
<http://www.cameron-cole.com>

FIGURE 1	
SITE LOCATION MAP AC TRANSIT – SEMINARY OAKLAND, CALIFORNIA	
SCALE:	DATE:
AS NOTED	4-28-09



LEGEND

- | | | | |
|----------|---------------------------------|--------|---------------------------|
| — 1.75 — | GROUNDWATER ELEVATION CONTOUR | ▲ | EXISTING MONITORING WELL |
| 0.91 | GROUNDWATER ELEVATION (FT. MSL) | ⊙ | MANHOLE |
| * | VALUE NOT USED IN CONTOURING | ▤ | CATCH BASIN |
| ← | REPORTED GROUNDWATER FLOW | — SD — | SURFACE DRAINAGE TRENCH |
| | | — IW — | INDUSTRIAL WASTE PIPELINE |

BY	DATE
DRAWN SPS	1/29/10
CHECKED	
APPROVED	
APPROVED	
APPROVED	


Cameron-Cole
 50 HEGENER LOOP
 OAKLAND, CALIFORNIA 94621
 PHONE: 510-777-1870
 FAX: 510-777-1871
<http://www.cameron-cole.com>

FIGURE 2

AC TRANSIT - OAKLAND, CALIFORNIA

1100 SEMINARY ROAD-POTENTIOMETRIC SURFACE MAP
NOVEMBER 23, 2009

SCALE: 1" = 120'	DWG. NO.: 2036-007A
------------------	---------------------

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	
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			

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	
	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	

**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-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		
	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		

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	Xylenes	MTBE
							Benzene		
		MCL (ug/l)			1.0	150	300	1,750	13
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	

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		MTBE
							Benzene	Xylenes	
		MCL (ug/l)			1.0	150	300	1,750	13
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

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	Xylenes	MTBE
							Benzene		
		MCL (ug/l)			1.0	150	300	1,750	13
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	

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	Xylenes	MTBE
							Benzene		
		MCL (ug/l)			1.0	150	300	1,750	13
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	

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	Xylenes	MTBE
							Benzene		
		MCL (ug/l)					300	1,750	13
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	

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		MTBE
							Benzene	Xylenes	
		MCL (ug/l)			1.0	150	300	1,750	13
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	

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

MCL: Maximum Contaminant Level

MTBE: Methyl-tert,butylether

NA: Not Analyzed

* Essel TechnologyServices, Inc. data.

APPENDIX A

CERTIFIED ANALYTICAL REPORTS

CHAIN-OF-CUSTODY DOCUMENTS



Technical Report for

Cameron-Cole

T0600102158-AC Transit Seminary, Oakland, CA

2036-002

Accutest Job Number: C8569

Sampling Date: 11/23/09

Report to:

Cameron-Cole
101 West Atlantic Avenue Suite 90
Alameda, CA 94501
dmetz@cameron-cole.com; ssurani@cameron-cole.com;
dbaker@cameron-cole.com
ATTN: Shaun Surani

Total number of pages in report: **30**



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.

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Anne Kathain 408-588-0200

Certifications: CA (08258CA)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	5
3.1: C8569-1: TB-01	6
3.2: C8569-2: MW-10	7
3.3: C8569-3: MW-3	9
3.4: C8569-4: MW-2	11
3.5: C8569-5: MW-1	13
3.6: C8569-6: MW-9	15
3.7: C8569-7: MW-11	17
Section 4: Misc. Forms	19
4.1: Chain of Custody	20
Section 5: GC/MS Volatiles - QC Data Summaries	23
5.1: Method Blank Summary	24
5.2: Blank Spike Summary	25
5.3: Matrix Spike/Matrix Spike Duplicate Summary	27
Section 6: GC Semi-volatiles - QC Data Summaries	28
6.1: Method Blank Summary	29
6.2: Blank Spike/Blank Spike Duplicate Summary	30



