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GROUNDWATER MONITORING REPORT FOR THE AC TRANSIT FACILITY LOCATED AT 1177 47th STREET, EMERYVILLE, CALIFORNIA

October 2002

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Project No: 2016-1

CAMERON-COLE, LLC

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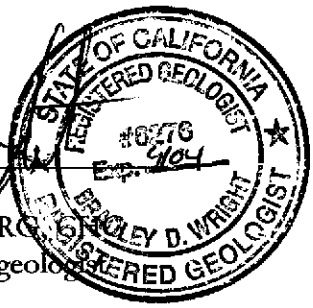

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Table of Contents

List of Figures

List of Tables

INTRODUCTION

This report presents the results from the September 2002 sampling event for the AC Transit Facility located at 1177 47th Street, Emeryville, California (Site). Groundwater sampling of monitor wells MW-1, MW-2, MW-3, MW-6, MW-7, MW-9, MW-10, MW-11, MW-12, MW-13, and W-1 was conducted in accordance with directives from Alameda County Health Care Services (ACHCS). In a letter dated August 7, 2001, ACHCS requested quarterly groundwater sampling for monitor wells MW-11, MW-12 and MW-13 and semi-annual groundwater sampling of other Site monitor wells. AC Transit retained Cameron-Cole to perform this work.

GROUNDWATER MONITORING

Work performed during this sampling event included measuring depth to water in all monitor wells and collecting groundwater samples from monitor wells MW-1, MW-2, MW-3, MW-6, MW-7, MW-9, MW-10, MW-11, MW-12 and W-1. Groundwater samples were analyzed for total extractable petroleum hydrocarbons (TEPH) using Environmental Protection Agency (EPA) Method 8015 Modified and benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) by EPA Method 8021B. A groundwater sample was not collected from MW-13 due to the presence of a free phase hydrocarbon layer.

A site map displaying the monitor well locations is presented as Figure 1. Chain-of-custody documents, field data sheets and certified analytical reports are included in Appendix A.

Groundwater Elevations and Flow Direction

On September 18, 2002 all 16 Site monitor wells were inspected and measured for the presence of free phase hydrocarbons and depth to groundwater. Measurements of depths to groundwater are presented on Table 1 and were used to construct the groundwater elevation contours shown in Figure 2. As shown, groundwater flow is to the west at a gradient of 0.023 feet/foot. A free phase hydrocarbon layer measuring 6.86 feet was detected in MW-13.

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, dissolved oxygen, oxidation-reduction potential, ferrous iron and temperature were monitored using calibrated field meters.

Groundwater samples were collected in 40-milliliter glass vials preserved with hydrochloric acid and one-liter non-preserved amber glass 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 8021B.

Groundwater Analytical Results

Table 2 presents groundwater analytical results for the September 2002 sampling event. TPH was detected in all monitoring wells at concentrations ranging from 180 to 320,000 parts per billion (ppb). Benzene was detected above the State of California maximum contaminant level (MCL) of 1.0 ppb in monitoring wells MW-6 and W-1. Methyl tert-butyl ether (MTBE) was detected above the MCL of 13 ppb in monitoring wells MW-1, MW-2 and MW-10. No analytes were detected in the trip blank or method blank. A lab control spike and lab control spike duplicate passed the EPA's criteria for acceptance.

SUMMARY OF RESULTS

- Groundwater flow is to the west at a gradient of 0.023 feet/foot.

- TPH as degraded diesel was detected in MW-1, MW-2, MW-3, MW-6, MW-7, MW-9, MW-10, MW-11, MW-12 and W-1 at 230, 180, 340, 320,000, 440, 480, 850, 250, 1,600 and 1,000 ppb, respectively.

- TPH as degraded gasoline was detected in MW-6, MW-7, MW-10, MW-12 and W-1, at 2,000, 870, 240, 570 and 5,900 ppb, respectively.

- Benzene above the MCL of 1.0 ppb was detected in monitoring wells MW-6 and W-1 at 74 and 11 pbb, respectively.

- MTBE above the MCL of 13 ppb was detected in monitoring wells MW-1, MW-2 and MW-10 at 30, 17 and 20 ppb, respectively.

PROJECTED WORK AND RECOMMENDATIONS

- Quarterly groundwater monitoring of monitoring wells MW-11, MW-12 and MW-13 is scheduled for October 2002. This event will include site-wide depth to groundwater level measurements, including inspection of each monitor well for free-phase hydrocarbon.

- Monthly free phase product removal from well MW-13 will be initiated in October 2002. This will include pumping or hand bailing of the free phase layer followed by removal of the sheen by a productive selective absorbent sock.

LEGEND

- MANHOLE
- CATCH BASIN
- MONITORING WELL
- ABANDONED MONITORING WELL
- SD — STORM DRAIN PIPELINE
- SS — SANITARY SEWER PIPELINE
- IW — INDUSTRIAL WASTE PIPELINE
- CHAIN LINK FENCE

BY	DATE
DRAWN: WRB	10/25/02
CHECKED	
APPROVED	
APPROVED	
APPROVED	

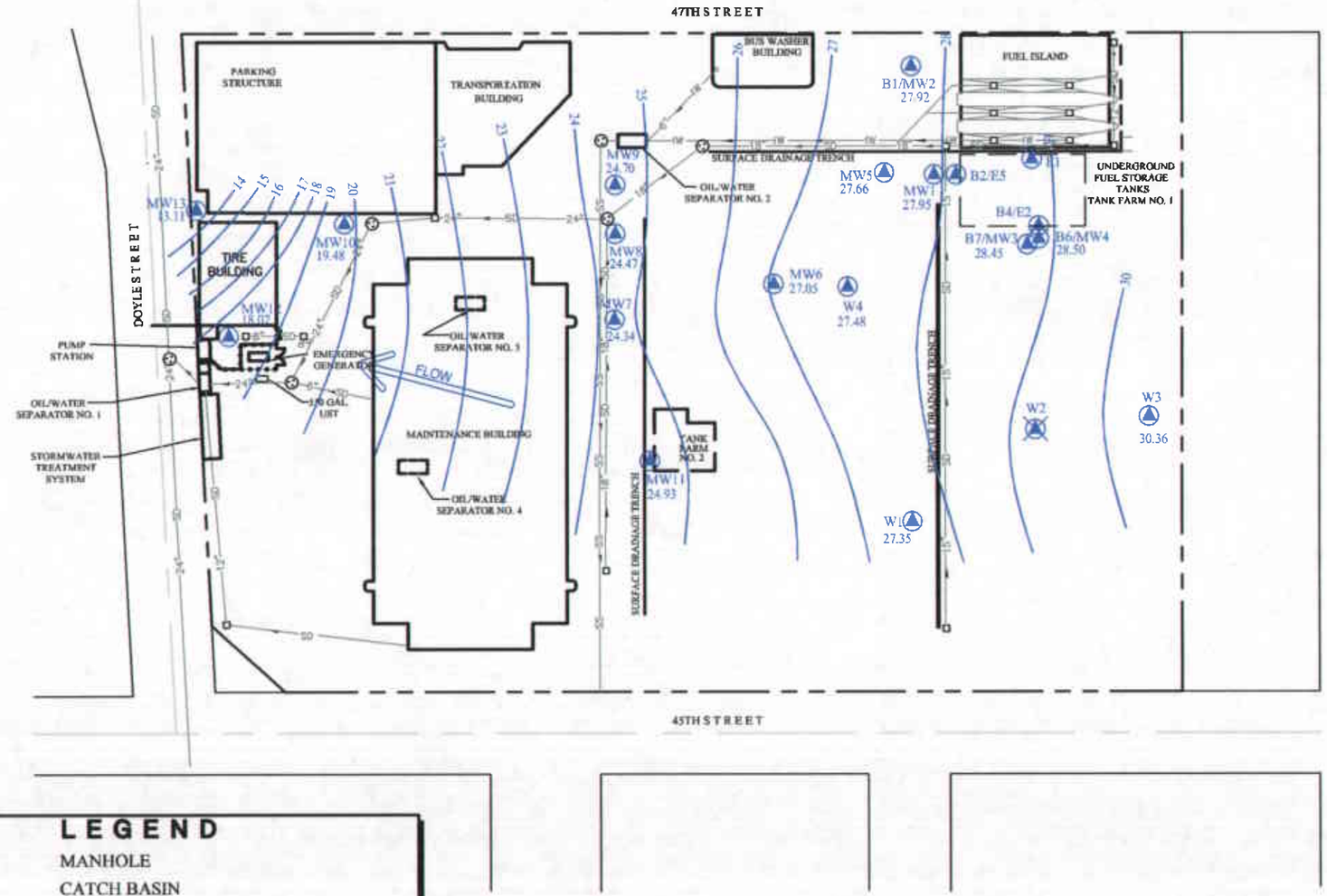
CAMERON-COLE

EMERYVILLE FACILITY - OAKLAND, CALIFORNIA

FIGURE 1
AC TRANSIT - MONITORING WELL LOCATION MAP

SCALE: 1" = 100'

DWG. NO.: 2015-01



LEGEND

- MANHOLE
- CATCH BASIN
- MONITORING WELL
- ABANDONED MONITORING WELL
- 13.11 POTENTIOMETRIC SURFACE ELEVATION
- POTENTIOMETRIC SURFACE CONTOUR
- SD STORM DRAIN PIPELINE
- SS SANITARY SEWER PIPELINE
- IW INDUSTRIAL WASTE PIPELINE
- CHAIN LINK FENCE

BY	DATE
DRAWN WRB	10/25/02
CHECKED	
APPROVED	
APPROVED	
APPROVED	

CAMERON-COLE

FIGURE 2

EMERYVILLE FACILITY - OAKLAND, CALIFORNIA

AC TRANSIT - POTENTIOMETRIC SURFACE MAP
THIRD QUARTER 2002

SCALE: 1" = 100'

