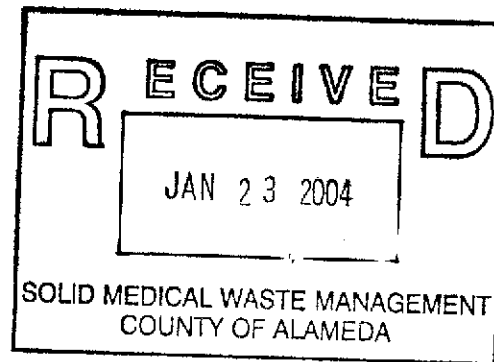


AC Transit

Alameda Contra Costa Transit District

Suzanne Patton, P.E.
Environmental Engineer
(510) 577-8869
January 20, 2004

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



Dear Ms. chu:

Subject: Quarterly Groundwater Monitoring Report – November 2003 Sampling 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 November 2003 sampling event and the results of additional site investigation activities that were conducted in October 2003. The additional work was performed in accordance with a July 2003 workplan and subsequent September 12, 2003, letter from your office.

The quarterly groundwater monitoring included collecting groundwater samples from two on-site monitoring wells (MW-11 and MW-12). These samples were analyzed for total 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. A groundwater sample was not collected from MW-13 due to the presence of a 10.2-inch free phase hydrocarbon layer. The concentrations of diesel decreased in both wells from the previous sampling: from 300 ppb to 77 ppb in MW-11 and from 110 ppb to 100 ppb in MW-12. The concentration of gasoline in MW-11 was still below the analytical detection limit of 50 ppb. The concentration of gasoline in MW-12 decreased from 260 ppb to 160 ppb which is the lowest measured concentration since monitoring began.

The additional site investigation included drilling six borings (SB-7 through SB-12) along Doyle Street and two borings (SB-13 and SB-14) on-site. Borings SB-7 through SB-10 were drilled to further define the extent of hydrocarbons in groundwater. SB-11 and SB-12 were drilled adjacent to the storm sewer under Doyle Street to determine whether hydrocarbons may be transported within the storm sewer. SB-13 and SB-14 were drilled to obtain more information on the

sand layer encountered in other on-site wells. Results of the samples taken near the storm drain indicate that the storm sewer is not acting as a preferential pathway for petroleum hydrocarbons from the site. Samples taken from SB-8 and SB-9 indicate that the downgradient extent of the petroleum hydrocarbons has not been defined.

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

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

December 2003

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: 2016/2017



CAMERON-COLE

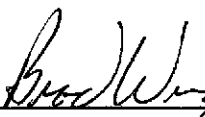
**GROUNDWATER MONITORING and
SUBSURFACE INVESTIGATION REPORT
FOR THE AC TRANSIT FACILITY LOCATED
AT 1177 47th STREET, EMERYVILLE, CALIFORNIA**

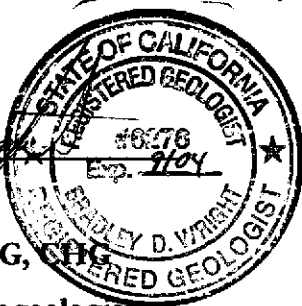
December 2003

**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: 2016/2017


Reviewed By:
Brad Wright, RG, CFC
Principal Hydrogeologist



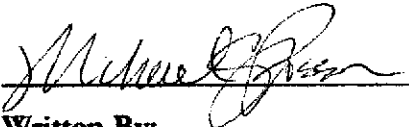

Written By:
Michael Posson
Environmental Scientist

TABLE OF CONTENTS

INTRODUCTION	1
GROUNDWATER MONITORING.....	1
Groundwater Elevations and Flow Direction.....	2
Groundwater Sampling Activities.....	2
Groundwater Analytical Results	2
ADDITIONAL SUBSURFACE CHARACTERIZATION.....	3
Scope of Investigation	4
Boring Installation.....	4
Laboratory Analysis	5
Lithology.....	5
Laboratory Results.....	6
CONCLUSIONS.....	7
PROJECTED WORK AND RECOMMENDATIONS.....	8

LIST OF FIGURES

Figure 1.....	Site Map Including Monitor Well Locations
Figure 2.....	Potentiometric Surface Map Including Groundwater Flow Direction
Figure 3	Soil Boring Location Map
Figure 4	Geologic Cross Section A-A'

LIST OF TABLES

Table 1	Groundwater Level Measurements
Table 2	Analytical Results of Groundwater Samples
Table 3	Analytical Results of Soil and Grab Groundwater Samples

APPENDICIES

APPENDIX A	Field Data Sheets
APPENDIX B	Certified Analytical Reports
APPENDIX C	Drilling Permits
APPENDIX D	Soil Boring Logs

INTRODUCTION

This report presents the results from the November 2003 sampling event for the AC Transit Facility located at 1177 47th Street, Emeryville, California (Site). Groundwater sampling of monitor wells MW-11, MW-12 and MW-13 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.

In addition, this report presents the results from additional subsurface characterization activities conducted at the Site in October 2003. The October 2003 subsurface investigation was conducted in accordance with the July 2003, "Workplan for Supplemental Subsurface Investigation" with modifications to the workplan requested the ACHCS in a letter dated September 12, 2003. This report presents activities and findings associated with quarterly groundwater monitoring followed by the results of the October 2003 investigation.

GROUNDWATER MONITORING

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

A site map displaying the monitor well locations is presented as Figure 1. Field data sheets are included in Appendix A and certified analytical reports are included in Appendix B.

Groundwater Elevations and Flow Direction

On November 20, 2003, 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 in Table 1 and were used to construct the groundwater elevation contours shown on Figure 2. As shown, groundwater flow is to the west at a gradient of 0.022 feet/foot. A free phase hydrocarbon layer measuring 0.85 feet was detected in MW-13.