Sample Summary

Cameron-Cole

Job No: C8569

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C8569-1	11/23/09	10:30 DB	11/24/09	AQ	Trip Blank Water	TB-01
C8569-2	11/23/09	10:45 DB	11/24/09	AQ	Ground Water	MW-10
C8569-3	11/23/09	12:00 DB	11/24/09	AQ	Ground Water	MW-3
C8569-4	11/23/09	12:40 DB	11/24/09	AQ	Ground Water	MW-2
C8569-5	11/23/09	13:25 DB	11/24/09	AQ	Ground Water	MW-1
C8569-6	11/23/09	14:00 DB	11/24/09	AQ	Ground Water	MW-9
C8569-7	11/23/09	14:30 DB	11/24/09	AQ	Ground Water	MW-11

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Cameron-Cole

Job No C8569

Site: T0600102158-AC Transit Seminary, Oakland, CA

Report Date 12/9/2009 8:02:51 PM

6 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 11/23/2009 and were received at Accutest on 11/24/2009 properly preserved, at 8.9 Deg. C and intact. These Samples received an Accutest job number of C8569. 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: VW353

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) C8569-2MS, C8569-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015B M

Matrix AQ

Batch ID: OP1541

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

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 Quality Objectives 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



Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: TB-01		Date Sampled: 11/23/09
Lab Sample ID: C8569-1		Date Received: 11/24/09
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: SW846 8260B		
Project: T0600102158-AC Transit Seminary, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W10138.D	1	12/02/09	BD	n/a	n/a	VW353
Run #2							

Run #	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	95%		60-130%
2037-26-5	Toluene-D8	100%		60-130%
460-00-4	4-Bromofluorobenzene	100%		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

32
3

Client Sample ID: MW-10		Date Sampled: 11/23/09
Lab Sample ID: C8569-2		Date Received: 11/24/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: T0600102158-AC Transit Seminary, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W10139.D	1	12/02/09	BD	n/a	n/a	VW353
Run #2							

Run #	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	1.0	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	92%		60-130%
2037-26-5	Toluene-D8	102%		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

32
3

Client Sample ID: MW-10		Date Sampled: 11/23/09
Lab Sample ID: C8569-2		Date Received: 11/24/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8015B M SW846 3510C		
Project: T0600102158-AC Transit Seminary, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG9767.D	1	11/30/09	JH	11/25/09	OP1541	GGG333
Run #2							

Run #	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 (C10-C28)	ND	0.095	mg/l	
	TPH (> C28-C40)	ND	0.19	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	96%		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: C8569-3		Date Sampled: 11/23/09
Matrix: AQ - Ground Water		Date Received: 11/24/09
Method: SW846 8260B		Percent Solids: n/a
Project: T0600102158-AC Transit Seminary, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W10140.D	1	12/02/09	BD	n/a	n/a	VW353
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	78.0	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	23.6	1.0	ug/l	
1330-20-7	Xylene (total)	3.5	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
	TPH-GRO (C6-C10)	999	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		60-130%
2037-26-5	Toluene-D8	101%		60-130%
460-00-4	4-Bromofluorobenzene	102%		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		Date Sampled: 11/23/09
Lab Sample ID: C8569-3		Date Received: 11/24/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8015B M SW846 3510C		
Project: T0600102158-AC Transit Seminary, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG9768.D	1	11/30/09	JH	11/25/09	OP1541	GGG333
Run #2							

Run #	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 (C10-C28)	ND	0.095	mg/l	
	TPH (> C28-C40)	0.502	0.19	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	98%		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

34
3

Client Sample ID: MW-2	
Lab Sample ID: C8569-4	Date Sampled: 11/23/09
Matrix: AQ - Ground Water	Date Received: 11/24/09
Method: SW846 8260B	Percent Solids: n/a
Project: T0600102158-AC Transit Seminary, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W10146.D	400	12/02/09	BD	n/a	n/a	VW353
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	18200	400	ug/l	
108-88-3	Toluene	ND	400	ug/l	
100-41-4	Ethylbenzene	1160	400	ug/l	
1330-20-7	Xylene (total)	1010	800	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	400	ug/l	
	TPH-GRO (C6-C10)	45200	20000	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		60-130%
2037-26-5	Toluene-D8	102%		60-130%
460-00-4	4-Bromofluorobenzene	100%		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		Date Sampled: 11/23/09
Lab Sample ID: C8569-4		Date Received: 11/24/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8015B M SW846 3510C		
Project: T0600102158-AC Transit Seminary, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG9769.D	25	11/30/09	JH	11/25/09	OP1541	GGG333
Run #2							

