AC Transit
Alameda-Contra Costa Transit District

10626 East 14th Street, Oakland, California 94603 ☐ (510) 577-8804
FAX ☐ (510) 577-8859

April 17, 2002

Ms. eva chu
Alameda County Health Division
Division of Environmental Protection
Department of Environmental Health
1131 Harbor Bay Parkway, Second Floor
Alameda, CA 94502

APR 19 2002

Dear Ms. chu:

Subject: Quarterly Groundwater Monitoring Report,
AC Transit, 1177 47th Street, Emeryville

AC Transit hereby submits the enclosed quarterly groundwater monitoring report for the AC Transit facility located at 1177 47th Street in Emeryville. The report was prepared by our consultant, Cameron-Cole, LLC, and contains the results of the March 27, 2002, sampling event.

Ground water samples were collected from 11 on-site monitoring wells and analyzed for total extractable petroleum hydrocarbons (TPH) using modified EPA Method 8015 and benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tert-butyl ether (MTBE) using EPA Method 8021B. In response to your January 3, 2002, request, monitoring well MW-11 was also analyzed for volatile organic compounds (VOCs) using EPA Method 8021B and ethylene glycol using EPA Method 8015 Modified. Depth to ground water was measured in all 16 on-site monitoring wells and ground water contour maps were developed for the report.

Analytical results indicate that TPH as degraded diesel was detected in eight wells at concentrations ranging from 0.15 to 43 ppm. TPH as degraded gasoline was detected in six wells at concentrations ranging from 0.15 to 7.1 ppm. Benzene was detected above the California maximum contaminant level of 1 ppb in wells MW-6 (68 ppb) and W-1 (24 ppb). The sample from MW-11 (near the former tank farm) had ethylene glycol at a concentration of 14 ppm and concentrations of VOCs below the laboratory reporting limits.

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

Sincerely,

Suzanne Patton, P.E.
Environmental Engineer

enclosure

Ro-402

APR 19 2002

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

March 29, 2002

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

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

Project No: 2015-1

CAMERON-COLE, LLC

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

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Reviewed By
Brad Wright, RG, CHG
Senior Geologist

STATE OF CALIFORNIA REGISTERED GEOLOGIST #6276 Exp. 9/02 BRADLEY D. WRIGHT CERTIFIED GEOLOGIST

Written By
Brady Hanson
Geologist I

Table of Contents

List of Figures

List of Tables

INTRODUCTION

This report presents the results from the February 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 and collecting groundwater samples from all monitor wells. 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. Additionally, MW-11 was analyzed for volatile organic compounds (VOCs) by the EPA Method 8021B and ethylene glycol by EPA Method 8015 Modified.

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 February 27, 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 on Figure 2, groundwater flow is to the west at a gradient of 0.023 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 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 on February 27, 2002 for analysis by EPA Method 8021B.

Groundwater Analytical Results

Table 2 presents groundwater analytical results for the February 2002 sampling event. TPH was detected in MW-3, MW-6, MW-7, MW-9, MW-10, MW-12, MW-13 and W-1 at concentrations ranging from 150 to 43,000 parts per billion (ppb). MTBE was detected above the California maximum contaminant level (MCL) for drinking water of 13 ppb in wells MW-1 and MW-2 at concentrations of 14 and 19 ppb, respectively. Benzene was detected above the MCL of 1 ppb in wells MW-6 and W-1 at concentrations of 68 and 24 ppb, respectively. Ethylene glycol was detected in MW-11 at 14,000 ppb and concentrations of VOCs were below reporting limits. 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.

Concentrations of TPH and benzene detected in W-1 may have originated from the former Berkley Farms Truck Repair Shop and Yard, which was located upgradient of well W-1 at 4575 San Pablo Avenue. The "Report of Additional Groundwater Investigation" dated October 30, 1998 for the Berkley Farms site shows that TPH and benzene were detected at concentrations of 38,000 and 1,700 ppb, respectively in groundwater immediately east of the AC Transit facility.

4575 San Pablo.
RO · 245

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-3, MW-6, MW-7, MW-9, MW-10, MW-12, MW-13, and W-1 at 560, 43,000, 430, 650, 610, 350, 1,100, and 1,800 ppb, respectively.

- TPH as degraded gasoline was detected in MW-6, MW-7, MW-10, MW-12, MW-13, and W-1 at 5000, 930, 150, 950, 450, and 7100 ppb, respectively.

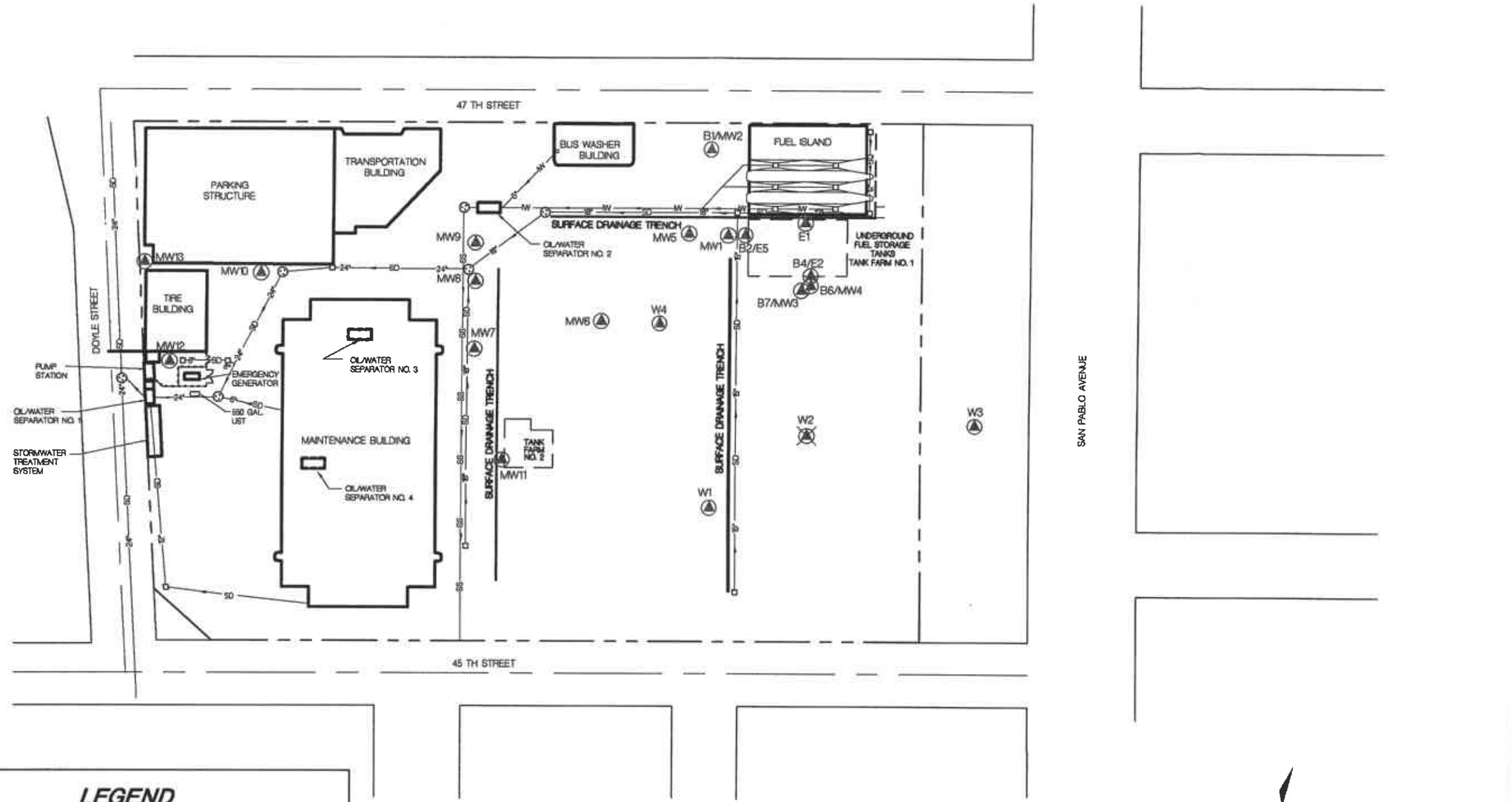
- MTBE above the MCL of 13 ppb was detected in MW-1 and MW-2 at 14 and 19 ppb, respectively. The laboratory reporting limit for MTBE in wells MW-6 and W-1 was 25 ppb.