Groundwater Sampling Activities

The monitor wells were purged a minimum of three casing volumes using a centrifugal pump and samples were collected using disposable polyethylene bailers. During well purging, field parameters for pH, electrical conductivity, dissolved oxygen, oxidation-reduction potential, ferrous iron and temperature were monitored using calibrated field meters.

Groundwater samples were collected in 40-milliliter glass vials preserved with hydrochloric acid and one-liter non-preserved amber glass containers and placed in an ice-filled cooler for shipment under chain-of-custody to a State of California certified laboratory. A trip blank was submitted for analysis by USEPA Method 8021B.

Groundwater Analytical Results

Table 2 presents groundwater analytical results for the November 2003 sampling event. TPH as diesel was detected in monitor wells MW-11 and MW-12 at concentrations of 77 and 100 parts per billion (ppb), respectively. TPH as gasoline was detected in monitor well MW-12 at a concentration of 160 ppb. MTBE was detected in MW-12 at a concentration of 8.9 ppb. No analytes were detected in the trip blank or method blank. A laboratory control spike and control spike duplicate passed the USEPA's criteria for acceptance.

ADDITIONAL SUBSURFACE CHARACTERIZATION

On November 6, 2002, AC Transit submitted a Notification of Release to Groundwater to the Alameda County Health Division of Environmental Protection Department of Environmental Health (Alameda County). During third quarter 2002 groundwater monitoring conducted at the site, an approximate seven-foot free phase product layer was measured in monitor well MW-13 (Figure 2). This was the first measurable product layer recorded in monitor well MW-13. Soon thereafter, AC Transit conducted tests on the hydraulic lift system used in the Tire Shop building located near monitor well MW-13. This testing confirmed that one of the hydraulic lifts had leaked. The hydraulic lift system was immediately taken out of service and the underground hydraulic lines were drained.

On November 13, 2002, Cameron-Cole implemented free product removal from monitor well MW-13. Initially, product layer removal consisted of pumping the free phase layer from the well on a daily basis. By November 20, 2002 the layer had been reduced to a sheen (< 0.01 feet). The thickness of this product layer is measured during each sampling event.

To assess the extent of the release associated with the Tire Shop lift system, a subsurface investigation was initiated in February 2003. The initial investigation included the installation of five borings (SB-1 through SB-5) drilled in the vicinity of the Tire Shop (Figure 3). Results from the February 2003 investigation were reported to Alameda County in May 2003. Laboratory analysis and field observations of grab groundwater samples collected from the borings showed that concentrations of TPH had impacted groundwater downgradient from the Tire Shop.

The May 2003 investigation report recommended the installation and collection of additional borings and grab groundwater to further define the extent of TPH in groundwater. The scope of work was defined in the "Workplan for Supplemental Subsurface Investigation" dated July 2003. ACHCS approved the July 2003 workplan with requested modification in a letter dated

September 12, 2003. The following sections describe the scope of work and presents the results of the supplemental subsurface investigation.

Scope of Investigation

The supplemental subsurface investigation was conducted in October 2003 pursuant to the ACHCS approved workplan. The work included the installation of six borings located along Doyle Street and two borings on the Site (Figure 3). Borings SB-7 through SB-10 were located along Doyle Street for purposes of further defining the extent of TPH in groundwater. SB-11 and SB-12 were located immediately adjacent to the storm sewer pipe parallel to and under Doyle Street, to assess TPH impacts that may be transported within the storm sewer. SB-13 and SB-14 were located onsite and installed to a sufficient depth to define a sand layer encountered in monitor wells W1, W2 and MW-13.

Boring Installation

Prior to mobilizing equipment to the Site, the following activities were completed:

- The site specific health and safety plan was updated.
- Underground Service Alert (USA) was notified of impending activities. Additionally, a professional underground utility locator cleared each boring location.
- Drilling permits were obtained from Alameda County Public Works Agency (ACPWA) and a City of Emeryville Encroachment permit was obtained for borings located along Doyle Avenue (Appendix C).

The borings were installed on October 2 and 3, 2003, using Geoprobe™ push technology coring equipment. During boring advancement, soil cores were continuously collected in clear acetate sleeves, which allowed the field geologist to describe the soil lithology according to the Unified Soil Classification System. The lithologic logs for each boring are presented in Appendix D.

Prior to sample collection, a disposable bailer was lowered to the top of the water table and allowed to fill with groundwater. The bailer sample was visually inspected to assess if a hydrocarbon sheen or measurable layer was present. Grab groundwater sampling involved temporarily placing ¾-inch polyvinyl chloride (PVC) well screen and casing to the total depth of the borehole. Groundwater samples were collected using a peristaltic pump. Groundwater was transferred to laboratory supplied containers and a unique sample identification number was assigned to each container. The sample identification number was documented on the chain-of-custody form. Upon completion of sample collection, each borehole was backfilled with neat cement and topped with appropriate material to match the surrounding ground surface.

Reusable equipment was thoroughly decontaminated between boreholes. Soil cuttings and water generated during sampling was placed in containers for storage and disposal in accordance with local, state and federal regulations.

Laboratory Analysis

Grab groundwater samples were submitted to Entech Analytical Labs for analysis of TPH diesel and stoddard solvent using USEPA Method 8015 modified and gasoline, MTBE and BTEX using USEPA Method 8021B.

Lithology

Soil boring logs generated during this investigation are presented in Appendix D. The lithology encountered during the installation of borings SB-7 through SB-14 was consistent with that encountered during previous investigations. The Site cross-section presented in the May 2003 investigation report has been updated to include lithologic log data generated during the installation of borings SB-13 and SB-14 (Figure 4). The Site is underlain by fill followed by a silty clay to depths of three to six feet below ground surface (bgs), where a thin clayey to silty sand layer is commonly encountered. The first sand layer is slightly moist at depths less than six feet bgs and very moist to saturated below six feet bgs. This sand layer is

underlain by silty clay to depths of 14 to 16 feet bgs. Very moist to saturated conditions are encountered below the silty clay layer at depths of 16 to 28 feet bgs in more transmissive clayey sand to silty gravel layers.