Run #	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 (C10-C28)	35.6	2.4	mg/l	
	TPH (> C28-C40)	ND	4.8	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	99%		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: C8569-5		Date Sampled: 11/23/09
Matrix: AQ - Ground Water		Date Received: 11/24/09
Method: SW846 8260B		Percent Solids: n/a
Project: T0600102158-AC Transit Seminary, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W10147.D	2.5	12/02/09	BD	n/a	n/a	VW353
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	12.6	2.5	ug/l	
108-88-3	Toluene	ND	2.5	ug/l	
100-41-4	Ethylbenzene	25.0	2.5	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	ug/l	
	TPH-GRO (C6-C10)	1520	130	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		60-130%
2037-26-5	Toluene-D8	102%		60-130%
460-00-4	4-Bromofluorobenzene	102%		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: C8569-5		Date Sampled: 11/23/09
Matrix: AQ - Ground Water		Date Received: 11/24/09
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	GG9770.D	1	11/30/09	JH	11/25/09	OP1541	GGG333
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	0.098	mg/l	
	TPH (> C28-C40)	0.230	0.20	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	96%		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	Date Sampled: 11/23/09
Lab Sample ID: C8569-6	Date Received: 11/24/09
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: T0600102158-AC Transit Seminary, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W10141.D	1	12/02/09	BD	n/a	n/a	VW353
Run #2							

Run #	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	93%		60-130%
2037-26-5	Toluene-D8	101%		60-130%
460-00-4	4-Bromofluorobenzene	99%		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	Date Sampled: 11/23/09
Lab Sample ID: C8569-6	Date Received: 11/24/09
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8015B M SW846 3510C	
Project: T0600102158-AC Transit Seminary, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG9773.D	2	11/30/09	JH	11/25/09	OP1541	GGG333
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	0.19	mg/l	
	TPH (> C28-C40)	1.43	0.38	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	96%		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

37
3

Client Sample ID: MW-11	
Lab Sample ID: C8569-7	Date Sampled: 11/23/09
Matrix: AQ - Ground Water	Date Received: 11/24/09
Method: SW846 8260B	Percent Solids: n/a
Project: T0600102158-AC Transit Seminary, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W10142.D	1	12/02/09	BD	n/a	n/a	VW353
Run #2							

Run #	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	93%		60-130%
2037-26-5	Toluene-D8	103%		60-130%
460-00-4	4-Bromofluorobenzene	99%		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

37
3

Client Sample ID: MW-11		Date Sampled: 11/23/09
Lab Sample ID: C8569-7		Date Received: 11/24/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8015B M SW846 3510C		
Project: T0600102158-AC Transit Seminary, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG9774.D	1	11/30/09	JH	11/25/09	OP1541	GGG333
Run #2							

Run #	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 (C10-C28)	ND	0.095	mg/l	
	TPH (> C28-C40)	ND	0.19	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	93%		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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C8569
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW353-MB	W10133.D	1	12/02/09	BD	n/a	n/a	VW353

The QC reported here applies to the following samples:

Method: SW846 8260B

C8569-1, C8569-2, C8569-3, C8569-4, C8569-5, C8569-6, C8569-7

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	92%	60-130%
2037-26-5	Toluene-D8	100%	60-130%
460-00-4	4-Bromofluorobenzene	101%	60-130%

Blank Spike Summary

Job Number: C8569
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW353-BS	W10129.D	1	12/02/09	BD	n/a	n/a	VW353

The QC reported here applies to the following samples:

Method: SW846 8260B

C8569-1, C8569-2, C8569-3, C8569-4, C8569-5, C8569-6, C8569-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.4	102	60-130
100-41-4	Ethylbenzene	20	20.9	105	60-130
1634-04-4	Methyl Tert Butyl Ether	20	19.2	96	60-130
108-88-3	Toluene	20	20.0	100	60-130
1330-20-7	Xylene (total)	60	62.6	104	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	60-130%
2037-26-5	Toluene-D8	97%	60-130%
460-00-4	4-Bromofluorobenzene	100%	60-130%

Blank Spike Summary

Job Number: C8569
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW353-BS	W10134.D	1	12/02/09	BD	n/a	n/a	VW353

The QC reported here applies to the following samples:

Method: SW846 8260B

C8569-1, C8569-2, C8569-3, C8569-4, C8569-5, C8569-6, C8569-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	TPH-GRO (C6-C10)	125	123	98	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	60-130%
2037-26-5	Toluene-D8	102%	60-130%
460-00-4	4-Bromofluorobenzene	102%	60-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C8569
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C8569-2MS	W10148.D	1	12/02/09	BD	n/a	n/a	VW353
C8569-2MSD	W10149.D	1	12/02/09	BD	n/a	n/a	VW353
C8569-2	W10139.D	1	12/02/09	BD	n/a	n/a	VW353

The QC reported here applies to the following samples:

Method: SW846 8260B

C8569-1, C8569-2, C8569-3, C8569-4, C8569-5, C8569-6, C8569-7

CAS No.	Compound	C8569-2 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	20	24.1	121	24.8	124	3	60-130/25
100-41-4	Ethylbenzene	ND	20	25.1	126	24.6	123	2	60-130/25
1634-04-4	Methyl Tert Butyl Ether	1.0	20	24.6	118	24.6	118	0	60-130/25
108-88-3	Toluene	ND	20	24.8	124	24.9	125	0	60-130/25
1330-20-7	Xylene (total)	ND	60	75.2	125	74.2	124	1	60-130/25

CAS No.	Surrogate Recoveries	MS	MSD	C8569-2	Limits
1868-53-7	Dibromofluoromethane	97%	98%	92%	60-130%
2037-26-5	Toluene-D8	101%	101%	102%	60-130%
460-00-4	4-Bromofluorobenzene	103%	103%	98%	60-130%

5.3.1
5



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: C8569
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1541-MB	GG9736.D	1	11/25/09	JH	11/25/09	OP1541	GGG332

The QC reported here applies to the following samples:

Method: SW846 8015B M

C8569-2, C8569-3, C8569-4, C8569-5, C8569-6, C8569-7

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	0.10	mg/l	
	TPH (> C28-C40)	ND	0.20	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	88% 45-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C8569
Account: CCCAA Cameron-Cole
Project: T0600102158-AC Transit Seminary, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1541-BS	GG9737.D	1	11/25/09	JH	11/25/09	OP1541	GGG332
OP1541-BSD	GG9738.D	1	11/25/09	JH	11/25/09	OP1541	GGG332

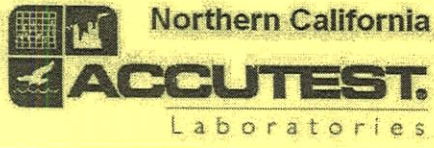
The QC reported here applies to the following samples:

Method: SW846 8015B M

C8569-2, C8569-3, C8569-4, C8569-5, C8569-6, C8569-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.743	74	0.782	78	5	45-140/30
	TPH (> C28-C40)	1	0.768	77	0.804	80	5	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	92%	98%	45-140%



CHAIN OF CUSTODY

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

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

Client / Reporting Information		Project Information		Requested Analysis				Matrix Codes	
Company Name CAMERON-COLE, LLC		Project Name: ACT-Seminary 4Q09						WW- Water GW- Ground Water SW- Surface Water SO- Soil OI- Oil WP- Wipe LIQ- Non-aqueous Liquid AIR DW- Drinking Water (Perchlorate Only)	
Address 101 W. ATLANTIC AVE. BLDG. 90		Street 1100 Seminary							
City State Zip ALAMEDA, CA		City State OAKLAND, CA							
Project Contact: DENNIS BAKER		Project #: 2036-002							
Phone # 510-769-3571		EMAIL: DBAKER@CAMERON-COLE.COM							
Samplers Name DENNIS BAKER		Client Purchase Order #							