- Benzene above the MCL of 1 ppb was detected in MW-6 and W-1 at 68 and 24 ppb, respectively.

- Ethylene glycol was detected in MW-11 at 14,000 ppb.

PROJECTED WORK AND RECOMMENDATIONS

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



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	CJJ	10-03-01
CHECKED		
APPROVED		
APPROVED		
APPROVED		

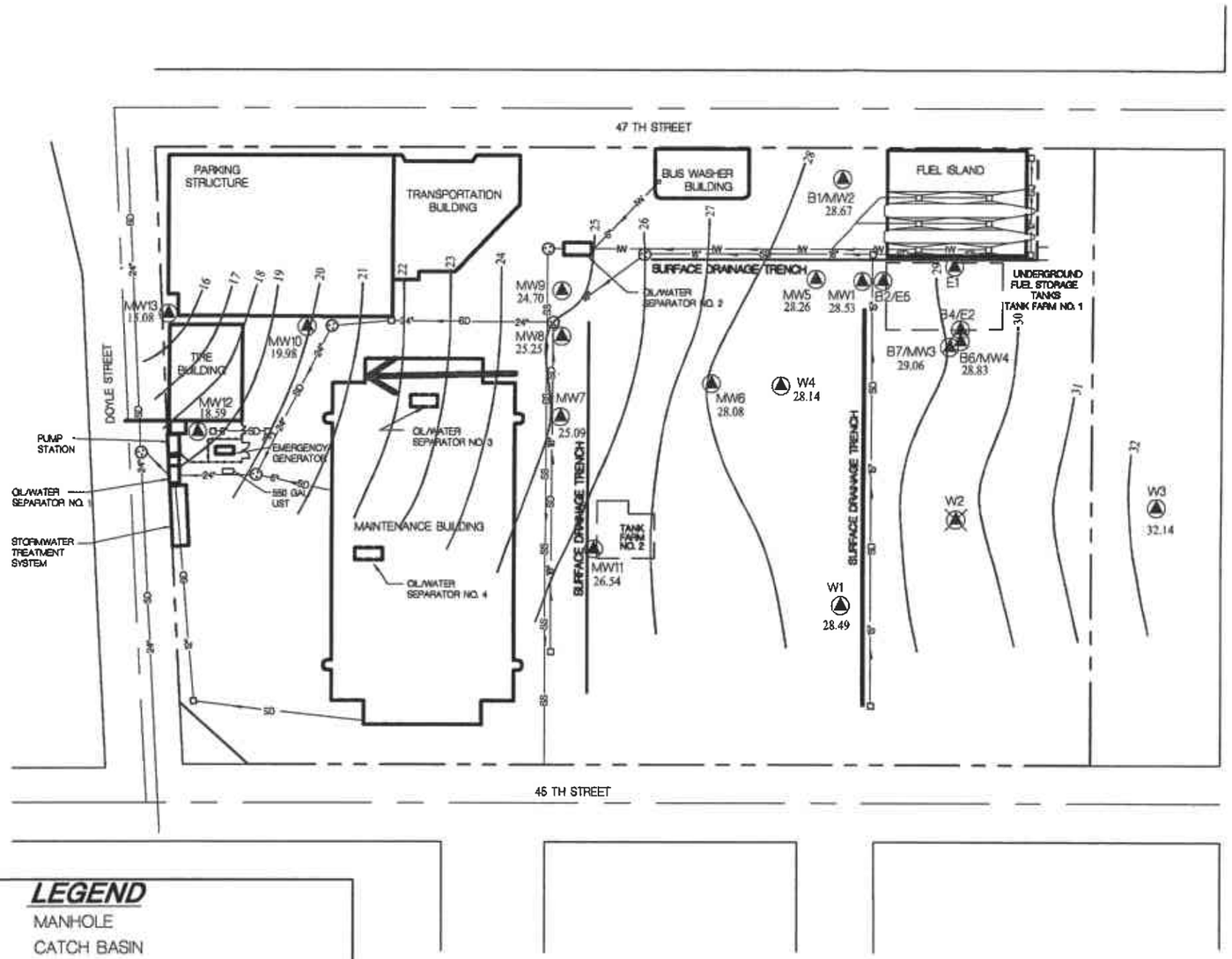
CAMERON-COLE

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
- 28.49 POTENTIOMETRIC SURFACE ELEVATION
- POTENTIOMETRIC SURFACE CONTOUR
- SD STORM DRAIN PIPELINE
- SS SANITARY SEWER PIPELINE
- IW INDUSTRIAL WASTE PIPELINE
- CHAIN LINK FENCE

NOTE: DATA FOR MW-4 WAS NOT USED IN CONTOURING.

North

0 100 FEET

BY	DATE
DRAWN CJJ	3-11-02
CHECKED	
APPROVED	
APPROVED	
APPROVED	

CAMERON-COLE

EMERYVILLE FACILITY - OAKLAND, CALIFORNIA

FIGURE 2
AC TRANSIT - POTENTIOMETRIC SURFACE MAP

SCALE: 1" = 100'

DWG. NO: 2015-04

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
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
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
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
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

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-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**
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**
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**
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**
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**

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-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
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
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
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
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
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

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**
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**
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**
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

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-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**
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**
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**
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**

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-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
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
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
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
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

AC TRANSIT - EMERYVILLE
FIRST QUARTER 2002

FIELD PERSONNEL: EG + EW

WELL OR LOCATION	DATE	TIME	MEASUREMENT	CODE	COMMENTS
MW-1	2/27/02	1004	4.03	SWL	
MW-2		0954	3.45		
MW-3		0949	5.00		
MW-4		0945	5.28		
MW-5		1008	3.44		
MW-6				OIL	no oil present
MW-6		1058	2.94	OWI	
MW-7		1031	4.53	SWL	
MW-8		1035	4.18		
MW-9		1037	4.48		
MW-10		1020	9.15		
MW-11		1041	2.39		
MW-12		1028	10.09		
MW-13		1051	7.64		
W-1		1044	4.94		
W-3		1046	5.32		
W-4		1010	3.58		

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

Project Name: ACT Emeryville
Casing Diameter (in): 2"
Total Well Depth (ft): 14.50
Depth to Water (ft) before purging: 4.03

Project Number: 2015-1
Sample Date: 2/27/02
Sample ID: MW-1

Well ID: MW-1

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)
1330	7.19	820	24.7		1.5	0.4
1334	7.22	741	23.7		3.0	
1338	7.23	730	23.5	5.41	4.5	↓
				Total 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 - 4.03 = 10.47 x .165 = 1.73 x 3 = 5.18
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: TPH gas 8021 8015 _____