Cross-section A-A' has been revised to include the lithologic data collected from borings SB-13 and SB-14. Underlying the engineering fill, the lithology consists primarily of silty clays with discontinuous sand and gravel layers. The sand layer encountered at a depth greater than 20 feet bgs in monitor wells W-2, W-3 and MW-13 was encountered in borings SB-13 and SB-14. As described in the May 2003 investigation report, soil sample collection was limited during the installation of monitor wells MW-7 and MW-10 and sand was not logged at depths greater than 20 feet bgs. However, based on the depth of soil collection in MW-7 and MW-10 and the new lithologic data collected from borings SB-13 and SB-14, the sand layer is now presented in cross-section A-A' as laterally continuous across the Site.

Laboratory Results

Certified analytical reports for the soil and grab groundwater samples analyzed during this previous investigation are presented in Appendix B and the results along with those collected during the previous investigation are summarized in Table 3

Concentrations of TPH as diesel, stoddard solvent and gasoline were detected in the grab groundwater samples collected from borings SB-8, SB-9, SB-13 and SB-14. TPH compounds were not detected above laboratory reporting limits in the grab groundwater samples collected from borings SB-7 and SB-10. Low concentrations of TPH as diesel were detected in the soil samples collected from borings SB-11 and SB-12 with low concentrations of TPH as stoddard solvent and gasoline detected in the 8-foot deep soil sample collected in boring SB-12.

It is important to note that the analytical laboratory has qualified each of the detections above reporting limits as not matching the pattern of the laboratory standard. The concentrations reported by the laboratory and presented in Table 3 as diesel, stoddard solvent and gasoline are only concentrations of carbon chain hydrocarbons that fall into the range of those

standards. Since the carbon chain range of the standards have overlap (i.e. gasoline {c4-c12}, stoddard solvent {c8-c13}, diesel {c9-c26}), the concentrations reported for each of the TPH types cannot be additive.

CONCLUSIONS

The low concentrations of TPH detected in soil samples collected in the immediate vicinity of the storm sewer pipe located within Doyle Street and the below reporting limit results of the grab groundwater sample collected from borings SB-10, suggest that the storm sewer is not acting as a preferential pathway of TPH migration from the Site.

The groundwater contour map presented as Figure 2 shows that groundwater flows to the West onsite and to the Northwest in the vicinity of Doyle Street. Concentrations of TPH detected in grab groundwater samples collected in February 2003 (SB-1 through SB-3) and TPH concentration detected in grab groundwater from recently installed borings SB-7 through SB-10, suggest that chemical transport is consistent with the groundwater flow direction along Doyle Street. Based on a Northwest flow direction borings SB-8 and SB-9 are located in the downgradient direction. Concentrations of TPH detected in the grab groundwater samples collected from SB-8 and SB-9 indicate that the downgradient extent of the TPH has not been defined.

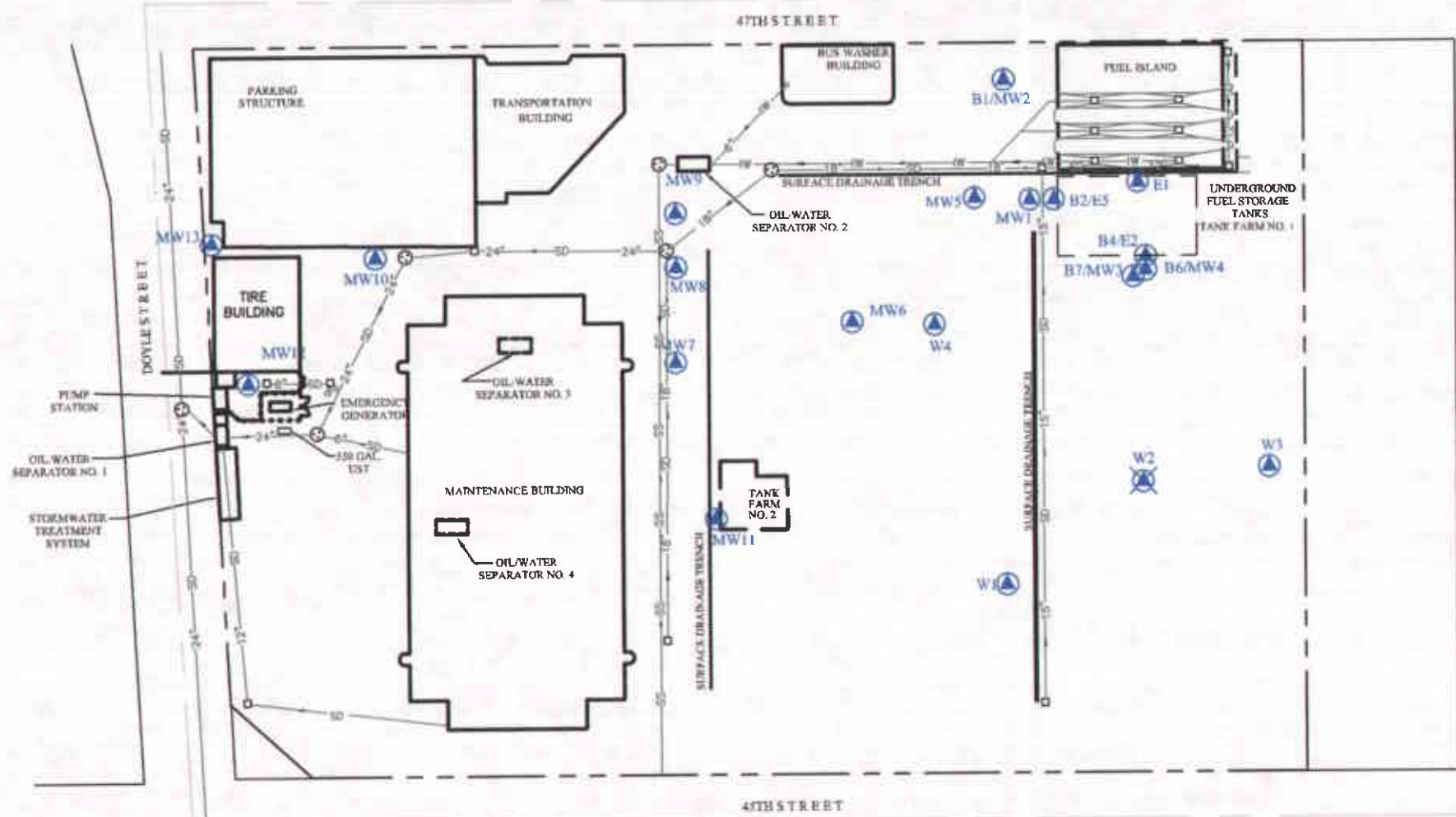
The sand layer encountered at depths of greater than 20 feet bgs appears to be laterally continuous across the site. While not logged during the installation of monitor wells installed in 1989 (MW1 through MW10), the depth at which it was encountered in SB-13 and SB-14 suggests that the screened interval of wells completed to depths of greater than 18 feet bgs do encounter this laterally continuous sand layer. Therefore, the existing monitor wells make up an appropriate network for future monitoring events.