DWG. NO.: 2015-06

TABLE 1
GROUNDWATER LEVEL MEASUREMENTS
AC TRANSIT
1177 47TH STREET, EMERYVILLE, CALIFORNIA

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected from Product Thickness* (ft-msl)
MW-1	8/31/1999	32.56	None	3.24	29.32	NA
	11/23/1999		None	4.55	28.01	NA
	3/1/2000		None	3.65	28.91	NA
	5/17/2000		None	4.08	28.48	NA
	8/30/2000		None	5.18	27.38	NA
	12/18/2000		None	4.86	27.7	NA
	3/20/2001		None	4.22	28.34	NA
	6/7/2001		None	4.88	27.68	NA
	9/20/2001		None	4.97	27.59	NA
	12/14/2001		None	3.59	28.97	NA
	2/27/2002		None	4.03	28.53	NA
	5/16/2002		None	4.32	28.24	NA
	9/18/2002		**None**	**4.61**	**27.95**	**NA**
MW-2	8/31/1999	32.12	None	5.24	26.88	NA
	11/23/1999		None	4.03	28.09	NA
	3/1/2000		None	3.11	29.01	NA
	5/17/2000		None	3.66	28.46	NA
	8/30/2000		None	4.65	27.47	NA
	12/18/2000		None	4.06	28.06	NA
	3/20/2001		None	3.91	28.21	NA
	6/7/2001		None	4.40	27.72	NA
	9/20/2001		None	4.45	27.67	NA
	12/14/2001		None	3.19	28.93	NA
	2/27/2002		None	3.45	28.67	NA
	5/16/2002		None	3.74	28.38	NA
	9/18/2002		**None**	**4.20**	**27.92**	**NA**
MW-3	8/31/1999	34.06	None	6.15	27.91	NA
	11/23/1999		None	5.78	28.28	NA
	3/1/2000		None	4.82	29.24	NA
	5/17/2000		None	5.29	28.77	NA
	8/30/2000		None	6.20	27.86	NA
	12/18/2000		None	5.65	28.41	NA
	3/20/2001		None	5.18	28.88	NA
	6/7/2001		None	6.01	28.05	NA
	9/20/2001		None	5.9	28.16	NA
	12/14/2001		None	4.66	29.40	NA
	2/27/2002		None	5.00	29.06	NA
	5/16/2002		None	5.21	28.85	NA
	9/18/2002		**None**	**5.61**	**28.45**	**NA**

TABLE 1
GROUNDWATER LEVEL MEASUREMENTS
AC TRANSIT
1177 47TH STREET, EMERYVILLE, CALIFORNIA

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected from Product Thickness* (ft-msl)
MW-4	8/31/1999	34.11	None	6.22	27.89	NA
	11/23/1999		None	6.01	28.10	NA
	3/1/2000		None	4.74	29.37	NA
	5/17/2000		None	5.33	28.78	NA
	8/30/2000		None	6.26	27.85	NA
	12/18/2000		None	5.66	28.45	NA
	3/20/2001		None	5.46	28.65	NA
	6/7/2001		None	6.02	28.09	NA
	9/20/2001		None	6.06	28.05	NA
	12/14/2001		None	5.39	28.72	NA
	2/27/2002		None	5.28	28.83	NA
	5/16/2002		None	5.39	28.72	NA
	9/18/2002		**None**	**5.61**	**28.5**	**NA**
MW-5	8/31/1999	31.70	None	4.51	27.19	NA
	11/23/1999		None	4.00	27.70	NA
	3/1/2000		None	3.31	28.39	NA
	5/17/2000		None	3.59	28.11	NA
	8/30/2000		None	4.53	27.17	NA
	12/18/2000		None	3.97	27.73	NA
	3/20/2001		None	3.68	28.02	NA
	6/7/2001		None	4.37	27.33	NA
	9/20/2001		None	4.46	27.24	NA
	12/14/2001		None	3.23	28.47	NA
	2/27/2002		None	3.44	28.26	NA
	5/16/2002		None	3.68	28.02	NA
	9/18/2002		**None**	**4.04**	**27.66**	**NA**
MW-6	8/31/1999	31.02	None	4.40	26.62	NA
	11/23/1999		None	3.81	27.21	NA
	3/1/2000		None	2.88	28.14	NA
	5/17/2000		None	3.44	27.58	NA
	8/30/2000		None	4.40	26.62	NA
	12/18/2000		None	3.61	27.41	NA
	3/20/2001		None	3.16	27.86	NA
	6/7/2001		None	4.18	26.84	NA
	9/20/2001		Sheen	4.22	26.80	NA
	12/14/2001		None	3.62	27.40	NA
	2/27/2002		None	2.94	28.08	NA
	5/16/2002		None	3.53	27.49	NA
	9/18/2002		**None**	**3.97**	**27.05**	**NA**

TABLE 1
GROUNDWATER LEVEL MEASUREMENTS
AC TRANSIT
1177 47TH STREET, EMERYVILLE, CALIFORNIA

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected from Product Thickness* (ft-msl)
MW-7	8/31/1999	29.62	None	5.47	24.15	NA
	11/23/1999		None	4.93	24.69	NA
	3/1/2000		None	4.06	25.56	NA
	5/17/2000		None	4.69	24.93	NA
	8/30/2000		None	5.50	24.12	NA
	12/18/2000		None	5.78	23.84	NA
	3/20/2001		None	4.83	24.79	NA
	6/7/2001		None	4.80	24.82	NA
	9/20/2001		None	5.19	24.43	NA
	12/14/2001		None	4.68	24.94	NA
	2/27/2002		None	4.53	25.09	NA
	5/16/2002		None	4.34	25.28	NA
	9/18/2002		**None**	**5.28**	**24.34**	**NA**
MW-8	8/31/1999	29.43	None	5.35	24.08	NA
	11/23/1999		None	4.75	24.68	NA
	3/1/2000		None	4.48	24.95	NA
	5/17/2000		None	4.78	24.65	NA
	8/30/2000		None	5.02	24.41	NA
	12/18/2000		None	5.23	24.20	NA
	3/20/2001		None	4.70	24.73	NA
	6/7/2001		None	5.13	24.30	NA
	9/20/2001		None	5.68	23.75	NA
	12/14/2001		None	4.26	25.17	NA
	2/27/2002		None	4.18	25.25	NA
	5/16/2002		None	4.58	24.85	NA
	9/18/2002		**None**	**4.96**	**24.47**	**NA**
MW-9	8/31/1999	29.18	None	4.15	25.03	NA
	11/23/1999		None	3.93	25.25	NA
	3/1/2000		None	3.69	25.49	NA
	5/17/2000		None	3.56	25.62	NA
	8/30/2000		None	4.64	24.54	NA
	12/18/2000		None	4.02	25.16	NA
	3/20/2001		None	3.92	25.26	NA
	6/7/2001		None	4.28	24.90	NA
	9/20/2001		None	5.12	24.06	NA
	12/14/2001		None	3.87	25.31	NA
	2/27/2002		None	4.48	24.70	NA
	5/16/2002		None	5.13	24.05	NA
	9/18/2002		**None**	**4.48**	**24.70**	**NA**

TABLE 1
GROUNDWATER LEVEL MEASUREMENTS
AC TRANSIT
1177 47TH STREET, EMERYVILLE, CALIFORNIA

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected from Product Thickness* (ft-msl)
MW-10	8/31/1999	29.13	None	9.59	19.54	NA
	11/23/1999		None	9.44	19.69	NA
	3/1/2000		None	9.06	20.07	NA
	5/17/2000		None	9.31	19.82	NA
	8/30/2000		None	9.68	19.45	NA
	12/18/2000		None	9.41	19.72	NA
	3/20/2001		None	9.23	19.90	NA
	6/7/2001		None	9.60	19.53	NA
	9/20/2001		None	9.70	19.43	NA
	12/14/2001		None	8.83	20.30	NA
	2/27/2002		None	9.15	19.98	NA
	5/16/2002		None	9.45	19.68	NA
	9/18/2002		**None**	**9.65**	**19.48**	**NA**
MW-11	9/20/2001	28.93	None	4.41	24.52	NA
	12/14/2001		None	1.82	27.11	NA
	2/27/2002		None	2.39	26.54	NA
	5/16/2002		None	2.98	25.95	NA
	9/18/2002		**None**	**4.00**	**24.93**	**NA**
MW-12	9/20/2001	28.68	None	10.41	18.27	NA
	12/14/2001		None	9.62	19.06	NA
	2/27/2002		None	10.09	18.59	NA
	5/16/2002		None	10.04	18.64	NA
	9/18/2002		**None**	**10.66**	**18.02**	**NA**
MW-13	9/20/2001	22.715	None	8.83	13.89	NA
	12/14/2001		None	7.95	14.77	NA
	2/27/2002		None	7.64	15.08	NA
	5/16/2002		None	8.43	14.29	NA
	9/18/2002		**6.86**	**15.09**	**7.63**	**13.11**
W-1	3/2/2000	33.43	None	4.08	29.35	NA
	5/17/2000		None	5.41	28.02	NA
	8/30/2000		None	6.71	26.72	NA
	12/18/2000		None	5.73	27.70	NA
	3/20/2001		None	5.16	28.27	NA
	6/7/2001		None	6.10	27.33	NA
	9/20/2001		None	6.58	26.85	NA
	12/14/2001		None	4.69	28.74	NA
	2/27/2002		None	4.94	28.49	NA
	5/16/2002		None	5.54	27.89	NA
	9/18/2002		**None**	**6.08**	**27.35**	**NA**