BTEX, MTAE, TPH-9
 by 82608
 TPH-d/mo by 8015M
 with Silica Gel Cleanup

Sample #	Field ID / Point of Collection	Collection		Sampled by	Matrix	# of bottles	Number of preserved Bottles												ENCORE	LAB USE ONLY
		Date	Time				HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MeOH	ENCORE						
	TB-01	11/29/09	1030	DB	GW	3	X										X			
	MW-10		1045			3	X										X			
	↓		↓			2					X						X			
	MW-3		1200			3	X										X			
	↓		↓			2					X						X			
	MW-2		1240			3	X										X			
	↓		↓			2					X						X			
	MW-1		1325			3	X										X			
	↓		↓			2					X						X			
	MW-9		1400			3	X										X			

Turnaround Time (Business days)	Approved By/Date:	Data Deliverable Information	Comments / Remarks
<input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> 10 Day (Workload dependent) <input type="checkbox"/> 6 Day (Workload dependent) <input type="checkbox"/> 3 Day (125% markup) <input type="checkbox"/> 2 Day (150% markup) <input type="checkbox"/> 1 Day (200% markup) <input type="checkbox"/> Same Day (300% markup)	<input type="checkbox"/> Commercial "A" <input checked="" type="checkbox"/> Commercial "B" <input type="checkbox"/> EDF for Geotracker Provide EDF Global ID: T060010253 Provide EDF Logcode:	<input type="checkbox"/> EDD Format	

Emergency T/A data available VIA Lablink

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

Relinquished by Sampler: 1 Dennis C. Baker	Date/Time: 11/29/09 0900	Received By: 1	Relinquished By: 2	Date/Time:	Received By:
Relinquished by:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
Relinquished by:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
Relinquished by:	Date/Time:	Received By:	Custody Seal #	Appropriate Bottle / Pres. Y / N	Headspace Y / N
				On Ice Y / N	Cooler Temp. _____ °C
			Labels match Coc? Y / N	Separate Receipt Log Y / N	

APPENDIX B
SAMPLING EVENT DATA

CAMERON-COLE
SAMPLING EVENT DATA SHEET

WELL OR LOCATION mw-1

PROJECT <u>AC Transit - Seminary</u>		EVENT <u>4Q2009</u>	SAMPLER <u>DB</u>	DATE <u>11/23/2009</u>
--------------------------------------	--	---------------------	-------------------	------------------------

	Well type <u>MW</u> (MW, EW, PZ, etc.)	ACTION	TIME	PUMP RATE (gpm)	DTW
	Diameter <u>2"</u>	Start Pump / Begin	<u>13:13</u>	<u>0.86</u>	<u>3.94</u>
	<u>0.165</u> gal/ft. casing				
		Stop	<u>13:20</u>	↓	<u>9.70</u>
		Sampled	<u>13:25</u>		
	Final IWL				

PURGE CALCULATION			
<u>0.165</u> gal/ft. *	<u>11.36</u> ft. =	<u>1.87</u> gals. X 3 =	<u>5.62</u> gals.
	SWL to TD	one volume	purge volume - 3 casings
2" = 0.165 gal/ft.	4" = 0.65 gal/ft.	6" = 1.47 gal/ft.	

Equipment Used / Sampling Method / Description of Event: <i>Centrifugal pump used to purge; disposable bailer used to sample.</i>	Actual gallons purged <u>6</u> Actual volumes purged <u>3.21</u> Well Yield ⊕ <u>MY</u>	
COC # _____		
Sample I.D.	Analysis	Lab
<u>MW-1</u>	<u>BTEX, MTBE, TPH by 8260B</u>	<u>Accutest</u>
↓	<u>TPH - d/mo by 8015M</u>	↓

Additional Comments:					
----------------------	--	--	--	--	--

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other
1. <u>1</u>	<u>22.4</u>	<u>1564</u>	<u>6.80</u>	<u>32.08</u>	
2. <u>3</u>	<u>21.5</u>	<u>1388</u>	<u>6.80</u>	<u>13.86</u>	
3. <u>5</u>	<u>21.6</u>	<u>1411</u>	<u>6.74</u>	<u>58.44</u>	
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 returning later or next day. VLY - Minimal recharge - unable to purge 3 volumes.