PROJECTED WORK AND RECOMMENDATIONS

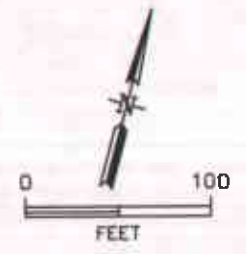
For purposes of providing a better understanding on the extent of elevated TPH concentrations in groundwater, additional borings and grab groundwater samples would need to be installed downgradient (Northwest) of borings SB-8 and SB-9. This requires encroachment onto property not owned by AC Transit or the City of Emeryville; therefore, before proposing work on this property an access agreement will need to be obtained.

To address the elevated concentrations of TPH detected in grab groundwater samples collected during this investigation and the continued presence of free phase hydrocarbons in monitor well MW-13, AC Transit will be evaluating remedial action options.

Semi-annual groundwater monitoring of all monitoring wells is scheduled for February 2003. 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
WRB	10/25/02
APPROVED	
APPROVED	



CAMERON-COLE

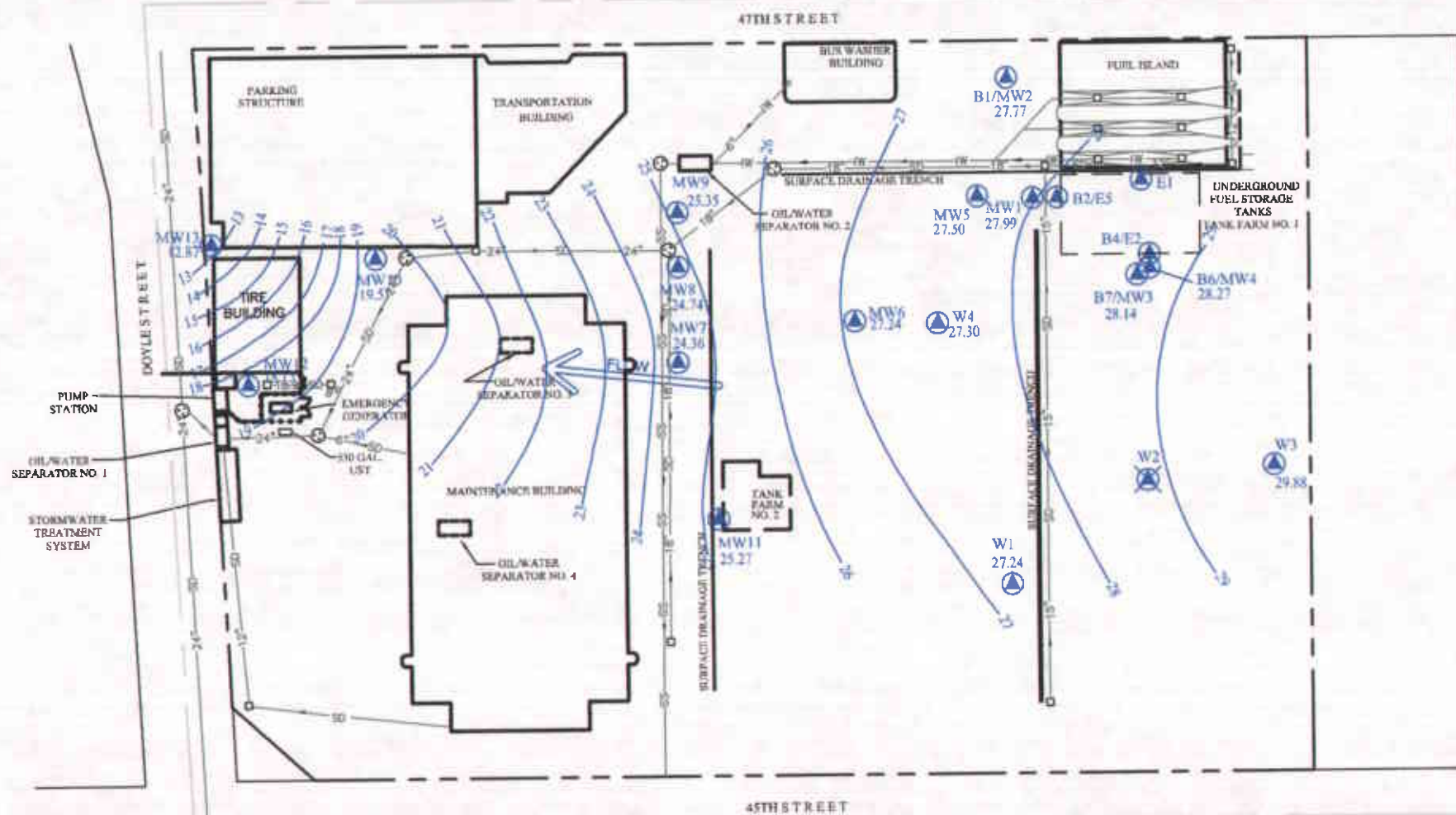
EMERYVILLE FACILITY - OAKLAND, CALIFORNIA