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

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations:
start: 1326
stop: 1341
sample: 1350

Name: EMCON WATERS

Date: 2/27/02

Project Name: AE Emeryville
Casing Diameter (in): 2"
Total Well Depth (ft): 14.56
Depth to Water (ft) before purging: 3.45

Project Number: 2015-1
Sample Date: 2/27/07
Sample ID:

Well ID: MW2

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)
1347	7.19	712	23.1		1.5	0.5
1350	7.16	677	23.3		3.0	↓
1353	7.11	659	22.5	6.21	4.5	↓
				total 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 - 3.45 = 11.11 x .165 = 1.83 x 4 = 5.50
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: 8021 8015 TPH gas _____

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

Decontamination Performed:
washed / rinsed sounder / meters

Comments / Calculations:
start: 1344
stop: 1355
sample: 1400

Name: CHAD WATERS

Date: 2/27/07

Project Name:
Casing Diameter (in): 2"
Total Well Depth (ft): 14.68
Depth to Water (ft) before purging: 5.00

Project Number:
Sample Date:
Sample ID:

Well ID: MW-3

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

NA **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)
1435	7.20	764	23.3	5.07	1.5	0.7
1437	7.09	774	22.3	5.14	3	↓
1439	7.04	754	21.5	5.21	4.5	↓
				total 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 - 5.00 = 9.68 x .165 = 1.60 x 3 = 4.79
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: 8021 8015 TPH gas _____

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

Decontamination Performed:
Washed/rinsed sounder/meters

Comments / Calculations:
start: 1433
stop: 1441
sample: 1445

Name: EMILY WATERS Date: 2/27/02

Project Name: AC Emeryville
Project Number: 2015-1
Well ID: MW-6
Casing Diameter (in): 2"
Sample Date: 2/27/02
Total Well Depth (ft): 19.64
Sample ID: MW-6
Depth to Water (ft) before purging: 2.94

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)
1115	6.94	1171	21.2	3.01	2.5	1.1
1117	6.96	1057	21.3	3.16	5.0	↓
1120	6.98	985	21.5	3.33	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
19.64 - 2.94 = 16.70 x 0.165 = 2.75 x 3 = 8.27
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: 8015 8021 TPH gas _____

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

Decontamination Performed:
washed/rinsed sounder/meters

Comments / Calculations:
start: 1113
stop: 1121
sample: 1130

Name: EMILY WATERS Date: 2/27/02

Project Name: AC Emeryville
Casing Diameter (in): 2"
Total Well Depth (ft): 24.53
Depth to Water (ft) before purging: 4.53

Project Number: 2015-1
Sample Date: 2/27/02
Sample ID: MW-7

Well ID: MW-7

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)
1306	6.92	921	21.9		3	0.15
1335	6.91	889	22.1		7	↓
1359	6.89	879	22.2	4.62	11	↓
				total vol =	12	

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 - 4.53 = 24.00 x 0.165 = 3.96 x 3 = 11.88
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:
_____**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: TPH gas 8021 8015 _____

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

peristaltic pump used to purge + sample

Decontamination Performed:
washed / rinsed meters / sounder

Comments / Calculations:
start: 1245
stop: 1405
sample 1405

Name: RICK WATERS Date: 2/27/02

Project Name: HC Emeryville
Casing Diameter (in): 2"
Total Well Depth (ft): 20.52
Depth to Water (ft) before purging: 4.48

Project Number: 2015-1
Sample Date: 2/27/02
Sample ID: MW-9

Well ID: MW-9

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)
1254	7.09	1281	24.1		2.5	0.5
1259	7.01	1140	24.2		5	↓
1304	6.98	1046	23.8	8.02	7.5	
				total 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
20.52 - 4.48 = 16.04 x .165 = 2.65 x 3 = 7.93
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: TPH gas 8021 8015 _____

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

Decontamination Performed:
washed/rinsed sounder/meters

Comments / Calculations:
start: 1251
stop: 1307
sample: 1310

Name: Emily Waters Date: 2/27/02

Project Name: AC Emeryville
Casing Diameter (in): 2"
Total Well Depth (ft): 24.15
Depth to Water (ft) before purging: 9.15

Project Number: 2015-1
Sample Date: 2/27/02
Sample ID: MW-10

Well ID: MW-10

Development Method:

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

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

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1453	7.30	766	22.7		2	1
1455	7.27	725	21.9		4	↓
1457	7.29	719	21.3	10.26	6	↓
				Total 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 - 9.15 = 15.00 x .165 = 2.48 x 3 = 7.43
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: 8021 8015 TPH gas _____

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

Decontamination Performed:
washed / rinsed sounder / meters

Start: 1451
Stop: 1459
Sample: 1505

Comments / Calculations:

Name: EMILY WATERS Date: 2/27/02

Project Name: AC Emeryville
Casing Diameter (in): 2"
Total Well Depth (ft): 17.40
Depth to Water (ft) before purging: 2.39

Project Number:
Sample Date: 2/27/02
Sample ID: MW-11

Well ID: MW-11

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)
1159	7.77	815	19.8	2.41	2	0.9
1201	7.74	500	18.6	2.43	4	↓
1203	7.67	491	18.3	2.46	6	↓
				total 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
17.40 - 2.39 = 15.01 x .165 = 2.48 x 3 = 7.43
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: TPH gas 8021 analyze for BTEX, MTBE + Chlorinated solvents 8015 _____

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

Decontamination Performed:
washed / rinsed sounder / meters

Comments / Calculations:
start: 1157
stop: 1206
sample: 1215

Name: EMILY WATERS Date: 2/27/02

Project Name: AC Emeryville
Project Number:
Well ID: MW-13

Casing Diameter (in): 2"
Sample Date: 2/27/02
Total Well Depth (ft): 22'
Sample ID: MW-13
Depth to Water (ft) before purging: 4.94'

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)
1126	7.18	1234	19.9		2.5	0.1
1151	7.12	1170	19.8		5.0	↓
1215	7.09	1010	19.6	4.97	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
22.00 - 4.94 = 17.06 x 0.165 = 2.81 x 3 = 8.45
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:

_____**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: TPH gas 8015 8021 _____

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

★ peristaltic pump used to purge + sample ★

Decontamination Performed:
washed/rinsed sounder/meters

Comments / Calculations:
start: 1102
stop: 1225
sample: 1225

Name: EMILY WATERS Date: 2/27/02

Project Name:
Casing Diameter (in): 2"
Total Well Depth (ft): 16.43
Depth to Water (ft) before purging: 4.94

Project Number:
Sample Date:
Sample ID: 212710Z

Well ID: W-1

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)
1142	7.05	1011	22.0	5.05	1.5	0.6
1144	6.98	994	22.0	5.11	3.0	↓
1146	6.94	1001	22.1	5.23	4.0	↓
				total vol = 6		

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 - 4.94 = 11.49 x .165 = 1.90 x 3 = 5.69
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: 8021 TPH gas 8015 _____

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

Decontamination Performed:
washed/rinsed sounder/meters

Comments / Calculations:
start @ W
stop: 1139
stop steve @ W: 1149
sample: 1155

Name:_____ Date:_____

Project Name: AC Emeryville
Casing Diameter (in): 2"
Total Well Depth (ft): 29.87
Depth to Water (ft) before purging: 10.09