TABLE 1
GROUNDWATER LEVEL MEASUREMENTS
AC TRANSIT
1177 47TH STREET, EMERYVILLE, CALIFORNIA

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected from Product Thickness* (ft-msl)
W-2	5/17/2000	34.21	None	5.60	28.61	NA
	8/30/2000		None	7.37	26.84	NA
	12/18/2000		None	6.44	27.77	NA
	1/23/2001					abandoned
W-3	5/17/2000	37.46	None	6.38	31.08	NA
	8/30/2000		None	8.16	29.30	NA
	12/18/2000		None	7.19	30.27	NA
	3/20/2001		None	5.70	31.76	NA
	6/7/2001		None	7.51	29.95	NA
	9/20/2001		None	7.83	29.63	NA
	12/14/2001		None	4.76	32.70	NA
	2/27/2002		None	5.32	32.14	NA
	5/16/2002		None	6.45	31.01	NA
	9/18/2002		**None**	**7.10**	**30.36**	**NA**
W-4	3/2/2000	31.72	None	3.34	28.38	NA
	5/17/2000		None	3.86	27.86	NA
	8/30/2000		None	4.99	26.73	NA
	12/18/2000		None	4.20	27.52	NA
	3/20/2001		None	3.75	27.97	NA
	6/7/2001		None	4.67	27.05	NA
	9/20/2001		None	4.80	26.92	NA
	12/14/2001		None	3.22	28.50	NA
	2/27/2002		None	3.58	28.14	NA
	5/16/2002		None	3.89	27.83	NA
	9/18/2002		**None**	**4.24**	**27.48**	**NA**

Notes:

* used 0.8 specific gravity of product

ft-msl:feet mean sea level

DTW: Depth to water

NA: not applicable

TABLE 2
ANALYTICAL RESULTS GROUNDWATER SAMPLES
AC TRANSIT
1177 47TH STREET, EMERYVILLE, CALIFORNIA

Well	Date	TPH-8015 (diesel)	TPH-8015 (gas)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MCL (ppb)		None	None	1.0	150	700	1750	13
MW-1	8/31/1999	310	NA	<1.0	2.4	1	1.6	NA
	11/23/1999	250	NA	<1.0	<1.0	<1.0	<1.0	NA
	3/1/2000	310	62	<1.0	<1.0	<1.0	<2.0	687
	5/17/2000	390	63	<1.0	<1.0	<1.0	<2.0	74
	8/31/2000	180	<50	<1.0	<1.0	<1.0	<2.0	49
	12/18/2000	310	<50	<1.0	<1.0	<1.0	<2.0	44
	3/21/2001	240	<50	<1.0	<1.0	<1.0	<2.0	17
	6/7/2001	540	<50	<1.0	<1.0	<1.0	<2.0	32
	9/20/2001	290	<50	<1.0	<1.0	<1.0	<2.0	29
	2/27/2002	<250	<50	<1.0	<1.0	<1.0	<2.0	14
	9/18/2002	230	<50	<1.0	<1.0	<1.0	<2.0	30
MW-2	8/31/1999	180	NA	<1.0	<1.0	<1.0	1.2	NA
	11/23/1999	120	NA	<1.0	<1.0	<1.0	<5.0	NA
	3/1/2000	510	<50	<1.0	<1.0	<1.0	<2.0	81
	5/17/2000	1,100	<50	<1.0	<1.0	<1.0	<2.0	87
	8/31/2000	620	<50	<1.0	<1.0	<1.0	<2.0	65
	12/19/2000	830	<50	<1.0	<1.0	<1.0	<2.0	70
	3/21/2001	900	<50	<2.0	<2.0	<2.0	<4.0	33
	6/7/2001	810	<50	<1.0	<1.0	<1.0	<2.0	43
	9/20/2001	1,200	<50	<1.0	<1.0	<1.0	<2.0	35
	2/27/2002	<250	<50	<1.0	<1.0	<1.0	<2.0	19
	9/18/2002	180	<50	<1.0	<1.0	<1.0	<2.0	17
MW-3	8/31/1999	2,700	NA	<1.0	<1.0	<1.0	<1.0	NA
	11/23/1999	640	NA	<1.0	<1.0	<1.0	<1.0	NA
	3/1/2000	<250	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	5/17/2000	620	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	8/31/2000	1,800	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	12/18/2000	NA	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	3/21/2001	1,700	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	6/7/2001	770	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	9/21/2001	260	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	2/27/2002	560	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	9/18/2002	340	<50	<1.0	<1.0	<1.0	<2.0	<5.0
MW-4	8/31/1999	<50	NA	<1.0	<1.0	<1.0	1.6	NA
	11/23/1999	<50	NA	<1.0	<1.0	<1.0	<1.0	NA
	3/1/2000	<250	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	5/17/2000	80	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	8/31/2000	<250	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	12/18/2000	<250	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	3/20/2001	<250	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	6/7/2001	<250	<50	<1.0	<1.0	<1.0	<2.0	<5.0
MW-5	8/31/1999	250	NA	<1.0	<1.0	<1.0	1	NA
	11/23/1999	300	NA	<1.0	<1.0	<1.0	<5.0	NA
	3/1/2000	340	<50	<1.0	<1.0	<1.0	<2.0	100
	5/17/2000	230	<50	<1.0	<1.0	<1.0	<2.0	86
	8/31/2000	220	<50	<1.0	<1.0	<1.0	<2.0	59
	12/18/2000	360	<50	<1.0	<1.0	<1.0	<2.0	57
	3/20/2001	250	<50	<5.0	<5.0	<5.0	<10	87
	6/7/2001	600	<50	<1.0	<1.0	<1.0	<2.0	74
MW-6	8/31/1999	140,000	NA	77	18	31	49	NA
	11/23/1999	6,100	NA	45	14	6.9	48	NA
	3/1/2000	22,000	2800	6.8	<2.0	<2.0	<10	<5.0
	5/17/2000	1,800	6200	77	16	39	37	<5.0
	8/31/2000	76,000	5300	60	13	43	45.7	<5.0
	12/19/2000	6,300	1300	26.0	4.9	8.4	11.5	<5.0
	3/21/2001	5,100	1900	49.0	9.5	13	12	<10
	6/7/2001	14,000	2600	47.0	10	13	19	<10
	9/21/2001	15,000	4000	180	14	24	40	<50
	2/27/2002	43,000	5000	68	16	52	41.8	<25
	9/18/2002	320,000	2000	74	7.3	22	25	<5.0

TABLE 2
ANALYTICAL RESULTS GROUNDWATER SAMPLES
AC TRANSIT
1177 47TH STREET, EMERYVILLE, CALIFORNIA

Well	Date	TPH-8015 (diesel)	TPH-8015 (gas)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MCL (ppb)		None	None	1.0	150	700	1750	13
MW-7	8/31/1999	1,400	NA	<1.0	2.9	2.3	2.7	NA
	11/23/1999	530	NA	<1.0	<1.0	<1.0	<1.0	NA
	3/1/2000	640	860	<1.0	<1.0	<1.0	<2.0	<20
	5/17/2000	430	410	<1.0	<1.0	<1.0	<2.0	9.5
	8/31/2000	950	1100	<1.0	<1.0	<1.0	<2.0	<5.0
	12/18/2000	1,100	820	<1.0	<1.0	<1.0	<2.0	<5.0
	3/20/2001	770	1000	<1.0	1.4	<1.0	<2.0	<5.0
	6/7/2001	1,400	870	<1.0	<1.0	<1.0	<2.0	<5.0
	9/21/2001	940	1000	<1.0	<1.0	<2.0	<5.0	<5.0
	2/27/2002	430	930	<1.0	<1.0	<1.0	<2.0	<5.0
	9/18/2002	440	870	<1.0	<1.0	<1.0	<2.0	<5.0
MW-8	8/31/1999	230	NA	<1.0	<1.0	1.2	<1.0	NA
	11/23/1999	220	NA	<1.0	<1.0	<1.0	<1.0	NA
	3/1/2000	260	150	<1.0	<1.0	<1.0	<2.0	<5.0
	5/17/2000	660	310	<1.0	<1.0	<1.0	<2.0	<5.0
	8/31/2000	460	300	<1.0	<1.0	<1.0	1.4	<5.0
	12/18/2000	370	230	<1.0	<1.0	<1.0	<2.0	<5.0
	3/20/2001	1,700	64	<1.0	<1.0	<1.0	<2.0	<5.0
	6/7/2001	1,300	180	<1.0	<1.0	<1.0	<2.0	<5.0
MW-9	8/31/1999	2,800	NA	<1.0	<1.0	<1.0	1.1	NA
	11/23/1999	1,300	NA	<1.0	<1.0	<1.0	<1.0	NA
	3/1/2000	510	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	5/17/2000	990	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	8/31/2000	1,100	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	12/18/2000	1,900	<50	<1.0	<1.0	<1.0	<2.0	5.9
	3/20/2001	1,500	<50	<1.0	<1.0	<1.0	<2.0	5.5
	6/7/2001	590	<50	<1.0	<1.0	<1.0	<2.0	8.1
	9/20/2001	790	<50	<1.0	<1.0	<1.0	<2.0	8.5
	2/27/2002	650	<50	<1.0	<1.0	<1.0	<2.0	9.5
	9/18/2002	480	<50	<1.0	<1.0	<1.0	<2.0	6.2
MW-10	8/31/1999	1,100	NA	<1.0	1.2	2.0	<1.0	NA
	11/23/1999	1,200	NA	<1.0	<1.0	<1.0	<1.0	NA
	3/1/2000	1,300	540	<1.0	<1.0	<1.0	<2.0	NA
	5/17/2000	990	460	<1.0	<1.0	<1.0	<2.0	6.9
	8/31/2000	840	320	<1.0	<1.0	<1.0	<2.0	25
	12/18/2000	900	290	<1.0	<1.0	<1.0	<2.0	<9.0
	3/21/2001	620	220	<1.0	<1.0	<1.0	<2.0	<5.0
	6/7/2001	1,300	360	<1.0	<1.0	<1.0	<2.0	15
	9/20/2001	1,000	350	<1.0	<1.0	<1.0	<2.0	44
	2/27/2002	610	150	<1.0	<1.0	<1.0	<2.0	<5.0
	9/18/2002	850	240	<1.0	1.2	<1.0	<2.0	20
MW-11	9/20/2001	460	88	<1.0	<1.0	<1.0	<2.0	<5.0
	12/14/2002	320	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	2/27/2002	<50	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	5/16/2002	380	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	9/18/2002	250	<50	<1.0	<1.0	<1.0	<2.0	<5.0
MW-12	9/20/2001	540	960	<1.0	<1.0	<2.0	<5.0	11
	12/14/2002	170	670	<1.0	<1.0	<1.0	<2.0	9.4
	2/27/2002	350	950	<1.0	<1.0	<1.0	<2.0	11
	5/16/2002	500	1100	<1.0	<1.0	<1.0	<2.0	6.7
	9/18/2002	1,600	570	<1.0	<1.0	<1.0	<3.0	7.1