FIGURE 1
AC TRANSIT - MONITORING WELL LOCATION MAP

SCALE: 1" = 100'

DWG. NO.: 2015-01





SAN PABLO AVENUE

LEGEND	
	MANHOLE
	CATCH BASIN
	MONITORING WELL
	ABANDONED MONITORING WELL
27.19	POTENTIOMETRIC SURFACE ELEVATION
*28.86	NOT USED IN CONTOURING
	POTENTIOMETRIC SURFACE CONTOUR
	SD STORM DRAIN PIPELINE
	SS SANITARY SEWER PIPELINE
	IW INDUSTRIAL WASTE PIPELINE
	CHAIN LINK FENCE

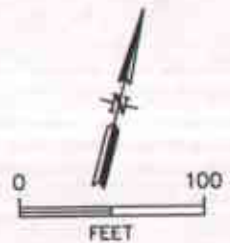
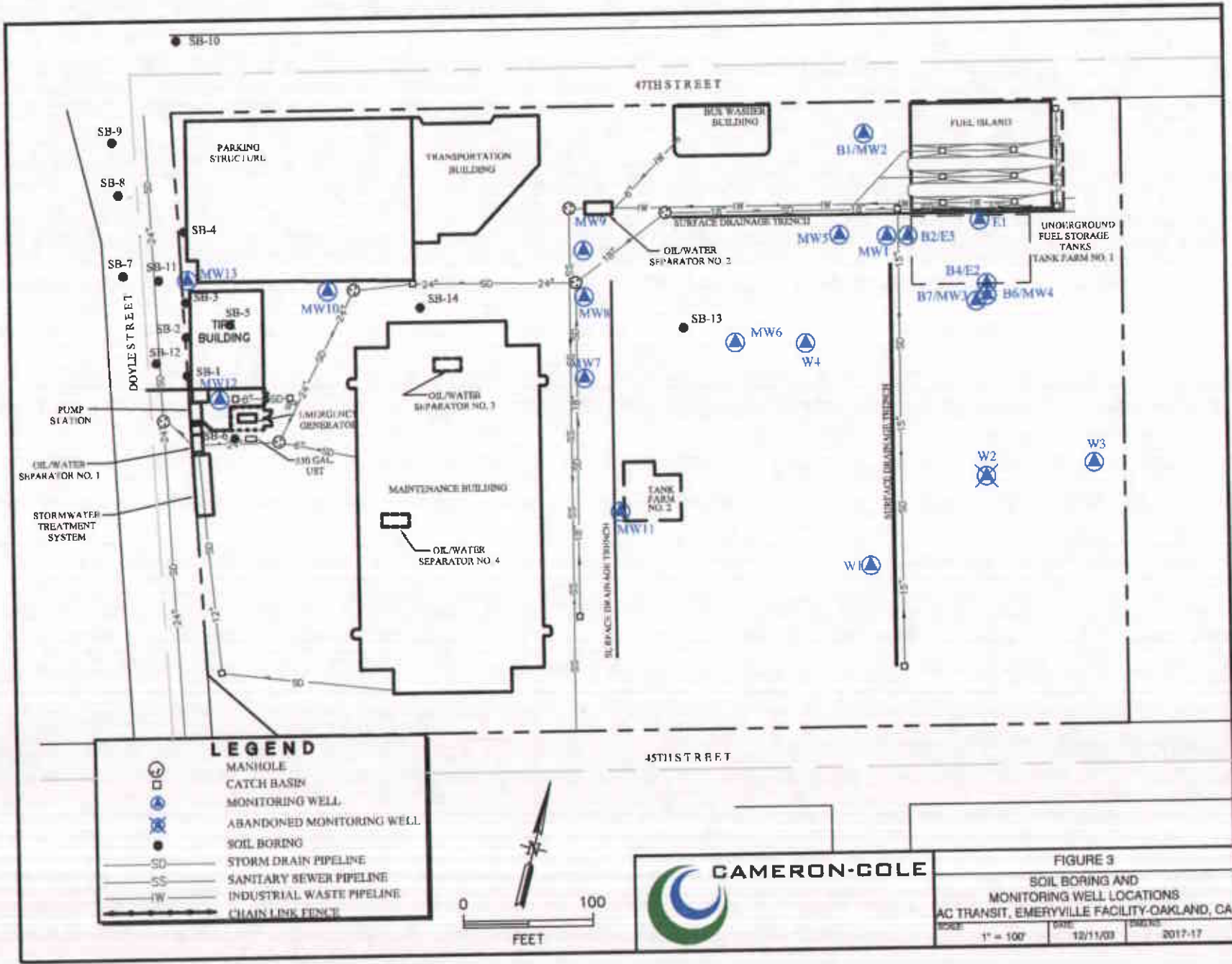


FIGURE 2

BY	DATE
WRB	12/9/03



EMERYVILLE FACILITY - OAKLAND, CALIFORNIA	
AC TRANSIT - POTENTIOMETRIC SURFACE MAP	
NOVEMBER 20, 2003	
SCALE: 1" = 100'	DWG. NO.: 2015-16



LEGEND

	MANHOLE
	CATCH BASIN
	MONITORING WELL
	ABANDONED MONITORING WELL
	SOIL BORING
	STORM DRAIN PIPELINE
	SANITARY SEWER PIPELINE
	INDUSTRIAL WASTE PIPELINE
	CHAIN LINK FENCE