Project Number: 2015-1
Sample Date:
Sample ID:

Well ID: MW-12

Development Method:

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

NA **Pump:** _____Dedicated Submersible Pump _____Bladder Pump

_____Non-Dedicated Submersible Pump

Time	~~pH~~ T° (C)	Conductivity (umho/cm)	~~Temperature (Celsius)~~ pH	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
1441	22.1	846	7.02		3	0.15
1456	21.0	815	6.99		6	↓
1510	20.6	815	6.95	10.17	9	
				total vol	10	

Water Volume to be Purged (gal):

(Casing Length in Ft – Depth to Water in Ft) (X) (3)

Where X =1 Well Volume in Gal/ft, X=0.165 for 2" wells, X=0.37 for 3" wells, X=0.65 for 4" wells

29.87 - 10.09 = 19.78 x .165 = 3.26 x 3 = 9.79

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:

_____**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: 8021 8015 TPH gas _____

Sample Appearance

_____OVA Reading (ppm)

_____Suspended Solids (describe):

peristaltic pump used to purge + sample

Decontamination Performed:

washed/rinsed sounder/meters

Comments / Calculations:

start 1421
stop 1515
sample 1515

Name: EMILY WATERS Date: 2/27/02

Chain of Custody Record

STL-4124 (1200)

SEVERN TRENT SERVICES Severn Trent Laboratories, Inc.

Client: Cameron-Cole	Project Manager: Brad Wright	Date: 2/27/02	Chain of Custody Number: 102362
Address: 101 W. Atlantic Ave Bldg 9	Telephone Number (Area Code)/Fax Number: (510) 337-8660/337-3554	Lab Number:	Page 2 of 2
City: Alameda State: CA Zip Code: 94501	Site Contact:	Lab Contact: B. McNeill	
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 G/BS	Diesel/Motor Oil	8021*	Special Instructions/Conditions of Receipt
Trip Blank	2/27/01	1030		X							3				X				8021* - analyze for BTEX, MTBE + Chlorinated Solvents
MW-6	↓	1130		↓				2			6				↓	X	X		
W-1	↓	1155		↓				2			6				↓	↓	↓		
MW-11	↓	1215		↓				2			6				↓	↓	↓		
MW-11	↓	↓		↓				3							↓	↓	↓	X	
MW-13	↓	1225		↓				2			6				↓	↓	↓		
MW-9	↓	1310		↓				2			6				↓	↓	↓		
MW-1	↓	1350		↓				2			6				↓	↓	↓		
MW-2	↓	1400		↓				2			6				↓	↓	↓		
MW-7	↓	1405		↓				2			6				↓	↓	↓		
MW-3	↓	[illegible]		↓				2			6				↓	↓	↓		
MW-10	↓	1505		↓				2			6				↓	↓	↓		

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: Erik R Gorg	2/27/02	1620	1. Received By: [illegible]	2/27/02	1620
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments:

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

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Cameron-Cole	Project Manager: Brad Wright	Date: 2/27/02	Chain of Custody Number: 071156
Address: 101 W. Atlantic Ave Bldg 14	Telephone Number (Area Code)/Fax Number: (510) 337 8660	Lab Number:	Page ____ of ____
City: Alameda / State: CA / Zip Code: 94501	Site Contact: ~~B McNeil~~	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/Motor Oil	Special Instructions/ Conditions of Receipt
MW-12	2/27/02	1515		X			2			6			X	X	X	

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: Erika Gerry	2/27/02	1620	1. Received By:	2-27-02	1620
2. Relinquished By:	Date	Time	2. Received By:	Date	Time
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments:

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

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

March 13, 2002

STL SACRAMENTO PROJECT NUMBER: G2B270277

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 February 27, 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 G2B270277

CASE NARRATIVE

STL SACRAMENTO PROJECT NUMBER G2B270277

General Comments

Samples were received at 0 degrees Centigrade. Samples were received intact.

WATER, 8015M, TPH Gas
Sample(s): 2, 3, 5, 9, 12

Samples G2B270277-002 (131%), -003 (158%), -005 (165%), -009 (171%) and -012 (184%) are outside the percent recovery criteria of 70% to 130% for the surrogate 4-bromofluorobenzene due to visible matrix interference. The method blank, laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) are within QC criteria for the surrogate. There is no impact to the data quality and is acceptable as reported.

WATER, 8021B, BTEX + MTBE by 8021B
Sample(s): 2, 3

Samples 02 and 03 for BTEX analysis had confirmation results that were greater than 40% D due to matrix interference.

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
G2B270277

WO#	Sample #	Client Sample ID	Sampling Date	Received Date
EVPAL	1	TRIP BLANK	2/27/02 10:30 AM	2/27/02 06:10 PM
EVPAM	2	MW-6	2/27/02 11:30 AM	2/27/02 06:10 PM
EVPAN	3	W-1	2/27/02 11:55 AM	2/27/02 06:10 PM
EVPAP	4	MW-11	2/27/02 12:15 PM	2/27/02 06:10 PM
EVPAQ	5	MW-13	2/27/02 12:25 PM	2/27/02 06:10 PM
EVPAR	6	MW-9	2/27/02 01:10 PM	2/27/02 06:10 PM
EVPAT	7	MW-1	2/27/02 01:50 PM	2/27/02 06:10 PM
EVPAV	8	MW-2	2/27/02 02:00 PM	2/27/02 06:10 PM
EVPAW	9	MW-7	2/27/02 02:05 PM	2/27/02 06:10 PM
EVPAX	10	MW-3	2/27/02 02:45 PM	2/27/02 06:10 PM
EVPA0	11	MW-10	2/27/02 03:05 PM	2/27/02 06:10 PM
EVPA1	12	MW-12	2/27/02 03:15 PM	2/27/02 06:10 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 weigh

G2B270277

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc

TL-4124 (1200)

Client	Project Manager	Date	Chain of Custody Number
Cameron-Cole	Brad Wright	2/27/02	102362

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
101 W. Atlantic Ave Bldg 80	(510) 337-8660/337-3994		1 of 2

City	State	Zip Code	Site Contact	Lab Contact
Alameda	CA	94501		B. McNeill

Project Name and Location (State)	Carrier/Waybill Number
AC Transit (Emeryville)	

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.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: 8021	TPH-Gas	Diesel (modified)	8021 #	Special Instructions/ Conditions of Receipt
Trip Blank	2/27/01	1030		X						3			X				8021# - analyze for BTEX, MTBE + Chlorinated Solvents
MW-6		1130		1			2			6				X	X		
W-1		1155					2			6							
MW-11		1215					2			6							
MW-11		↓					3									X	
MW-13		1225					2			6							
MW-9		1310					2			6							
MW-1		1350					2			6							
MW-2		1400					2			6							
MW-7		1405					2			6							
MW-3		1445					2			6							
MW-10	↓	1505		↓			2			6			↓	↓	↓		

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

1. Relinquished By	Date	Time	1. Received By	Date	Time
Erik R Goff	2/27/02	1620	L Tom	2-27-02	1620
2. Relinquished By	Date	Time	2. Received By	Date	Time
L Tom	2-27-02	1818	[signature]	2-27-02	1810
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

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

STL Sacramento 916-373-5600

G2B270277

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc

STL-4124 (1200)