TABLE 2
ANALYTICAL RESULTS GROUNDWATER SAMPLES
AC TRANSIT
1177 47TH STREET, EMERYVILLE, CALIFORNIA

Well	Date	TPH-8015 (diesel)	TPH-8015 (gas)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MCL (ppb)		None	None	1.0	150	700	1750	13
MW-13	9/21/2001	<250	<50	<1.0	<1.0	<1.0	<2.0	7.4
	12/14/2002	160	<50	<1.0	<1.0	<1.0	<2.0	11
	2/27/2002	1,100	450	<1.0	<5.0	<1.0	<2.0	9.9
	5/16/2002	520	150	<1.0	<1.0	<1.0	<2.0	8.7
W-1	3/2/2000	1,800	3400	20.0	5.3	30	23.8	<5.0
	5/17/2000	1,100	7300	35.0	11	59	45	<1.0
	8/31/2000	2,200	6200	20.0	7.9	36	38.2	<10
	12/19/2000	1,700	5600	20.0	8.4	30	35.6	<5.0
	3/20/2001	2,100	7200	32.0	13	56	40	<10
	6/7/2001	2,100	7300	26.0	18	42	38.3	<10
	9/21/2001	1,800	7100	27	<10	48	40	<10
	2/27/2002	1,800	7100	24	9	52	34	<25
	9/18/2002	1,000	5900	11	<22	23	22	<5.0
W-2	5/17/2000	19,000	870	<2.0	<1.0	<2.0	<4.0	<5.0
	8/31/2000	7,400	2200	4.6	2.5	3.8	11	<5.0
	12/19/2000	10,000	290	8.8	3.4	8.6	17.4	<5.0
W-3	5/17/2000	<50	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	8/31/2000	<50	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	12/18/2000	<250	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	3/20/2001	630	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	6/7/2001	1,200	<50	<1.0	<1.0	<1.0	<2.0	<5.0
W-4	3/2/2000	190	<50	1.1	<1.0	<1.0	<2.0	<5.0
	5/17/2000	230	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	8/31/2000	240	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	12/19/2000	320	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	3/21/2001	220	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	6/7/2001	430	<50	<1.0	<1.0	<1.0	<2.0	<5.0

Notes:
ppb: parts per billion
TPH: Total Petroleum Hydrocarbons
MTBE: methyl tert butylether
MCL: Maximum Contaminant Level
NA: not analyzed

APPENDIX A

CHAIN-OF-CUSTODY DOCUMENTATION
FIELD DATA SHEETS
CERTIFIED ANALYTICAL REPORTS

SEVERN TRENT SERVICES

STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500

Tel: 916 373 5600
Fax: 916 371 8420
www.stl-inc.com

October 22, 2002

STL SACRAMENTO PROJECT NUMBER: G2I180337

Brad Wright
Cameron-Cole LLC
101 West Atlantic Avenue
Building #90
Alameda, CA 94501

Dear Mr. Wright,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on September 18, 2002. These samples are associated with your AC Transit Emeryville project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4414.

Sincerely,

Bonnie McNeill

Bonnie J. McNeill
Project Manager

TABLE OF CONTENTS

STL SACRAMENTO PROJECT NUMBER G2I180337

CASE NARRATIVE

STL SACRAMENTO PROJECT NUMBER G2I180337

General Comments

Samples 1 through 6 were received at 2°C, and samples 7 through 11 were received at 9°C. The requests for sulfate and nitrate were cancelled and the request for TEPH was changed to diesel only per Emily Waters of your office.

WATER, 8015M, TPH Gas
Samples: 2, 5, 6, 7

High surrogate recoveries are attributed to co-eluting peaks seen in the unknown hydrocarbon.

WATER, 8021B, BTEX + MTBE
Samples: 3, 8

High surrogate recoveries are attributed to co-eluting peaks seen in the unknown hydrocarbon.

WATER, 8015 MOD, Diesel
Samples: 7

Due to the required sample dilution the surrogate was diluted out and the recovery could not be calculated.

There were no other anomalies associated with this project.

STL Sacramento

Quality Control Definitions

QC Parameter	Definition
QC Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Duplicate Control Sample (DCS)	Consist of a pair of LCSs analyzed within the same QC batch to monitor precision and accuracy independent of sample matrix effects. This QC is performed only if required by client or when insufficient sample is available to perform MS/MSD.
Duplicate Sample (DU)	A second aliquot of an environmental sample, taken from the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative of the precision for other samples in the batch.
Laboratory Control Sample (LCS)	A volume of reagent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. An LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MSs/MSDs are carried through the entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank (MB)	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate Spike	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.

Source: STL Sacramento Laboratory Quality Manual

STL Sacramento Certifications:
Alaska (UST-055), Arizona (#AZ00616), Arkansas, California (NELAP # 01119CA) (ELAP #I-2439), Connecticut (#PH-0691), Florida (E87570), Hawaii, Louisiana (AI # 30612), New Jersey (Lab ID 44005), Nevada (#CA 044), New York (LAB ID 11666 serial # 107407), Oregon (LAB ID CA 044), South Carolina (LAB ID 87014, Cert. # 870140), Utah (E-168), Virginia (#00178), Washington (# C087), West Virginia (# 9930C), Wisconsin (Lab 998204680), USNAVY, USACE, USDA Foreign Plant (Permit # 37-82605), USDA Foreign Soil (Permit # S-46613)..

Sample Summary
G2I180337

WO#	Sample #	Client Sample ID	Sampling Date	Received Date
E8GJP	1	TRIP BLANK	9/18/02 09:45 AM	9/18/02 06:30 PM
E8GJR	2	MW-6	9/18/02 01:15 PM	9/18/02 06:30 PM
E8GJT	3	MW-10	9/18/02 02:05 PM	9/18/02 06:30 PM
E8GJV	4	MW-9	9/18/02 12:25 PM	9/18/02 06:30 PM
E8GJW	5	MW-12	9/18/02 10:50 AM	9/18/02 06:30 PM
E8GJX	6	MW-7	9/18/02 12:00 PM	9/18/02 06:30 PM
E8GJ0	7	W-1	9/18/02 01:20 PM	9/18/02 06:30 PM
E8GJ1	8	MW-2	9/18/02 11:35 AM	9/18/02 06:30 PM
E8GJ3	9	MW-11	9/18/02 02:00 PM	9/18/02 06:30 PM
E8GJ4	10	MW-3	9/18/02 10:30 AM	9/18/02 06:30 PM
E8GJ5	11	MW-1	9/18/02 12:30 PM	9/18/02 06:30 PM

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight

G21180337

[redacted]

Chain of Custody Record

STL-4124 (1200)

SEVERN TRENT SERVICES — **Severn Trent Laboratories, Inc.**

Client	Cameron Cole
Address	101 W. Atlantic Ave Bdg 90
City	Alameda
State	CA
Zip Code	94501
Project Name and Location (State)	AC Transit Emeryville
Contract/Purchase Order/Quote No.	
Project Manager	Brad Wright
Telephone Number (Area Code)/Fax Number	(510) 769-3563
Site Contact	
Lab Contact	B. McNeil
Carrier/Waybill Number	
Date	9/18/02
Lab Number	
Chain of Custody Number	084758
Page ___ of ___	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8021	TPH-Gas	Diesel/Motor Oil	Nitrate/Sulfate	Special Instructions/ Conditions of Receipt
* Trip Blank	9/18/02	0945		X						X			X				Good
MW-6	↓	1315		↓						X			X				↓
↓		↓								X				X			
							X								X		
							X									X	
MW-10		1405								X			X				
↓	↓	↓		↓						X				X			
							X								X		
							X									X	9-18-02

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify): Standard

	Date	Time		Date	Time
1. Relinquished By: [signature]	9/18/02	1630	1. Received By: [signature]	9-18-02	1630
2. Relinquished By: [signature]	9-18-02	1830	2. Received By: [signature]	9-18-02	1830
3. Relinquished By			3. Received By		

Comments: * one vial with larger than 6mm bubble [initials]

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

STL - Sacramento (916) 373 - 5600

G2118O337

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Cameron Cole	Project Manager: Brad Wright	Date: 9/18/02	Chain of Custody Number: 084760
Address: 101 W. Atlantic Ave Bldg 90	Telephone Number (Area Code)/Fax Number: (510) 769-3563	Lab Number:	Page ____ of ____
City: Alameda / State: CA / Zip Code: 94501	Site Contact:	Lab Contact: B. McNeil	
Project Name and Location (State): AC Transit Emeryville	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8021	BTEX + Gas	Diesel/Motor Oil	Nitrate/Sulfate	Special Instructions/ Conditions of Receipt
MW-9	9/18/02	1225	X							X			X	X	X	X	Joe2
										X							
							X										
							X										
MW-12		1050								X			X				
										X				X			
							X								X		
							X										
MW-7		1200								X			X				
										X				X			
							X								X		
							X									X	

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other ____

QC Requirements (Specify): Standard

	Date	Time		Date	Time
1. Relinquished By	9/18/02	1630	1. Received By		
2. Relinquished By	9-18-02	1830	2. Received By		
3. Relinquished By			3. Received By		