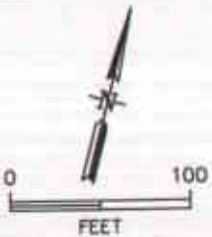
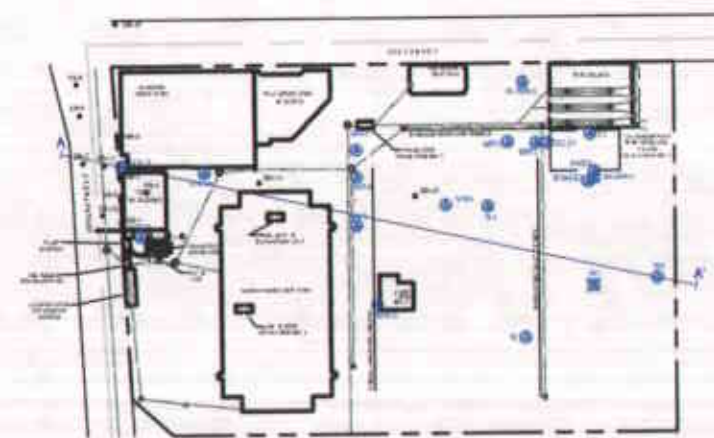
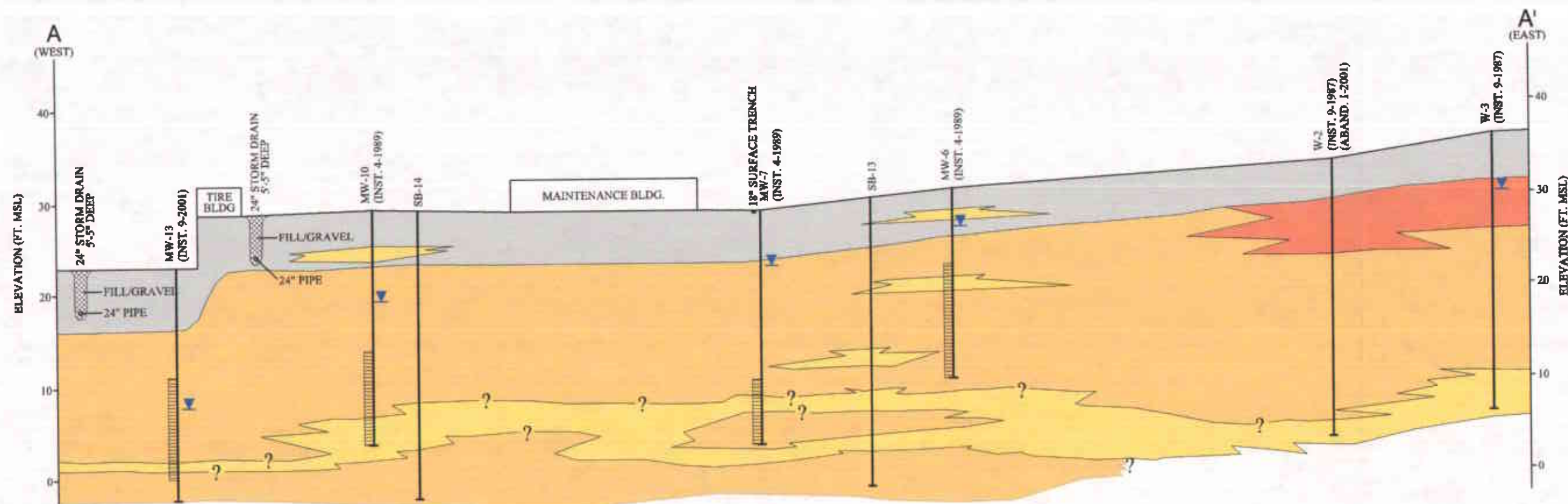


FIGURE 3
SOIL BORING AND MONITORING WELL LOCATIONS
AC TRANSIT, EMERYVILLE FACILITY-OAKLAND, CA

SCALE: 1" = 100'	DATE: 12/11/03	DRAWN BY: 2017-17
------------------	----------------	-------------------



SECTION LOCATION KEY

LEGEND	
	FILL
	CLAY - CL/CH
	SILT - ML
	SAND/GRAVEL - SM, SP, SW, GM, GP
	GROUNDWATER LEVEL (10/20/02)
	MONITORING WELL SCREEN INTERVAL



BY	DATE
WRB	12/12/03



FIGURE 4	
GEOLOGIC CROSS SECTION A - A'	
AC TRANSIT, 1177 47th STREET - EMERYVILLE, CA	
SCALE:	AS NOTED
DWG. NO.:	2015-17