CAMERON-COLE
SAMPLING EVENT DATA SHEET

WELL OR LOCATION MW-2

PROJECT <u>AC Transit - Seminary</u>		EVENT <u>4Q2009</u>	SAMPLER <u>DB</u>	DATE <u>11/23/2009</u>
--------------------------------------	--	---------------------	-------------------	------------------------

	Well type <u>MW</u> (MW, EW, PZ, etc.)	ACTION	TIME	PUMP RATE (gpm)	DTW
	Diameter <u>2"</u>	Start Pump / Begin	<u>12:33</u>	<u>1.29</u>	<u>5.57</u>
	<u>0.165</u> gal/ft. casing	Stop	<u>12:40</u>	↓	
		Sampled	<u>12:45</u>		
		Final IWL			

PURGE CALCULATION			
<u>0.165</u> gal/ft. *	<u>17.73</u> ft. =	<u>2.93</u> gals. X 3 =	<u>8.78</u> gals.
	SWL to TD	one volume	purge volume - 3 casings
2" = 0.165 gal/ft.	4" = 0.65 gal/ft.	6" = 1.47 gal/ft.	

Equipment Used / Sampling Method / Description of Event: <u>Centrifugal pump used to purge;</u> <u>disposable bailer used to sample.</u>	Actual gallons purged <u>9</u> Actual volumes purged <u>3.07</u> Well Yield ⊕ <u>MY</u> COC # _____
--	--

Additional Comments:	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:20%;">Sample I.D.</th> <th style="width:30%;">Analysis</th> <th style="width:50%;">Lab</th> </tr> </thead> <tbody> <tr> <td><u>MW-2</u></td> <td><u>BTEX, MTBE, TPH</u> <u>by 8260B</u></td> <td><u>Accutest</u></td> </tr> <tr> <td style="text-align: center;">↓</td> <td><u>TPH-d/ms by 8015M</u></td> <td style="text-align: center;">↓</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sample I.D.	Analysis	Lab	<u>MW-2</u>	<u>BTEX, MTBE, TPH</u> <u>by 8260B</u>	<u>Accutest</u>	↓	<u>TPH-d/ms by 8015M</u>	↓									
Sample I.D.	Analysis	Lab																	
<u>MW-2</u>	<u>BTEX, MTBE, TPH</u> <u>by 8260B</u>	<u>Accutest</u>																	
↓	<u>TPH-d/ms by 8015M</u>	↓																	

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other
<u>3</u>	<u>21.6</u>	<u>2440</u>	<u>6.46</u>	<u>64.64</u>	
<u>6</u>	<u>21.5</u>	<u>2540</u>	<u>6.48</u>	<u>87.38</u>	
<u>8</u>	<u>21.5</u>	<u>2560</u>	<u>6.50</u>	<u>55.74</u>	

*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 returning later or next day. VLY - Minimal recharge - unable to purge 3 volumes.

CAMERON-COLE
SAMPLING EVENT DATA SHEET

WELL OR LOCATION MW-3

PROJECT <u>AC Transit - Seminary</u>		EVENT <u>4Q2009</u>	SAMPLER <u>DB</u>	DATE <u>11/23/2009</u>
--------------------------------------	--	---------------------	-------------------	------------------------

	Well type <u>MW</u> (MW, EW, PZ, etc.)	ACTION	TIME	PUMP RATE (gpm)	DTW
	Diameter <u>2"</u>	Start Pump / Begin	<u>11:49</u>	<u>0.7</u>	<u>2.88</u>
	<u>0.165</u> gal/ft. casing	Stop	<u>11:59</u>	↓	
		Sampled	<u>12:08</u>		
		Final IWL			

PURGE CALCULATION			
<u>0.165</u> gal/ft. *	<u>14.12</u> ft. =	<u>2.33</u> gals. X 3 =	<u>6.99</u> gals.
	SWL to TD	one volume	purge volume - 3 casings
2" = 0.165 gal/ft.	4" = 0.65 gal/ft.	6" = 1.47 gal/ft.	