	Date	Time
	9-18-02	1630
	9-18-02	1830

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

STL - Sacramento (916) 373 - 5600

G21180337

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Cameron Cole	Project Manager: Brad Wright	Date: 9/18/02	Chain of Custody Number: 084759
Address: 101 W. Atlantic Ave Bldg 90	Telephone Number (Area Code)/Fax Number: (510) 769-3563	Lab Number	Page ____ of ____
City: Alameda / State: CA / Zip Code: 94501	Site Contact	Lab Contact: B. McNeil	
Project Name and Location (State): AC Transit Emeryville	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8021	TPH-Gas	Diesel/Hydraulic Oil	Sludge/Influent	Special Instructions/ Conditions of Receipt
MW-1	9/18/02	1320		X						X			X				good
										X				X			
							X								X		
							X									X	
MW-2		1135								X			X				
										X				X			
							X								X		
							X									X	
MW-11		1400								X			X				
										X				X			
							X								X		
							X									X	

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other ____

QC Requirements (Specify): Standard

		Date	Time
1. Relinquished By		9/18/02	1630
2. Relinquished By		9-18-02	1815
3. Relinquished By			
1. Received By		9-18-02	1630
2. Received By		9-18-02	1830
3. Received By			

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

STL - Sacramento (916) 373 - 5600

G21180337

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Cameron Cole	Project Manager: Brad Wright	Date: 9/18/02	Chain of Custody Number: 084763
Address: 101 W. Atlantic Ave Bldg 90	Telephone Number (Area Code)/Fax Number: (510) 769-3563	Lab Number	Page ____ of ____
City: Alameda / State: CA / Zip Code: 94501	Site Contact	Lab Contact: B. McNeil	
Project Name and Location (State): AC Transit Emeryville	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8021	TPH-Gas	Diesel/Motor Oil	Silica Gel Cleanup	Special Instructions/ Conditions of Receipt
MW-3	9/18/02	1030		X						X			X	X	X	X	good
							X			X							
MW-1		1230					X			X			X	X	X	X	
							X			X							
							X						X	X	X	X	

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other ____

QC Requirements (Specify): Standard

	Date	Time		Date	Time
1. Relinquished By	9/18/02	1630	1. Received By		
2. Relinquished By	9-18-02	1815	2. Received By		
3. Relinquished By			3. Received By	9-18-02	1830

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

WATER, 8015M, TPH Gas

CAMERON-COLE LLC

Client Sample ID: MW-6

GC Volatiles

Lot-Sample #...: G2I180337-002	Work Order #...: E8GJR1AE	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/24/02	Analysis Date..: 09/24/02	
Prep Batch #...: 2280557	Analysis Time..: 21:06	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	2000	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	216 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: MW-10

GC Volatiles

Lot-Sample #...: G2I180337-003	Work Order #...: E8GJT1AE	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/24/02	Analysis Date..: 09/24/02	
Prep Batch #...: 2280557	Analysis Time..: 21:47	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	240	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	124	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-9

GC Volatiles

Lot-Sample #...: G2I180337-004	Work Order #...: E8GJV1AE	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/24/02	Analysis Date..: 09/24/02	
Prep Batch #...: 2280557	Analysis Time..: 22:29	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	111	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-12

GC Volatiles

Lot-Sample #...: G2I180337-005	Work Order #...: E8GJW1AE	Matrix.....: WATER	
Date Sampled...: 09/18/02	Date Received..: 09/18/02		
Prep Date.....: 09/24/02	Analysis Date..: 09/24/02		
Prep Batch #...: 2280557	Analysis Time..: 23:11		
Dilution Factor: 1			
	Method.....: DHS CA LUFT		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	570	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	179 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: MW-7

GC Volatiles

Lot-Sample #...: G2I180337-006	Work Order #...: E8GJX1AE	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/24/02	Analysis Date..: 09/24/02	
Prep Batch #...: 2280557	Analysis Time..: 23:52	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	870	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	190 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: W-1

GC Volatiles

Lot-Sample #...: G2I180337-007	Work Order #...: E8GJ01AE	Matrix.....: WATER	
Date Sampled...: 09/18/02	Date Received..: 09/18/02		
Prep Date.....: 09/25/02	Analysis Date..: 09/25/02		
Prep Batch #...: 2280558			
Dilution Factor: 5	Method.....: DHS CA LUFT		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	250	ug/L
Unknown Hydrocarbon	5900	250	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	146 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: MW-2

GC Volatiles

Lot-Sample #...: G2I180337-008 Work Order #...: E8GJ11AE Matrix.....: WATER
Date Sampled...: 09/18/02 Date Received..: 09/18/02
Prep Date.....: 09/24/02 Analysis Date..: 09/25/02
Prep Batch #...: 2280557 Analysis Time..: 01:16
Dilution Factor: 1

Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-11

GC Volatiles

Lot-Sample #...: G2I180337-009 Work Order #...: E8GJ31AE Matrix.....: WATER
Date Sampled...: 09/18/02 Date Received..: 09/18/02
Prep Date.....: 09/24/02 Analysis Date..: 09/25/02
Prep Batch #...: 2280557 Analysis Time..: 01:58
Dilution Factor: 1

Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	108	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-3

GC Volatiles

Lot-Sample #...: G2I180337-010	Work Order #...: E8GJ41AE	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/24/02	Analysis Date..: 09/25/02	
Prep Batch #...: 2280557	Analysis Time..: 02:39	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	105	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-1

GC Volatiles

Lot-Sample #...: G2I180337-011	Work Order #...: E8GJ51AE	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/24/02	Analysis Date..: 09/25/02	
Prep Batch #...: 2280557	Analysis Time..: 03:21	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	112	(70 - 130)

QC DATA ASSOCIATION SUMMARY

G2I180337

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	DHS CA LUFT		2280486	
002	WATER	SW846 8015 MOD		2268153	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
003	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
004	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
005	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
006	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
007	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280558	
	WATER	DHS CA LUFT		2280529	
008	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
009	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
010	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
011	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9JEN1AA Matrix.....: WATER
MB Lot-Sample #: G2J070000-557

Prep Date.....: 09/24/02 Analysis Time..: 12:03
Analysis Date..: 09/24/02 Prep Batch #...: 2280557
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Gasoline)	ND	50	ug/L	DHS CA LUFT
Unknown Hydrocarbon	ND	50	ug/L	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	103	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9JEN1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2J070000-557 E9JEN1AD-LCSD
Prep Date.....: 09/24/02 Analysis Date..: 09/24/02
Prep Batch #...: 2280557 Analysis Time..: 12:45
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	**1000**	**861**	**ug/L**	**86**		**DHS CA LUFT**
	1000	**878**	**ug/L**	**88**	**1.9**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	113	(70 - 130)
	116	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G2I180337 **Work Order #...:** E9JE41AA **Matrix.....:** WATER
MB Lot-Sample #: G2J070000-558

Prep Date.....: 09/25/02 **Analysis Time..:** 13:17
Analysis Date..: 09/25/02 **Prep Batch #...:** 2280558
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Gasoline)	ND	50	ug/L	DHS CA LUFT
Unknown Hydrocarbon	ND	50	ug/L	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	103	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9JE41AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2J070000-558 E9JE41AD-LCSD
Prep Date.....: 09/25/02 Analysis Date..: 09/25/02
Prep Batch #...: 2280558 Analysis Time..: 13:59
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	1000	922	ug/L	92		DHS CA LUFT
	1000	981	ug/L	98	6.3	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	110	(70 - 130)
	114	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9JEN1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2J070000-557 E9JEN1AD-LCSD
Prep Date.....: 09/24/02 Analysis Date..: 09/24/02
Prep Batch #...: 2280557 Analysis Time..: 12:45
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	86	(70 - 130)			DHS CA LUFT
	88	(70 - 130)	1.9	(0-35)	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	113	(70 - 130)
	116	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

WATER, 8021B
BTEX + MTBE

CAMERON-COLE LLC

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: G2I180337-001 Work Order #...: E8GJP1AA Matrix.....: WATER
Date Sampled...: 09/18/02 Date Received..: 09/18/02
Prep Date.....: 09/19/02 Analysis Date..: 09/19/02
Prep Batch #...: 2280486 Analysis Time..: 15:30
Dilution Factor: 1
Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	93	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-6

GC Volatiles

Lot-Sample #...: G2I180337-002	Work Order #...: E8GJR1AF	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/19/02	Analysis Date..: 09/19/02	
Prep Batch #...: 2280486	Analysis Time..: 16:19	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	74	1.0	ug/L
Ethylbenzene	22	1.0	ug/L
Toluene	7.3	1.0	ug/L
m-Xylene & p-Xylene	25	2.0	ug/L
o-Xylene	ND G	8.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(70 - 130)

NOTE(S):

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CAMERON-COLE LLC

Client Sample ID: MW-10

GC Volatiles

Lot-Sample #...: G2I180337-003	Work Order #...: E8GJT1AF	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/19/02	Analysis Date..: 09/19/02	
Prep Batch #...: 2280486	Analysis Time..: 17:08	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	1.2	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	20	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	184 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: MW-9

GC Volatiles

Lot-Sample #...: G2I180337-004	Work Order #...: E8GJV1AF	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/19/02	Analysis Date..: 09/19/02	
Prep Batch #...: 2280486	Analysis Time..: 17:56	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	**6.2**	**5.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	120	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-12

GC Volatiles

Lot-Sample #...: G2I180337-005	Work Order #...: E8GJW1AF	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/19/02	Analysis Date..: 09/19/02	
Prep Batch #...: 2280486	Analysis Time..: 18:45	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND G	3.0	ug/L
Methyl tert-butyl ether	7.1	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	111	(70 - 130)

NOTE(S):

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CAMERON-COLE LLC

Client Sample ID: MW-7

GC Volatiles

Lot-Sample #...: G2I180337-006 Work Order #...: E8GJX1AF Matrix.....: WATER
Date Sampled...: 09/18/02 Date Received..: 09/18/02
Prep Date.....: 09/20/02 Analysis Date..: 09/20/02
Prep Batch #...: 2280529 Analysis Time..: 16:50
Dilution Factor: 1

Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	79	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: W-1