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

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater
						Elevation Corrected from Product Thickness*
						(ft-msl)
MW-1	8/31/1999	32.56	None	3.24	29.32	NA
	11/23/1999		None	4.55	28.01	NA
	3/1/2000		None	3.65	28.91	NA
	5/17/2000		None	4.08	28.48	NA
	8/30/2000		None	5.18	27.38	NA
	12/18/2000		None	4.86	27.7	NA
	3/20/2001		None	4.22	28.34	NA
	6/7/2001		None	4.88	27.68	NA
	9/20/2001		None	4.97	27.59	NA
	12/14/2001		None	3.59	28.97	NA
	2/27/2002		None	4.03	28.53	NA
	5/16/2002		None	4.32	28.24	NA
	9/18/2002		None	4.61	27.95	NA
	10/30/2002		None	4.74	27.82	NA
	2/6/2003		None	4.08	28.48	NA
	5/1/2003		None	3.68	28.88	NA
8/26/2003	None	4.64	27.92	NA		
11/20/2003	None	4.57	27.99	NA		
MW-2	8/31/1999	32.12	None	5.24	26.88	NA
	11/23/1999		None	4.03	28.09	NA
	3/1/2000		None	3.11	29.01	NA
	5/17/2000		None	3.66	28.46	NA
	8/30/2000		None	4.65	27.47	NA
	12/18/2000		None	4.06	28.06	NA
	3/20/2001		None	3.91	28.21	NA
	6/7/2001		None	4.40	27.72	NA
	9/20/2001		None	4.45	27.67	NA
	12/14/2001		None	3.19	28.93	NA
	2/27/2002		None	3.45	28.67	NA
	5/16/2002		None	3.74	28.38	NA
	9/18/2002		None	4.20	27.92	NA
	10/30/2002		None	4.23	27.89	NA
	2/6/2003		None	3.70	28.42	NA
	5/1/2003		None	3.59	28.53	NA
8/26/2003	None	4.24	27.88	NA		
11/20/2003	None	4.35	27.77	NA		
MW-3	8/31/1999	34.06	None	6.15	27.91	NA
	11/23/1999		None	5.78	28.28	NA
	3/1/2000		None	4.82	29.24	NA
	5/17/2000		None	5.29	28.77	NA
	8/30/2000		None	6.20	27.86	NA
	12/18/2000		None	5.65	28.41	NA
	3/20/2001		None	5.18	28.88	NA
	6/7/2001		None	6.01	28.05	NA
	9/20/2001		None	5.9	28.16	NA
	12/14/2001		None	4.66	29.40	NA
	2/27/2002		None	5.00	29.06	NA
	5/16/2002		None	5.21	28.85	NA
	9/18/2002		None	5.61	28.45	NA
	10/30/2002		None	5.72	28.34	NA
	2/6/2003		None	4.97	29.09	NA
	5/1/2003		None	4.89	29.17	NA
8/26/2003	None	5.82	28.24	NA		
11/20/2003	None	5.92	28.14	NA		

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

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater
						Elevation Corrected from Product Thickness*
						(ft-msl)
MW-4	8/31/1999	34.11	None	6.22	27.89	NA
	11/23/1999		None	6.01	28.10	NA
	3/1/2000		None	4.74	29.37	NA
	5/17/2000		None	5.33	28.78	NA
	8/30/2000		None	6.26	27.85	NA
	12/18/2000		None	5.66	28.45	NA
	3/20/2001		None	5.46	28.65	NA
	6/7/2001		None	6.02	28.09	NA
	9/20/2001		None	6.06	28.05	NA
	12/14/2001		None	5.39	28.72	NA
	2/27/2002		None	5.28	28.83	NA
	5/16/2002		None	5.39	28.72	NA
	9/18/2002		None	5.61	28.50	NA
	10/30/2002		None	5.70	28.41	NA
	2/6/2003		None	5.39	28.72	NA
	5/1/2003		None	5.25	28.86	NA
	8/26/2003		None	5.88	28.23	NA
11/20/2003		None	5.84	28.27	NA	
MW-5	8/31/1999	31.70	None	4.51	27.19	NA
	11/23/1999		None	4.00	27.70	NA
	3/1/2000		None	3.31	28.39	NA
	5/17/2000		None	3.59	28.11	NA
	8/30/2000		None	4.53	27.17	NA
	12/18/2000		None	3.97	27.73	NA
	3/20/2001		None	3.68	28.02	NA
	6/7/2001		None	4.37	27.33	NA
	9/20/2001		None	4.46	27.24	NA
	12/14/2001		None	3.23	28.47	NA
	2/27/2002		None	3.44	28.26	NA
	5/16/2002		None	3.68	28.02	NA
	9/18/2002		None	4.04	27.66	NA
	10/30/2002		None	4.21	27.49	NA
	2/6/2003		None	3.61	28.09	NA
	5/1/2003		None	3.15	28.55	NA
	8/26/2003		None	4.00	27.70	NA
11/20/2003		None	4.20	27.50	NA	
MW-6	8/31/1999	31.02	None	4.40	26.62	NA
	11/23/1999		None	3.81	27.21	NA
	3/1/2000		None	2.88	28.14	NA
	5/17/2000		None	3.44	27.58	NA
	8/30/2000		None	4.40	26.62	NA
	12/18/2000		None	3.61	27.41	NA
	3/20/2001		None	3.16	27.86	NA
	6/7/2001		None	4.18	26.84	NA
	9/20/2001		Sheen	4.22	26.80	NA
	12/14/2001		None	3.62	27.40	NA
	2/27/2002		None	2.94	28.08	NA
	5/16/2002		None	3.53	27.49	NA
	9/18/2002		None	3.97	27.05	NA
	10/30/2002		None	3.96	27.06	NA
	2/6/2003		None	2.97	28.05	NA
	5/1/2003		None	3.98	27.04	NA
	8/26/2003		None	3.82	27.20	NA
11/20/2003		None	3.78	27.24	NA	