Client: Cameron-Cole	Project Manager: Brad Wright	Date: 2/27/02	Chain of Custody Number: 071156
Address: 101 W. Atlantic Ave Bldg 90	Telephone Number (Area Code)/Fax Number: (510) 337 8660	Lab Number:	Page ____ of ____
City: Alameda / State: CA / Zip Code: 94501	Site Contact: ~~B. McNeil~~	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/Motor oil	Special Instructions/ Conditions of Receipt
MW-12	2/27/02	1515		X			2			6			X	X	X	9004 2-27-02

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: Erik R. Gertz	2/27/02	1620	1. Received By: L. Toon	2-27-02	1620
2. Relinquished By: L. Toon	2-27-02	1810	2. Received By: Cheryl Hoy	2-27-02	1811
3. Relinquished By:			3. Received By:		

Comments

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

STL Sacramento 916-373-5600

WATER, 8015M, TPH Gas
BTEX+MTBE by 8021B

CAMERON-COLE LLC

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: G2B270277-001	Work Order #...: EVPAL1AA	Matrix.....: WATER
Date Sampled...: 02/27/02	Date Received..: 02/27/02	
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02	
Prep Batch #...: 2067398	Analysis Time..: 23:36	
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
Fluorobenzene	103	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-6

GC Volatiles

Lot-Sample #...: G2B270277-002	Work Order #...: EVPAM1AC	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2065311	Analysis Time..: 22:01		
Dilution Factor: 5			
	Method.....: DHS CA LUFT		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	250	ug/L
Unknown Hydrocarbon	5000	250	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	131 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: MW-6

GC Volatiles

Lot-Sample #...: G2B270277-002 Work Order #...: EVPAM1AD Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/06/02
Prep Batch #...: 2067398 Analysis Time..: 10:24
Dilution Factor: 5

Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	68	5.0	ug/L
Ethylbenzene	52	5.0	ug/L
Toluene	16	5.0	ug/L
m-Xylene & p-Xylene	33	10	ug/L
o-Xylene	8.3	5.0	ug/L
Methyl tert-butyl ether	ND	25	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	117	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: W-1

GC Volatiles

Lot-Sample #...: G2B270277-003	Work Order #...: EVPAN1AC	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2065311	Analysis Time..: 22:42		
Dilution Factor: 5			
	Method.....: DHS CA LUFT		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	250	ug/L
Unknown Hydrocarbon	7100	250	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	158 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: W-1

GC Volatiles

Lot-Sample #...: G2B270277-003 Work Order #...: EVPAN1AD Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/06/02
Prep Batch #...: 2067398 Analysis Time..: 12:01
Dilution Factor: 5

Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	24	5.0	ug/L
Ethylbenzene	52	5.0	ug/L
Toluene	9.0	5.0	ug/L
m-Xylene & p-Xylene	34	10	ug/L
o-Xylene	ND	5.0	ug/L
Methyl tert-butyl ether	ND	25	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	112	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-11

GC Volatiles

Lot-Sample #...: G2B270277-004 Work Order #...: EVPAP1AC Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 02/28/02 Analysis Date..: 02/28/02
Prep Batch #...: 2065325 Analysis Time..: 13:29
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	103	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-13

GC Volatiles

Lot-Sample #...: G2B270277-005 Work Order #...: EVPAQ1AC Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/05/02
Prep Batch #...: 2065311 Analysis Time..: 20:38
Dilution Factor: 1
Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	450	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	165 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: MW-13

GC Volatiles

Lot-Sample #...: G2B270277-005	Work Order #...: EVPAQ1AD	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2067398	Analysis Time..: 17:09		
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 G	5.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
Methyl tert-butyl ether	**9.9**	**5.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	113	(70 - 130)

NOTE(S):

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

CAMERON-COLE LLC

Client Sample ID: MW-9

GC Volatiles

Lot-Sample #...: G2B270277-006	Work Order #...: EVPAR1AC		Matrix.....: WATER
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2065311	Analysis Time..: 13:03		
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	106	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-9

GC Volatiles

Lot-Sample #...: G2B270277-006	Work Order #...: EVPAR1AD	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2067398	Analysis Time..: 20:23		
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	**9.5**	**5.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	102	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-1

GC Volatiles

Lot-Sample #...: G2B270277-007	Work Order #...: EVPAT1AC	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2065311	Analysis Time..: 13:44		
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	103	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-1

GC Volatiles

Lot-Sample #...: G2B270277-007	**Work Order #...:** EVPAT1AD	**Matrix.....:** WATER	
Date Sampled...: 02/27/02	**Date Received..:** 02/27/02		
Prep Date.....: 03/05/02	**Analysis Date..:** 03/05/02		
Prep Batch #...: 2067398	**Analysis Time..:** 21:11		
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	**14**	**5.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	103	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-2

GC Volatiles

Lot-Sample #...: G2B270277-008	Work Order #...: EVPAV1AC		Matrix.....: WATER
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2065311	Analysis Time..: 14:25		
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-2

GC Volatiles

Lot-Sample #...: G2B270277-008 Work Order #...: EVPAV1AD Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/06/02
Prep Batch #...: 2067398 Analysis Time..: 00:25
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	**19**	**5.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	103	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-7

GC Volatiles

Lot-Sample #...: G2B270277-009 Work Order #...: EVPAW1AC Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/05/02
Prep Batch #...: 2065311 Analysis Time..: 15:06
Dilution Factor: 1
Method.....: DHS CA LUFT

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	930	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	171 *	(70 - 130)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CAMERON-COLE LLC

Client Sample ID: MW-7

GC Volatiles

Lot-Sample #...: G2B270277-009 Work Order #...: EVPAW1AD Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/05/02
Prep Batch #...: 2067398 Analysis Time..: 18:46
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
Fluorobenzene	127	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-3

GC Volatiles

Lot-Sample #...: G2B270277-010	Work Order #...: EVPAX1AC	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2065311	Analysis Time..: 15:48		
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	101	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-3

GC Volatiles

Lot-Sample #...: G2B270277-010 Work Order #...: EVPAX1AD Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/06/02
Prep Batch #...: 2067398 Analysis Time..: 01:13
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
Fluorobenzene	102	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-10

GC Volatiles

Lot-Sample #...: G2B270277-011	Work Order #...: EVPA01AC	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2065311	Analysis Time..: 21:20		
Dilution Factor: 1			
	Method.....: DHS CA LUFT		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	**150**	**50**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	115	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-10

GC Volatiles

Lot-Sample #...: G2B270277-011 Work Order #...: EVPA01AD Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/05/02
Prep Batch #...: 2067398 Analysis Time..: 17:57
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
Fluorobenzene	107	(70 - 130)

CAMERON-COLE LLC

Client Sample ID: MW-12

GC Volatiles

Lot-Sample #...: G2B270277-012	Work Order #...: EVPA11AC	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 03/05/02	Analysis Date..: 03/05/02		
Prep Batch #...: 2065311	Analysis Time..: 16:29		
Dilution Factor: 1			
	Method.....: DHS CA LUFT		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	**950**	**50**	**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-12

GC Volatiles

Lot-Sample #...: G2B270277-012 Work Order #...: EVPA11AD Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 03/05/02 Analysis Date..: 03/05/02
Prep Batch #...: 2067398 Analysis Time..: 19:34
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	**11**	**5.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	109	(70 - 130)

QC DATA ASSOCIATION SUMMARY

G2B270277

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	DHS CA LUFT		2067398	
002	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
003	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
004	WATER	DHS CA LUFT		2065325	
005	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
006	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
007	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
008	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
009	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
010	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
011	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	
012	WATER	DHS CA LUFT		2065311	
	WATER	DHS CA LUFT		2067398	