GC Volatiles

Lot-Sample #...: G2I180337-007	Work Order #...: E8GJ01AF	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/20/02	Analysis Date..: 09/20/02	
Prep Batch #...: 2280529	Analysis Time..: 17:39	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	11	1.0	ug/L
Ethylbenzene	23	1.0	ug/L
Toluene	ND G	22	ug/L
m-Xylene & p-Xylene	22	2.0	ug/L
o-Xylene	ND G	6.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	122	(70 - 130)

NOTE(S):

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CAMERON-COLE LLC

Client Sample ID: MW-2

GC Volatiles

Lot-Sample #...: G2I180337-008	Work Order #...: E8GJ11AF	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/20/02	Analysis Date..: 09/20/02	
Prep Batch #...: 2280529	Analysis Time..: 18:28	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	17	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	148 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: MW-11

GC Volatiles

Lot-Sample #...: G2I180337-009	**Work Order #...:** E8GJ31AF		**Matrix.....:** WATER
Date Sampled...: 09/18/02	**Date Received..:** 09/18/02		
Prep Date.....: 09/20/02	**Analysis Date..:** 09/20/02		
Prep Batch #...: 2280529	**Analysis Time..:** 19:17		
Dilution Factor: 1			
	Method.....: DHS CA LUFT		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	95	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-3

GC Volatiles

Lot-Sample #...: G2I180337-010 Work Order #...: E8GJ41AF Matrix.....: WATER
Date Sampled...: 09/18/02 Date Received..: 09/18/02
Prep Date.....: 09/20/02 Analysis Date..: 09/20/02
Prep Batch #...: 2280529 Analysis Time..: 20:05
Dilution Factor: 1

Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	95	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-1

GC Volatiles

Lot-Sample #...: G2I180337-011	Work Order #...: E8GJ51AF	Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02	
Prep Date.....: 09/20/02	Analysis Date..: 09/20/02	
Prep Batch #...: 2280529	Analysis Time..: 20:54	
Dilution Factor: 1		
	Method.....: DHS CA LUFT	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	30	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	82	(70 - 130)

QC DATA ASSOCIATION SUMMARY

G2I180337

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	DHS CA LUFT		2280486	
002	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
003	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
004	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
005	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
006	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
007	WATER	DHS CA LUFT		2280558	
	WATER	DHS CA LUFT		2280529	
008	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
009	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
010	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
011	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9H9N1AA Matrix.....: WATER
MB Lot-Sample #: G2J070000-486

Prep Date.....: 09/19/02 Analysis Time..: 10:41
Analysis Date..: 09/19/02 Prep Batch #...: 2280486
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	DHS CA LUFT
Ethylbenzene	ND	1.0	ug/L	DHS CA LUFT
Toluene	ND	1.0	ug/L	DHS CA LUFT
m-Xylene & p-Xylene	ND	2.0	ug/L	DHS CA LUFT
o-Xylene	ND	1.0	ug/L	DHS CA LUFT
Methyl tert-butyl ether	ND	5.0	ug/L	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	94	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9JA01AA Matrix.....: WATER
MB Lot-Sample #: G2J070000-529

Prep Date.....: 09/20/02 Analysis Time..: 13:22
Analysis Date..: 09/20/02 Prep Batch #...: 2280529
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	DHS CA LUFT
Ethylbenzene	ND	1.0	ug/L	DHS CA LUFT
Toluene	ND	1.0	ug/L	DHS CA LUFT
m-Xylene & p-Xylene	ND	2.0	ug/L	DHS CA LUFT
o-Xylene	ND	1.0	ug/L	DHS CA LUFT
Methyl tert-butyl ether	ND	5.0	ug/L	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	92	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9H9N1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2J070000-486 E9H9N1AD-LCSD
Prep Date.....: 09/19/02 Analysis Date..: 09/19/02
Prep Batch #...: 2280486 Analysis Time..: 11:30
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Benzene	**10.0**	**9.30**	**ug/L**	**93**		**DHS CA LUFT**
	10.0	**8.54**	**ug/L**	**85**	**8.5**	**DHS CA LUFT**
Ethylbenzene	**10.0**	**9.19**	**ug/L**	**92**		**DHS CA LUFT**
	10.0	**8.44**	**ug/L**	**84**	**8.5**	**DHS CA LUFT**
Toluene	**10.0**	**9.33**	**ug/L**	**93**		**DHS CA LUFT**
	10.0	**8.54**	**ug/L**	**85**	**8.8**	**DHS CA LUFT**
m-Xylene & p-Xylene	**20.0**	**18.0**	**ug/L**	**90**		**DHS CA LUFT**
	20.0	**16.6**	**ug/L**	**83**	**8.1**	**DHS CA LUFT**
o-Xylene	**10.0**	**9.03**	**ug/L**	**90**		**DHS CA LUFT**
	10.0	**8.32**	**ug/L**	**83**	**8.1**	**DHS CA LUFT**
Methyl tert-butyl ether	**10.0**	**8.89**	**ug/L**	**89**		**DHS CA LUFT**
	10.0	**7.42**	**ug/L**	**74**	**18**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	94	(70 - 130)
	89	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9H9N1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2J070000-486 E9H9N1AD-LCSD
Prep Date.....: 09/19/02 Analysis Date..: 09/19/02
Prep Batch #...: 2280486 Analysis Time..: 11:30
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**93**	**(70 - 130)**			**DHS CA LUFT**
	85	**(70 - 130)**	**8.5**	**(0-35)**	**DHS CA LUFT**
Ethylbenzene	**92**	**(70 - 130)**			**DHS CA LUFT**
	84	**(70 - 130)**	**8.5**	**(0-35)**	**DHS CA LUFT**
Toluene	**93**	**(70 - 130)**			**DHS CA LUFT**
	85	**(70 - 130)**	**8.8**	**(0-35)**	**DHS CA LUFT**
m-Xylene & p-Xylene	**90**	**(70 - 130)**			**DHS CA LUFT**
	83	**(70 - 130)**	**8.1**	**(0-35)**	**DHS CA LUFT**
o-Xylene	**90**	**(70 - 130)**			**DHS CA LUFT**
	83	**(70 - 130)**	**8.1**	**(0-35)**	**DHS CA LUFT**
Methyl tert-butyl ether	**89**	**(70 - 130)**			**DHS CA LUFT**
	74	**(70 - 130)**	**18**	**(0-35)**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	94	(70 - 130)
	89	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: G2I180337 Work Order #...: E9JA01AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2J070000-529 E9JA01AD-LCSD
Prep Date.....: 09/20/02 Analysis Date..: 09/20/02
Prep Batch #...: 2280529 Analysis Time..: 14:10
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Benzene	10.0	9.05	ug/L	91		DHS CA LUFT
	10.0	9.03	ug/L	90	0.20	DHS CA LUFT
Ethylbenzene	10.0	8.96	ug/L	90		DHS CA LUFT
	10.0	8.97	ug/L	90	0.12	DHS CA LUFT
Toluene	10.0	9.05	ug/L	90		DHS CA LUFT
	10.0	9.06	ug/L	91	0.11	DHS CA LUFT
m-Xylene & p-Xylene	20.0	17.6	ug/L	88		DHS CA LUFT
	20.0	17.6	ug/L	88	0.43	DHS CA LUFT
o-Xylene	10.0	8.85	ug/L	88		DHS CA LUFT
	10.0	8.90	ug/L	89	0.63	DHS CA LUFT
Methyl tert-butyl ether	10.0	8.94	ug/L	89		DHS CA LUFT
	10.0	8.85	ug/L	89	1.0	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	94	(70 - 130)
	92	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: G2I180337 **Work Order #...:** E9JA01AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G2J070000-529 E9JA01AD-LCSD
Prep Date.....: 09/20/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2280529 **Analysis Time..:** 14:10
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**91**	**(70 - 130)**			**DHS CA LUFT**
	90	**(70 - 130)**	**0.20**	**(0-35)**	**DHS CA LUFT**
Ethylbenzene	**90**	**(70 - 130)**			**DHS CA LUFT**
	90	**(70 - 130)**	**0.12**	**(0-35)**	**DHS CA LUFT**
Toluene	**90**	**(70 - 130)**			**DHS CA LUFT**
	91	**(70 - 130)**	**0.11**	**(0-35)**	**DHS CA LUFT**
m-Xylene & p-Xylene	**88**	**(70 - 130)**			**DHS CA LUFT**
	88	**(70 - 130)**	**0.43**	**(0-35)**	**DHS CA LUFT**
o-Xylene	**88**	**(70 - 130)**			**DHS CA LUFT**
	89	**(70 - 130)**	**0.63**	**(0-35)**	**DHS CA LUFT**
Methyl tert-butyl ether	**89**	**(70 - 130)**			**DHS CA LUFT**
	89	**(70 - 130)**	**1.0**	**(0-35)**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	94	(70 - 130)
	92	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

WATER, 8015 MOD, Diesel

CAMERON-COLE LLC

Client Sample ID: MW-10

GC Semivolatiles

Lot-Sample #...:	G2I180337-003	Work Order #...:	E8GJT1AD	Matrix.....:	WATER
Date Sampled...:	09/18/02	Date Received..:	09/18/02		
Prep Date.....:	09/18/02	Analysis Date..:	10/03/02		
Prep Batch #...:	2261342				
Dilution Factor:	1	Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	850	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	105	(57 - 147)

NOTE(S):

Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-C24 only.

CAMERON-COLE LLC

Client Sample ID: MW-9

GC Semivolatiles

Lot-Sample #...: G2I180337-004	Work Order #...: E8GJV1AD		Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02		
Prep Date.....: 09/18/02	Analysis Date..: 10/03/02		
Prep Batch #...: 2261342			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	480	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	100	(57 - 147)

NOTE(S):

Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-C24 only.

CAMERON-COLE LLC

Client Sample ID: MW-12

GC Semivolatiles

Lot-Sample #...: G2I180337-005 Work Order #...: E8GJW1AD Matrix.....: WATER
Date Sampled...: 09/18/02 Date Received..: 09/18/02
Prep Date.....: 09/18/02 Analysis Date..: 10/03/02
Prep Batch #...: 2261342
Dilution Factor: 1 Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	1600	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	101	(57 - 147)

NOTE(S):

Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-C24 only.