Equipment Used / Sampling Method / Description of Event:	Actual gallons purged <u>7</u> Actual volumes purged <u>3.00</u> Well Yield ⊕ <u>MY</u> COC # _____
--	--

Additional Comments:	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:20%;">Sample I.D.</th> <th style="width:40%;">Analysis</th> <th style="width:40%;">Lab</th> </tr> </thead> <tbody> <tr> <td><u>MW-3</u></td> <td><u>BTEX, MTBE, TPH-3 by 82608</u></td> <td><u>Accutest</u></td> </tr> <tr> <td>↓</td> <td><u>TPH - d/mo by 20157A</u></td> <td>↓</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sample I.D.	Analysis	Lab	<u>MW-3</u>	<u>BTEX, MTBE, TPH-3 by 82608</u>	<u>Accutest</u>	↓	<u>TPH - d/mo by 20157A</u>	↓									
Sample I.D.	Analysis	Lab																	
<u>MW-3</u>	<u>BTEX, MTBE, TPH-3 by 82608</u>	<u>Accutest</u>																	
↓	<u>TPH - d/mo by 20157A</u>	↓																	

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other
<u>2</u>	<u>23.0</u>	<u>1281</u>	<u>6.82</u>	<u>204.3</u>	
<u>4</u>	<u>23.3</u>	<u>668</u>	<u>6.80</u>	<u>34.95</u>	
<u>6</u>	<u>23.5</u>	<u>435</u>	<u>6.84</u>	<u>39.64</u>	

*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 returning 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 4Q2009 SAMPLER DB DATE 11/23/2009

	Well type <u>MW</u> (MW, EW, PZ, etc.)	ACTION	TIME	PUMP RATE (gpm)	DTW
	Diameter <u>2"</u>	Start Pump / Begin	<u>14:20</u>	<u>0.6</u>	<u>2.40</u>
	<u>0.165</u> gal/ft. casing				
	SWL <u>2.40</u> (if above screen)	Stop	<u>14:28</u>	↓	
	SWL _____ (if in screen)	Sampled	<u>14:30</u>		
	Measured TD <u>13.44</u>	Final IWL			<u>10.24</u>

PURGE CALCULATION

0.165 gal/ft. * 11.04 ft. = 1.82 gals. X 3 = 5.46 gals.
SWL to TD one volume purge volume - 3 casings

2" = 0.165 gal/ft. 4" = 0.65 gal/ft. 6" = 1.47 gal/ft.

Equipment Used / Sampling Method / Description of Event:
*Centrifugal pump used to purge;
 disposable bailer used to sample.*

Actual gallons purged	<u>6</u>
Actual volumes purged	<u>3.13</u>
Well Yield ⊕	<u>VLY</u>
COC # _____	

Additional Comments:

Sample I.D.	Analysis	Lab
<u>MW-11</u>	<u>BTEX, MTBE, TPH-g by 8260B</u>	<u>Accutest</u>
↓	<u>TPH-d/mo by 8015M</u>	↓

Gallons Purged *	Temp °C	EC (us / cm)	pH	Turbidity (NTU)	Other
<u>2</u>	<u>23.6</u>	<u>1325</u>	<u>7.06</u>	<u>6.36</u>	
<u>4</u>	<u>24.9</u>	<u>1407</u>	<u>7.03</u>	<u>10.84</u>	
<u>5</u>	<u>25.4</u>	<u>1391</u>	<u>7.10</u>	<u>10.81</u>	
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 returning later or next day. VLY - Minimal recharge - unable to purge 3 volumes.