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G2B270277 Work Order #...: EV1J01AA Matrix.....: WATER
MB Lot-Sample #: G2C060000-311

Prep Date.....: 03/05/02 Analysis Time..: 10:18
Analysis Date..: 03/05/02 Prep Batch #...: 2065311
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	104	(70 - 130)

NOTE(S):

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G2B270277 **Work Order #...:** EV1K81AA **Matrix.....:** WATER
MB Lot-Sample #: G2C060000-325
Prep Date.....: 02/28/02 **Analysis Time..:** 08:41
Analysis Date..: 02/28/02 **Prep Batch #...:** 2065325
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	106	(70 - 130)

NOTE(S):

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: G2B270277 **Work Order #...:** EV57R1AA **Matrix.....:** WATER
MB Lot-Sample #: G2C080000-398

Prep Date.....: 03/05/02 **Analysis Time..:** 13:06
Analysis Date..: 03/05/02 **Prep Batch #...:** 2067398
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
Fluorobenzene	105	(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 #...: G2B270277 **Work Order #...:** EV1J01AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G2C060000-311 EV1J01AD-LCSD
Prep Date.....: 03/05/02 **Analysis Date..:** 03/05/02
Prep Batch #...: 2065311 **Analysis Time..:** 11:41
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	**1000**	**1020**	**ug/L**	**102**		**DHS CA LUFT**
	1000	**1040**	**ug/L**	**104**	**1.7**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	114	(70 - 130)
	120	(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 #...: G2B270277 Work Order #...: EV1K81AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2C060000-325 EV1K81AD-LCSD
Prep Date.....: 02/28/02 Analysis Date..: 02/28/02
Prep Batch #...: 2065325 Analysis Time..: 09:22
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	1000	1070	ug/L	107		DHS CA LUFT
	1000	1080	ug/L	108	1.1	DHS CA LUFT

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	121	(70 - 130)
	117	(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 #...: G2B270277 Work Order #...: EV57R1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2C080000-398 EV57R1AD-LCSD
Prep Date.....: 03/05/02 Analysis Date..: 03/05/02
Prep Batch #...: 2067398 Analysis Time..: 13:55
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Benzene	**10.0**	**10.2**	**ug/L**	**102**		**DHS CA LUFT**
	10.0	**10.2**	**ug/L**	**102**	**0.43**	**DHS CA LUFT**
Ethylbenzene	**10.0**	**10.1**	**ug/L**	**101**		**DHS CA LUFT**
	10.0	**10.1**	**ug/L**	**101**	**0.34**	**DHS CA LUFT**
Toluene	**10.0**	**10.2**	**ug/L**	**102**		**DHS CA LUFT**
	10.0	**10.1**	**ug/L**	**101**	**0.61**	**DHS CA LUFT**
m-Xylene & p-Xylene	**20.0**	**20.2**	**ug/L**	**101**		**DHS CA LUFT**
	20.0	**20.1**	**ug/L**	**100**	**0.44**	**DHS CA LUFT**
o-Xylene	**10.0**	**10.0**	**ug/L**	**100**		**DHS CA LUFT**
	10.0	**9.99**	**ug/L**	**100**	**0.35**	**DHS CA LUFT**
Methyl tert-butyl ether	**10.0**	**9.96**	**ug/L**	**100**		**DHS CA LUFT**
	10.0	**11.0**	**ug/L**	**110**	**9.7**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	106	(70 - 130)
	103	(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 #...: G2B270277 **Work Order #...:** EV1J01AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G2C060000-311 EV1J01AD-LCSD
Prep Date.....: 03/05/02 **Analysis Date..:** 03/05/02
Prep Batch #...: 2065311 **Analysis Time..:** 11:41
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**102**	**(70 - 130)**			**DHS CA LUFT**
	104	**(70 - 130)**	**1.7**	**(0-35)**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	114	(70 - 130)
	120	(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 #...: G2B270277 Work Order #...: EV1K81AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2C060000-325 EV1K81AD-LCSD
Prep Date.....: 02/28/02 Analysis Date..: 02/28/02
Prep Batch #...: 2065325 Analysis Time..: 09:22
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**107**	**(70 - 130)**			**DHS CA LUFT**
	108	**(70 - 130)**	**1.1**	**(0-35)**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	121	(70 - 130)
	117	(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 #...: G2B270277 Work Order #...: EV57R1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G2C080000-398 EV57R1AD-LCSD
Prep Date.....: 03/05/02 Analysis Date..: 03/05/02
Prep Batch #...: 2067398 Analysis Time..: 13:55
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**102**	**(70 - 130)**			**DHS CA LUFT**
	102	**(70 - 130)**	**0.43**	**(0-35)**	**DHS CA LUFT**
Ethylbenzene	**101**	**(70 - 130)**			**DHS CA LUFT**
	101	**(70 - 130)**	**0.34**	**(0-35)**	**DHS CA LUFT**
Toluene	**102**	**(70 - 130)**			**DHS CA LUFT**
	101	**(70 - 130)**	**0.61**	**(0-35)**	**DHS CA LUFT**
m-Xylene & p-Xylene	**101**	**(70 - 130)**			**DHS CA LUFT**
	100	**(70 - 130)**	**0.44**	**(0-35)**	**DHS CA LUFT**
o-Xylene	**100**	**(70 - 130)**			**DHS CA LUFT**
	100	**(70 - 130)**	**0.35**	**(0-35)**	**DHS CA LUFT**
Methyl tert-butyl ether	**100**	**(70 - 130)**			**DHS CA LUFT**
	110	**(70 - 130)**	**9.7**	**(0-35)**	**DHS CA LUFT**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Fluorobenzene	106	(70 - 130)
	103	(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/Motor Oil

CAMERON-COLE LLC

Client Sample ID: MW-6

GC Semivolatiles

Lot-Sample #...: G2B270277-002	Work Order #...: EVPAM1AA		Matrix.....: WATER
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 50	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Motor Oil)	ND	12000	ug/L
TPH (as Diesel)	ND	2500	ug/L
Unknown Hydrocarbon	**43000**	**2500**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	0.0 SRD	(57 - 147)

NOTE(S):

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

The unknown hydrocarbon from n-C8 to n-C24 is quantitated with all peaks from n-C8 to n-C36 and based on diesel (n-C10 to n-C24).

CAMERON-COLE LLC

Client Sample ID: W-1

GC Semivolatiles

Lot-Sample #...: G2B270277-003	Work Order #...: EVPAN1AA		Matrix.....: WATER
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 5	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Motor Oil)	ND	1200	ug/L
TPH (as Diesel)	ND	250	ug/L
Unknown Hydrocarbon	**1800**	**250**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	104	(57 - 147)

NOTE(S):

The unknown hydrocarbon from n-C8 to n-C16 is quantitated with all peaks from n-C8 to n-C36 and based on diesel (n-C10 to n-C24).

CAMERON-COLE LLC

Client Sample ID: MW-11

GC Semivolatiles

Lot-Sample #...: G2B270277-004 Work Order #...: EVPAP1AA Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 02/28/02 Analysis Date..: 03/06/02
Prep Batch #...: 2059451
Dilution Factor: 1 Method.....: SW846 8015 MOD

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

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

CAMERON-COLE LLC

Client Sample ID: MW-13

GC Semivolatiles

Lot-Sample #...: G2B270277-005	Work Order #...: EVPAQ1AA	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Motor Oil)	ND	250	ug/L
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	**1100**	**50**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	112	(57 - 147)

NOTE(S):

The unknown hydrocarbon from n-C8 to n-C28 is quantitated with all peaks from n-C8 to n-C36 and based on diesel (n-C10 to n-C24).