CAMERON-COLE LLC

Client Sample ID: MW-7

GC Semivolatiles

Lot-Sample #...:	G2I180337-006	Work Order #...:	E8GJX1AD	Matrix.....:	WATER
Date Sampled...:	09/18/02	Date Received..:	09/18/02		
Prep Date.....:	09/18/02	Analysis Date..:	10/03/02		
Prep Batch #...:	2261342				
Dilution Factor:	1	Method.....:	SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	440	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	84	(57 - 147)

NOTE(S):

Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-C24 only.

CAMERON-COLE LLC

Client Sample ID: W-1

GC Semivolatiles

Lot-Sample #...: G2I180337-007	Work Order #...: E8GJ01AD		Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02		
Prep Date.....: 09/18/02	Analysis Date..: 10/03/02		
Prep Batch #...: 2261342			
Dilution Factor: 20	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	1000	ug/L
Unknown Hydrocarbon	1000	1000	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	ND	(57 - 147)

NOTE(S):

Surrogate diluted out due to 20X dilution.

Unknown hydrocarbon in the range of n-C10 to n-c24. Quantitation based on diesel between n-C10 to n-c24 only.

CAMERON-COLE LLC

Client Sample ID: MW-2

GC Semivolatiles

Lot-Sample #...:	G2I180337-008	Work Order #...:	E8GJ11AD	Matrix.....: WATER
Date Sampled...:	09/18/02	Date Received..:	09/18/02	
Prep Date.....:	09/18/02	Analysis Date..:	10/03/02	
Prep Batch #...:	2261342			
Dilution Factor:	1	Method.....:	SW846 8015 MOD	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	180	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	84	(57 - 147)

NOTE(S):

Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-C24 only.

CAMERON-COLE LLC

Client Sample ID: MW-11

GC Semivolatiles

Lot-Sample #...: G2I180337-009	**Work Order #...:** E8GJ31AD		**Matrix.....:** WATER
Date Sampled...: 09/18/02	**Date Received..:** 09/18/02		
Prep Date.....: 09/18/02	**Analysis Date..:** 10/03/02		
Prep Batch #...: 2261342			
Dilution Factor: 1	**Method.....:** SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	250	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	87	(57 - 147)

NOTE(S):

Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-C24 only.

CAMERON-COLE LLC

Client Sample ID: MW-3

GC Semivolatiles

Lot-Sample #...: G2I180337-010	**Work Order #...:** E8GJ41AD		**Matrix.....:** WATER
Date Sampled...: 09/18/02	**Date Received..:** 09/18/02		
Prep Date.....: 09/18/02	**Analysis Date..:** 10/03/02		
Prep Batch #...: 2261342			
Dilution Factor: 1	**Method.....:** SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	340	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	92	(57 - 147)

NOTE(S):

Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-C24 only.

CAMERON-COLE LLC

Client Sample ID: MW-1

GC Semivolatiles

Lot-Sample #...: G2I180337-011	Work Order #...: E8GJ51AD		Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02		
Prep Date.....: 09/18/02	Analysis Date..: 10/03/02		
Prep Batch #...: 2261342			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	230	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	94	(57 - 147)

NOTE(S):

Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-c24 only.

QC DATA ASSOCIATION SUMMARY

G2I180337

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	DHS CA LUFT		2280486	
002	WATER	SW846 8015 MOD		2268153	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
003	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
004	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
005	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
006	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
007	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280558	
	WATER	DHS CA LUFT		2280529	
008	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
009	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
010	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
011	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: G2I180337 Work Order #...: E8PAW1AA Matrix.....: WATER
MB Lot-Sample #: G2I180000-342

Prep Date.....: 09/18/02
Analysis Date..: 10/02/02 Prep Batch #...: 2261342
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	50	ug/L	SW846 8015 MOD
Unknown Hydrocarbon	ND	50	ug/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	94	(57 - 147)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: G2I180337 Work Order #...: E8FAW1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2I180000-342 E8FAW1AD-LCSD
Prep Date.....: 09/18/02 Analysis Date..: 10/02/02
Prep Batch #...: 2261342
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Diesel)	**1500**	**1280**	**ug/L**	**85**		**SW846 8015 MOD**
	1500	**1300**	**ug/L**	**86**	**1.4**	**SW846 8015 MOD**
TPH (as Motor Oil)	**NA**		**ug/L**	**0**		**SW846 8015 MOD**
	NA		**ug/L**			**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	97	(57 - 147)
	98	(57 - 147)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: G2I180337 **Work Order #...:** E8FAW1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G2I180000-342 E8FAW1AD-LCSD
Prep Date.....: 09/18/02 **Analysis Date..:** 10/02/02
Prep Batch #...: 2261342
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**85**	**(39 - 125)**			**SW846 8015 MOD**
	86	**(39 - 125)**	**1.4**	**(0-44)**	**SW846 8015 MOD**
TPH (as Motor Oil)	**0**	**(50 - 150)**			**SW846 8015 MOD**
		(50 - 150)		**(0-30)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	97	(57 - 147)
	98	(57 - 147)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

CAMERON-COLE LLC

Client Sample ID: MW-6

GC Semivolatiles

Lot-Sample #...: G2I180337-002	Work Order #...: E8GJR1AD		Matrix.....: WATER
Date Sampled...: 09/18/02	Date Received..: 09/18/02		
Prep Date.....: 09/25/02	Analysis Date..: 10/02/02		
Prep Batch #...: 2268153			
Dilution Factor: 200	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	RREPORTING LIMIT	UNITS
TPH (as Diesel)	ND	10000	ug/L
Unknown Hydrocarbon	320000	10000	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	ND	(57 - 147)

NOTE(S):

Surrogate was diluted out due to a 200x dilution on the sample. Unknown hydrocarbon in the range of n-C10 to n-C24. Quantitation based on diesel between n-C10 to n-C24 only.

QC DATA ASSOCIATION SUMMARY

G2I180337

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	DHS CA LUFT		2280486	
002	WATER	SW846 8015 MOD		2268153	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
003	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
004	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
005	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280486	
006	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
007	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280558	
	WATER	DHS CA LUFT		2280529	
008	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
009	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
010	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	
011	WATER	SW846 8015 MOD		2261342	
	WATER	DHS CA LUFT		2280557	
	WATER	DHS CA LUFT		2280529	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: G2I180337 Work Order #...: E8R271AA Matrix.....: WATER
MB Lot-Sample #: G2I250000-153

Prep Date.....: 09/25/02
Analysis Date..: 10/01/02 Prep Batch #...: 2268153
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Diesel)	ND	50	ug/L	SW846 8015 MOD
Unknown Hydrocarbon	ND	50	ug/L	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	95	(57 - 147)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: G2I180337 Work Order #...: E8R271AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2I250000-153 E8R271AD-LCSD
Prep Date.....: 09/25/02 Analysis Date..: 10/01/02
Prep Batch #...: 2268153
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Diesel)	300	300	ug/L	100		SW846 8015 MOD
	300	321	ug/L	107	6.6	SW846 8015 MOD
TPH (as Motor Oil)	NA		ug/L	0		SW846 8015 MOD
	NA		ug/L			SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	106	(57 - 147)
	103	(57 - 147)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: G2I180337 Work Order #...: E8R271AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2I250000-153 E8R271AD-LCSD
Prep Date.....: 09/25/02 Analysis Date..: 10/01/02
Prep Batch #...: 2268153
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	100	(39 - 125)			SW846 8015 MOD
	107	(39 - 125)	6.6	(0-44)	SW846 8015 MOD
TPH (as Motor Oil)	0	(50 - 150)			SW846 8015 MOD
		(50 - 150)		(0-30)	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	106	(57 - 147)
	103	(57 - 147)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

AC TRANSIT - EMERYVILLE
FIRST QUARTER 2002

FIELD PERSONNEL:

WELL OR LOCATION	DATE	TIME	MEASUREMENT	CODE	COMMENTS
MW-1	9/18/02	0921	4.61	SWL	
MW-2		0917	4.20		
MW-3		0925	5.61		
MW-4		0927	5.61		
MW-5		0919	4.04	↓	
MW-6		—	—	OIL	no oil oil/water interphase DTW = 4.96
MW-6		0906	3.97	OWI	regular sounder
MW-7		0902	5.28	SWL	
MW-8		0856	4.96		
MW-9		0900	4.48		
MW-10		1336	9.65		
MW-11		0903	4.00		
MW-12		0848	10.66	↓	
MW-13		0810	9.22	OIL	used oil/water →
MW-13		0810	16.08	OWI	interphase probe
W-1		0930	6.08	SWL	
W-3		0933	7.10		
W-4	↓	0911	4.24	↓	

SWL - Static Water Level
OIL - Oil Level
OWI - Oil/Water Interface
MTD - Measured Total Depth

Project Name: AC Transit Emery
Project Number: 2015
Well ID: MW-1
Casing Diameter (in): 2"
Sample Date: 9/18/02
Total Well Depth (ft): 14.50
Sample ID: MW-1
Depth to Water (ft) before purging: 4.51

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1210	7.15	691	30.3		1.5	0.4
1214	7.11	715	30.9		3.0	↓
1218	7.19	707	30.5	5.81	4.5	↓
			tot	Vol = 5.5		

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
(14.50 – 4.51) = (9.99 × 0.165) = (1.65 × 3) = 4.94
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

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

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

Parameter Collected: 8260 ~~Sulfate/Nitrate~~ (2) 8015 DRO/GRO

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

cent pump used to purge
disposable bailer used to sample

Decontamination Performed:
washed/rinsed
sounder/meters

Fe = >3.30
DO = 6.48 mg/L
ORP = -0.99

Comments / Calculations:
Start: 1206
Stop: 1221
Sample: 1230

Name: Mike Mastro Date: 9-18-02

Project Name: AC Transit Emery
Project Number: 2015
Well ID: MW-2
Casing Diameter (in): 2"
Sample Date: 9/18/02
Total Well Depth (ft): 14.56
Sample ID: MW-2
Depth to Water (ft) before purging: 4.08

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1132	7.22	735	25.9	4.52	1.5	0.5
1136	7.18	718	26.2	5.33	3.0	↓
1139	7.16	726	26.4	5.67	4.5	↓
				Tot Vol:	5.5	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
(14.56 - 4.08) (10.48 x 0.165) (1.73 x 3) = 5.18
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

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

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

Parameter Collected: 8260 ~~Sulfate/Nitrate~~ (a) 8015 DRO/GRO

Sample Appearance
_____ OVA Reading (ppm)
_____ Suspended Solids (describe): cent pump used to purge disposable Bailer used to sample

Decontamination Performed:
washed/rinsed sounder/meters

Fe = >3.30
DO = 4.23 mg/L
ORP = -111

Comments / Calculations:
Start: 1130
Stop: 1132
Sample: 1135

Name: Mike Marotto Date: 9.18.02

Project Name: AC Transit Emery
Casing Diameter (in): 2"
Total Well Depth (ft): 14.68
Depth to Water (ft) before purging: 5.61

Project Number: 2015
Sample Date: 9/18/02
Sample ID: MW-3

Well ID: MW-3

Development Method:

NA ______Bailer: ______Teflon ______Stainless Steel ______PVC ______ABS Plastic

______Pump: ______Dedicated Submersible Pump ______Bladder Pump
______Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1022	7.47	914	24.4	5.56	1.5	0.7
1024	7.21	774	25.0	5.73	3	↓
1026	7.15	793	25.2	5.79	4.5	
			Tot vol	= 5.5		

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X = 1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
(14.68-5.61) = 9.07 × .165 = 1.49 × 3 = 4.48

NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

Sample Collection Method:
X Bailer: ______Teflon ______Stainless Steel ______PVC ______ABS Plastic

______Pump: ______Dedicated Submersible Pump ______Bladder Pump
______Non-Dedicated Submersible Pump

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

Parameter Collected: 8260 (3 VOAs) ~~Sulfate/Nitrate~~ (m) (Poly) 8015 DRO/GRO (3 VOAs, TPH-~~Diesel~~ L-2 Ambers)

Sample Appearance
______OVA Reading (ppm)
______Suspended Solids (describe): cent pump used to purge disposable bailer used to sample

Fe = ~~0.00~~ (m) ~~2~~ 3.30
DO = 3.52 mg/L
ORP = -115

Decontamination Performed: washed/rinsed sounder/meters

Comments / Calculations:
Start: 1020
Stop: 1028
Sample: 1030

Name: Mike Marotto

Date: 9.18.02

Well ID: MW-6

Project Name: AC Transit Emery
Project Number: 2015
Casing Diameter (in): 2"
Sample Date: 9/18/02
Total Well Depth (ft): 19.64
Sample ID: MW-6
Depth to Water (ft) before purging: 3.95

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1303	6.98	602	32.8	3.99	2.5	0.67
1306	6.95	676	33.1	4.06	5.0	↓
1309	7.03	724	34.0	4.06	7.5	
				total vol	8.0	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft. X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
19.64 - 3.95 = 15.69 x 0.165 = 2.6 x 3 = 7.8 gal
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

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

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

Parameter Collected: 8260 ~~Sulfate/Nitrate~~ (w) 8015 DRO/GRO

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe):
cent pump used to purge
disposable bailer used to sample

Decontamination Performed:
washed/rinsed
sampler/meters

Fe = 1.40
DO = 6.45
ORP = -70

Comments / Calculations:
Start: 1259
Stop: 1311
Sample: 1315

Name: EMILY WATERS Date: 9/18/02

Project Name: AC Transit Emery
Project Number: 2015
Well ID: MW-7
Casing Diameter (in): 2"
Sample Date: 9/18/02
Total Well Depth (ft): 24.53
Sample ID:
Depth to Water (ft) before purging: 5.29

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1041	7.18	704	23.3		3	0.09
1111	7.11	716	24.6		6	↓
1140	7.08	692	26.4	6.61	9	↓
				total vol =	9.75gal	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
24.53 - 5.29 = 19.24 x 0.165 = 3.17 x 3 = 9.52
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

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

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

Parameter Collected: 8260 ~~Sulfate/Nitrate~~ (4) 8015 DRO/GRO

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

Trip blank collected @ 0945
peri pump used to purge, disposable bailer used to sample
Fe = 1.76
DO = 6.32
ORP = -20 mV

Decontamination Performed:
washed/rinsed sander/meters

Comments / Calculations:
Start: 1001
Stop: 1153
Sample: 1200

Name: EMILY WATERS Date: 9/18/02

Well ID: MW-9

Project Name: AC Transit Emery
Project Number: 2015
Casing Diameter (in): 2"
Sample Date: 9/18/02
Total Well Depth (ft): 20.52
Sample ID:
Depth to Water (ft) before purging: 4.18

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1208	7.20	859	27.2	5.79	2.5	0.53
1212	7.15	852	28.1	6.35	5.0	↓
1216	7.09	863	29.0	6.49	7.5	↓
			total	Vol =	8.5	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
20.52 - 4.18 = 16.34 x 0.165 = 2.7 x 3 = 8.0 gal
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

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

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

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

Parameter Collected: 8260 ~~Sulfate/Nitrate~~ 8015 DRO/GRO

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

cent pump used to purge
disposable bailer used to sample

Decontamination Performed:
washed/rinsed
sounder/meters

Fe = 0.00
DO = 4.61
ORP = 95 mV

Comments / Calculations:
Start: 1204
Stop: 1220
Sample: 1225

Name: EMILY WATERS Date: 9/18/02

Project Name: AC Transit Emery
Project Number: 2015
Well ID: MW-10
Casing Diameter (in): 2"
Sample Date: 9/18/02
Total Well Depth (ft): 24.15
Sample ID: MW-10
Depth to Water (ft) before purging: 9.65

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1345	7.20	596	31.7	10.30	2	0.5
1349	7.17	586	31.8	10.28	4	↓
1353	7.22	628	32.4	10.28	6	↓
			Ttal Vol		8	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
24.15 - 9.65 = 14.50 x 0.165 = 2.39 x 3 = 7.2
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

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

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

Parameter Collected: 8260 ~~Sulfate/Nitrate~~ (2) 8015 DRO/GRO

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe):
ent pump used to purge
disposable bailer used to sample.

Decontamination Performed:
washed/rinsed
sampler/meters

Fe = 1.90
DO = 7.68
ORP = -70

Comments / Calculations:
Start: 1341
Stop: 1357
Sample: 1405

Name: Emily Watts Date: 9/18/02

Project Name: AC Transit Emery
Project Number: 2015
Well ID: MW-11
Casing Diameter (in): 2"
Sample Date: 7/18/02
Total Well Depth (ft): 17.40
Sample ID: MW-11
Depth to Water (ft) before purging: 4.00

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1350	7.69	907	25.7		2	~~0.4~~ 10
1352	7.74	894	25.9		4	↓
1354	7.68	911	26.3	4.06	6	↓
				Tot Vol = 8		

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
(17.4 - 4.00) (13.40 x 0.165) = (2.211 x 3) = 6.63
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

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

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

Parameter Collected: 8260 Sulfate/Nitrate 8015 DRO/GRO

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

cent pump used to purge
disposable bailer used to sample

Decontamination Performed:
washed/rinsed
sounder/meters

Fe => 3.30
DO = 5.40
ORP = -121

Comments / Calculations:
Start: 1348
Stop: 1356
Sample: 1400

Name: Mike Masotto Date: 9.18.02

Project Name: AC Transit Emery
Project Number: 2015
Well ID: MW-12
Casing Diameter (in): 2"
Total Well Depth (ft): 29.87
Depth to Water (ft) before purging: 10.66
Sample Date: 9/18/02
Sample ID: MW-12

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
	7.26					
1030	~~7.28~~	704	26.2	11.74	3	0.5
1037	7.02	762	29.7	11.62	6	↓
1044	6.98	762	29.9	11.70	9	
				Total Vol	10 gal	

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
29.87 - 10.66 = 19.21 x 0.165 = 3.17 x 3 = 9.5
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

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

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

Parameter Collected: 8260 ~~Sulfate/Nitrate~~ 8015 DRO/GRO

Sample Appearance
_____OVA Reading (ppm)
_____Suspended Solids (describe): cent pump used to purge disposable bailer used to sample

Decontamination Performed:
Washed/rinsed sounder/meters

Fe = 1.33
DO = 4.64
ORP = 25 mv

Comments / Calculations:
Start: 1026
Stop: 1046
Sample: 1050

Name: EMILY WATERS Date: 9/18/02

Project Name: AC Transit Emery
Project Number: 2015
Well ID: W-1
Casing Diameter (in): 2"
Sample Date: 9/18/02
Total Well Depth (ft): 16.43
Sample ID: W-1
Depth to Water (ft) before purging: 6.09

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1307	6.87	876	30.3		1.5	0.6
1309	6.81	912	29.9		3.0	↓
1311	6.85	894	30.1	6.44	4.5	↓
			Tot Vol = 5.5			

Water Volume to be Purged (gal):
(Casing Length in Ft – Depth to Water in Ft) (X) (3)
Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells
(16.43 - 6.09) : (0.34 x 0.165) = (1.7 x 3) = 5.12
NOTE: 3 to 5 Well Casing Volumes required prior to sample collection.

At least 3 well casing volumes were removed prior to sampling.

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

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

Parameter Collected: 8260 ~~Sulfate / Nitrate~~ (2) 8015 DRO/GRO

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

Cent pump used to purge
disposable bailer used to sample

Decontamination Performed:
washed/rinsed
sounder/meters

Fe = >3.30
DO = 6.81 mg/L
ORP = -118

Comments / Calculations:
Start: 1304
Stop: 1314
Sample: 1320

Name: Mike Moratto Date: 9.18.02