CAMERON-COLE LLC

Client Sample ID: MW-9

GC Semivolatiles

Lot-Sample #...: G2B270277-006	Work Order #...: EVPAR1AA	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Motor Oil)	ND	250	ug/L
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	**650**	**250**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	115	(57 - 147)

NOTE(S):

The unknown hydrocarbon from n-C8 to n-C40 is quantitated with all peaks from n-C8 to n-C36 and based on motor oil (n-C19 to n-C36).

CAMERON-COLE LLC

Client Sample ID: MW-1

GC Semivolatiles

Lot-Sample #...: G2B270277-007	Work Order #...: EVPAT1AA	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	93	(57 - 147)

CAMERON-COLE LLC

Client Sample ID: MW-2

GC Semivolatiles

Lot-Sample #...: G2B270277-008	Work Order #...: EVPAV1AA	Matrix.....: WATER	
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	109	(57 - 147)

CAMERON-COLE LLC

Client Sample ID: MW-7

GC Semivolatiles

Lot-Sample #...: G2B270277-009	Work Order #...: EVPAW1AA		Matrix.....: WATER
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Motor Oil)	ND	250	ug/L
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	430	50	ug/L

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

NOTE(S):

The unknown hydrocarbon from n-C8 to n-C30 is quantitated with all peaks from n-C8 to n-C36 and based on diesel (n-C10 to n-C24).

CAMERON-COLE LLC

Client Sample ID: MW-3

GC Semivolatiles

Lot-Sample #...: G2B270277-010	Work Order #...: EVPAX1AA		Matrix.....: WATER
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Motor Oil)	ND	250	ug/L
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	**560**	**250**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	104	(57 - 147)

NOTE(S):

The unknown hydrocarbon from n-C16 to n-C40 is quantitated with all peaks from n-C8 to n-C36 and based on motor oil (n-C19 to n-C36).

CAMERON-COLE LLC

Client Sample ID: MW-10

GC Semivolatiles

Lot-Sample #...: G2B270277-011 Work Order #...: EVPA01AA Matrix.....: WATER
Date Sampled...: 02/27/02 Date Received..: 02/27/02
Prep Date.....: 02/28/02 Analysis Date..: 03/06/02
Prep Batch #...: 2059451
Dilution Factor: 1 Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Motor Oil)	ND	250	ug/L
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	**610**	**50**	**ug/L**

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

NOTE(S):

The unknown hydrocarbon from n-C8 to n-C40 is quantitated with all peaks from n-C8 to n-C36 and based on diesel (n-C10 to n-C24).

CAMERON-COLE LLC

Client Sample ID: MW-12

GC Semivolatiles

Lot-Sample #...: G2B270277-012	Work Order #...: EVPA11AA		Matrix.....: WATER
Date Sampled...: 02/27/02	Date Received..: 02/27/02		
Prep Date.....: 02/28/02	Analysis Date..: 03/06/02		
Prep Batch #...: 2059451			
Dilution Factor: 1	Method.....: SW846 8015 MOD		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Motor Oil)	ND	250	ug/L
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	**350**	**50**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	107	(57 - 147)

NOTE(S):

The unknown hydrocarbon from n-C8 to n-C28 is quantitated with all peaks from n-C8 to n-C36 and based on diesel (n-C10 to n-C24).

QC DATA ASSOCIATION SUMMARY

G2B270277

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
002	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
003	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
004	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065325	
005	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
006	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
007	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
008	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
009	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
010	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
011	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	
012	WATER	SW846 8015 MOD		2059451	
	WATER	DHS CA LUFT		2065311	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: G2B270277 Work Order #...: EVQW91AA Matrix.....: WATER
MB Lot-Sample #: G2B280000-451

Prep Date.....: 02/28/02
Analysis Date..: 03/06/02 Prep Batch #...: 2059451
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Motor Oil)	ND	250	ug/L	SW846 8015 MOD
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	86	(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 #...: G2B270277 **Work Order #...:** EVQW91AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G2B280000-451 EVQW91AD-LCSD
Prep Date.....: 02/28/02 **Analysis Date..:** 03/06/02
Prep Batch #...: 2059451
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Diesel)	**300**	**253**	**ug/L**	**84**		**SW846 8015 MOD**
	300	**246**	**ug/L**	**82**	**2.8**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	92	(57 - 147)
	99	(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 #...: G2B270277 **Work Order #...:** EVQW91AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G2B280000-451 EVQW91AD-LCSD
Prep Date.....: 02/28/02 **Analysis Date..:** 03/06/02
Prep Batch #...: 2059451
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**84**	**(39 - 125)**			**SW846 8015 MOD**
	82	**(39 - 125)**	**2.8**	**(0-44)**	**SW846 8015 MOD**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	92	(57 - 147)
	99	(57 - 147)

NOTE(S):

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

Bold print denotes control parameters

WATER, Ethylene Glycol
8021 Volatile Organics
STL Pensacola

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C2-03022
Received: 01 MAR 02
Reported: 13 MAR 02

Ms. Bonnie McNeill
STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Project: CAMERON-COLE
Sampled By: Client
Code: 135820313

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
03022-1	MW-11/G2B270277-4	02-27-02/12:15

PARAMETER	03022-1
Aromatic and Halogenated Volatiles (8021B)	
Benzene, ug/l	<1.0
Bromobenzene, ug/l	<3.0
Bromodichloromethane, ug/l	<1.0
Bromoform, ug/l	<2.0
Bromomethane (Methyl bromide), ug/l	<5.0
Carbon tetrachloride, ug/l	<1.0
Chlorobenzene, ug/l	<1.0
Chloroethane, ug/l	<5.0
Chloroform, ug/l	<2.0
Chloromethane, ug/l	<5.0
Dibromochloromethane, ug/l	<5.0
Dibromomethane (Methylene bromide), ug/l	<5.0
1,2-Dichlorobenzene, ug/l	<2.0
1,3-Dichlorobenzene, ug/l	<2.0
1,4-Dichlorobenzene, ug/l	<2.0
Dichlorodifluoromethane, ug/l	<5.0
1,1-Dichloroethane, ug/l	<1.0
1,2-Dichloroethane, ug/l	<1.0
1,1-Dichloroethene, ug/l	<1.0
cis-1,2-Dichloroethene, ug/l	<1.0
trans-1,2-Dichloroethene, ug/l	<1.0
1,2-Dichloroethene (total), ug/l	<1.0
1,2-Dichloropropane, ug/l	<1.0
cis-1,3-Dichloropropene, ug/l	<1.0
trans-1,3-Dichloropropene, ug/l	<1.0

STL Pensacola
LOG NO: C2-03022
Received: 01 MAR 02
Reported: 13 MAR 02

Ms. Bonnie McNeill
STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Project: CAMERON-COLE
Sampled By: Client
Code: 135820313

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
03022-1	MW-11/G2B270277-4	02-27-02/12:15

PARAMETER	03022-1				
Ethylbenzene, ug/l	<1.0				
Methylene chloride (Dichloromethane), ug/l	<5.0				
Methyl t-butyl ether (MTBE), ug/l	<5.0				
1,1,1,2-Tetrachloroethane, ug/l	<1.0				
1,1,2,2-Tetrachloroethane, ug/l	<1.0				
Tetrachloroethene, ug/l	<3.0				
Toluene, ug/l	<1.0				
1,1,1-Trichloroethane, ug/l	<1.0				
1,1,2-Trichloroethane, ug/l	<2.0				
Trichloroethene, ug/l	<1.0				
Trichlorofluoromethane, ug/l	<2.0				
1,2,3-Trichloropropane, ug/l	<5.0				
Vinyl chloride, ug/l	<1.0				
Xylenes, Total, ug/l	<2.0				
Surrogate - 4-Bromofluorobenzene (PID), ug/l	102 %				
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l	109 %				
Dilution Factor	1				
Analysis Date	03.05.02				
Batch ID	LUW017A				
Prep Method	5030B				
Analyst	SA				
General Organics (8015M)					
Ethylene Glycol, mg/l	14				
Dilution Factor	1				
Prep Date	03.11.02				
Analysis Date	03.11.02				
Batch ID	GEW009				
Analyst	IE				

STL Pensacola
LOG NO: C2-03022
Received: 01 MAR 02
Reported: 13 MAR 02

Ms. Bonnie McNeill
STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Project: CAMERON-COLE
Sampled By: Client
Code: 135820313

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
03022-2	Method Blank	
03022-3	Lab Control Standard % Recovery	

PARAMETER	03022-2	03022-3	
Aromatic and Halogenated Volatiles (8021B)			
Benzene, ug/l	<1.0	102 %	
Bromobenzene, ug/l	<3.0	96 %	
Bromodichloromethane, ug/l	<1.0	107 %	
Bromoform, ug/l	<2.0	106 %	
Bromomethane (Methyl bromide), ug/l	<5.0	166 %	
Carbon tetrachloride, ug/l	<1.0	91 %	
Chlorobenzene, ug/l	<1.0	100 %	
Chloroethane, ug/l	<5.0	110 %	
Chloroform, ug/l	<2.0	92 %	
Chloromethane, ug/l	<5.0	112 %	
Dibromochloromethane, ug/l	<5.0	104 %	
Dibromomethane (Methylene bromide), ug/l	<5.0	99 %	
1,2-Dichlorobenzene, ug/l	<2.0	97 %	
1,3-Dichlorobenzene, ug/l	<2.0	101 %	
1,4-Dichlorobenzene, ug/l	<2.0	101 %	
Dichlorodifluoromethane, ug/l	<5.0	123 %	
1,1-Dichloroethane, ug/l	<1.0	102 %	
1,2-Dichloroethane, ug/l	<1.0	90 %	
1,1-Dichloroethene, ug/l	<1.0	114 %	
cis-1,2-Dichloroethene, ug/l	<1.0	98 %	
trans-1,2-Dichloroethene, ug/l	<1.0	103 %	
1,2-Dichloroethene (total), ug/l	<1.0	---	
1,2-Dichloropropane, ug/l	<1.0	94 %	
cis-1,3-Dichloropropene, ug/l	<1.0	108 %	

STL Pensacola
LOG NO: C2-03022
Received: 01 MAR 02
Reported: 13 MAR 02

Ms. Bonnie McNeill
STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Project: CAMERON-COLE
Sampled By: Client
Code: 135820313

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
03022-2	Method Blank	
03022-3	Lab Control Standard % Recovery	

PARAMETER	03022-2	03022-3	
trans-1,3-Dichloropropene, ug/l	<1.0	95 %	
Ethylbenzene, ug/l	<1.0	101 %	
Methylene chloride (Dichloromethane), ug/l	<5.0	96 %	
Methyl t-butyl ether (MTBE), ug/l	<5.0	97 %	
1,1,1,2-Tetrachloroethane, ug/l	<1.0	86 %	
1,1,2,2-Tetrachloroethane, ug/l	<1.0	99 %	
Tetrachloroethene, ug/l	<3.0	99 %	
Toluene, ug/l	<5.0	101 %	
1,1,1-Trichloroethane, ug/l	<1.0	99 %	
1,1,2-Trichloroethane, ug/l	<2.0	87 %	
Trichloroethene, ug/l	<1.0	102 %	
Trichlorofluoromethane, ug/l	<2.0	118 %	
1,2,3-Trichloropropane, ug/l	<5.0	99 %	
Vinyl chloride, ug/l	<1.0	96 %	
Xylenes, Total, ug/l	<2.0	101 %	
Surrogate - 4-Bromofluorobenzene (PID), ug/l	103 %	97 %	
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l	107 %	107 %	
Dilution Factor	1	---	
Analysis Date	03.05.02	---	
Batch ID	LUW017A	LUW017A	
Prep Method	5030B	---	
Analyst	SA	---	

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C2-03022
Received: 01 MAR 02
Reported: 13 MAR 02

Ms. Bonnie McNeill
STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Project: CAMERON-COLE
Sampled By: Client
Code: 135820313

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
03022-2	Method Blank	
03022-3	Lab Control Standard % Recovery	

PARAMETER	03022-2	03022-3
General Organics (8015M)		
Ethylene Glycol, mg/l	<5.0	53 %
Dilution Factor	1	---
Prep Date	03.11.02	---
Analysis Date	03.11.02	---
Batch ID	GEW009	GEW009
Analyst	IE	---

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.
See the Project Sample Inspection Form (PSIF) to determine if a sample was received that did not meet EPA requirements for sample collection, preservation, or holding time.

Melissa L. Pope, Project Manager

Final Page Of Report

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT SERVICES

Lab Order #: C203022 Date Received: 3-1-02

1.	Was there a Chain of Custody?	(Yes)	No*	
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*	
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP	(Yes)	No*	N/A
4.	Were all samples properly labeled and identified?	(Yes)	No*	
5.	Did samples require splitting or compositing♦? Req By: PM Client Other*	Yes*	(No)	
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*	
7.	Were all sample containers received intact?	(Yes)	No*	
8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)+*	Yes	No*	(N/A)
9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A *(Can)*
10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No*	
11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	(No)	N/A
12.	If sent, were matrix spike bottles returned?	Yes	No*	(N/A)
13.	Was Project Manager notified of problems? (initials: JC)	(Yes)	No*	N/A

Airbill Number(s): 7903 2697 7240

Shipped By: Fed Ex

Cooler Number(s): BOX

Shipping Charges: N/A

Cooler Weight(s): 11#

Cooler Temp(s) (°C): 2°C

(((K3)

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

10. WATCH HOLD TIMES ON 8021 (UNPRESERVED) 3-4-02

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: JC **Date:** 3-1-02 **Logged By:** LHK **Date:** 01-MAR-02

♣ *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples(pH, Dissolved O_2, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.*

♦ *If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

\+ *All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).*

G2B270277

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc

STL-4124 (1200)

Client	Project Manager	Date	Chain of Custody Number
STL - SAC	Bonnie McNeill	2-28-02	102056
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page ____ of ____**
880 Riverside Prkwy		C203022	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
West SAC / CA			
Project Name and Location (State)	**Carrier/Waybill Number**		
Cameron-Cole			
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	Ethylene glycol	Special Instructions/ Conditions of Receipt
(VH) G2B270277-4	2-27-02	1245		X			X						X		* Analyze for BTEX, MTBE, Chlorinated Solvents
↓	↓	↓		X						X				X	

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)

	Date	Time		Date	Time
1. Relinquished By	2-28-02	1600	1. Received By	3-1-02	0920
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

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

STL Sacramento 916-373-5600