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

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	D/TW (feet)	Groundwater Elevation (ft-msl)	Groundwater
						Elevation Corrected from Product Thickness*
MW-7	8/31/1999	29.62	None	5.47	24.15	NA
	11/23/1999		None	4.93	24.69	NA
	3/1/2000		None	4.06	25.56	NA
	5/17/2000		None	4.69	24.93	NA
	8/30/2000		None	5.50	24.12	NA
	12/18/2000		None	5.78	23.84	NA
	3/20/2001		None	4.83	24.79	NA
	6/7/2001		None	4.80	24.82	NA
	9/20/2001		None	5.19	24.43	NA
	12/14/2001		None	4.68	24.94	NA
	2/27/2002		None	4.53	25.09	NA
	5/16/2002		None	4.34	25.28	NA
	9/18/2002		None	5.28	24.34	NA
	10/30/2002		None	5.51	24.11	NA
	2/6/2003		None	4.36	25.26	NA
	5/1/2003		None	4.76	24.86	NA
	8/26/2003		None	5.25	24.37	NA
11/20/2003	None	5.26	24.36	NA		
MW-8	8/31/1999	29.43	None	5.35	24.08	NA
	11/23/1999		None	4.75	24.68	NA
	3/1/2000		None	4.48	24.95	NA
	5/17/2000		None	4.78	24.65	NA
	8/30/2000		None	5.02	24.41	NA
	12/18/2000		None	5.23	24.20	NA
	3/20/2001		None	4.70	24.73	NA
	6/7/2001		None	5.13	24.30	NA
	9/20/2001		None	5.68	23.75	NA
	12/14/2001		None	4.26	25.17	NA
	2/27/2002		None	4.18	25.25	NA
	5/16/2002		None	4.58	24.85	NA
	9/18/2002		None	4.96	24.47	NA
	10/30/2002		None	4.99	24.44	NA
	2/6/2003		None	4.41	25.02	NA
	5/1/2003		None	4.29	25.14	NA
	8/26/2003		None	4.58	24.85	NA
11/20/2003	None	4.69	24.74	NA		
MW-9	8/31/1999	29.18	None	4.15	25.03	NA
	11/23/1999		None	3.93	25.25	NA
	3/1/2000		None	3.69	25.49	NA
	5/17/2000		None	3.56	25.62	NA
	8/30/2000		None	4.64	24.54	NA
	12/18/2000		None	4.02	25.16	NA
	3/20/2001		None	3.92	25.26	NA
	6/7/2001		None	4.28	24.90	NA
	9/20/2001		None	5.12	24.06	NA
	12/14/2001		None	3.87	25.31	NA
	2/27/2002		None	4.48	24.70	NA
	5/16/2002		None	5.13	24.05	NA
	9/18/2002		None	4.48	24.70	NA
	10/30/2002		None	3.90	25.28	NA
	2/6/2003		None	3.65	25.53	NA
	5/1/2003		None	4.50	24.68	NA
	8/26/2003		None	4.33	24.85	NA
11/20/2003	None	3.83	25.35	NA		

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

Well	Date	Top of Casing	Product	DTW (feet)	Groundwater	Groundwater
		Elevation	Thickness		Elevation	Elevation Corrected
		(ft-msl)	(feet)		(ft-msl)	from Product
						Thickness*
						(ft-msl)
MW-10	8/31/1999	29.13	None	9.59	19.54	NA
	11/23/1999		None	9.44	19.69	NA
	3/1/2000		None	9.06	20.07	NA
	5/17/2000		None	9.31	19.82	NA
	8/30/2000		None	9.68	19.45	NA
	12/18/2000		None	9.41	19.72	NA
	3/20/2001		None	9.23	19.90	NA
	6/7/2001		None	9.60	19.53	NA
	9/20/2001		None	9.70	19.43	NA
	12/14/2001		None	8.83	20.30	NA
	2/27/2002		None	9.15	19.98	NA
	5/16/2002		None	9.45	19.68	NA
	9/18/2002		None	9.65	19.48	NA
	10/30/2002		None	9.73	19.40	NA
	2/6/2003		None	9.34	19.79	NA
	5/1/2003		None	9.14	19.99	NA
8/26/2003		None	9.69	19.44	NA	
11/20/2003		None	9.62	19.51	NA	
MW-11	9/20/2001	28.93	None	4.41	24.52	NA
	12/14/2001		None	1.82	27.11	NA
	2/27/2002		None	2.39	26.54	NA
	5/16/2002		None	2.98	25.95	NA
	9/18/2002		None	4.00	24.93	NA
	10/30/2002		None	4.14	24.79	NA
	2/6/2003		None	2.59	26.34	NA
	5/1/2003		None	2.26	26.67	NA
	8/26/2003		None	3.79	25.14	NA
	11/20/2003		None	3.66	25.27	NA
	MW-12	9/20/2001	28.68	None	10.41	18.27
12/14/2001			None	9.62	19.06	NA
2/27/2002			None	10.09	18.59	NA
5/16/2002			None	10.04	18.64	NA
9/18/2002			None	10.66	18.02	NA
10/30/2002			None	10.62	18.06	NA
2/6/2003			None	9.97	18.71	NA
5/1/2003			None	9.78	18.90	NA
8/26/2003			None	10.70	17.98	NA
11/20/2003			None	10.53	18.15	NA
MW-13	9/20/2001	22.715	None	8.83	13.89	NA
	12/14/2001		None	7.95	14.77	NA
	2/27/2002		None	7.64	15.08	NA
	5/16/2002		None	8.43	14.29	NA
	9/18/2002		6.86	15.09	7.63	13.11
	10/30/2002		6.04	14.29	8.43	13.26
	2/6/2003		0.09	8.25	14.47	14.54
	5/1/2003		0.24	7.29	15.43	15.62
	8/26/2003		0.39	9.70	13.02	13.33
	11/20/2003		0.85	9.85	12.87	13.55

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

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected from Product Thickness* (ft-msl)
W-1	3/2/2000	33.43	None	4.08	29.35	NA
	5/17/2000		None	5.41	28.02	NA
	8/30/2000		None	6.71	26.72	NA
	12/18/2000		None	5.73	27.70	NA
	3/20/2001		None	5.16	28.27	NA
	6/7/2001		None	6.10	27.33	NA
	9/20/2001		None	6.58	26.85	NA
	12/14/2001		None	4.69	28.74	NA
	2/27/2002		None	4.94	28.49	NA
	5/16/2002		None	5.54	27.89	NA
	9/18/2002		None	6.08	27.35	NA
	10/30/2002		None	6.24	27.19	NA
	2/6/2003		None	5.17	28.26	NA
	5/1/2003		None	4.71	28.72	NA
	8/26/2003		None	6.14	27.29	NA
	11/20/2003		None	6.19	27.24	NA
	W-2		5/17/2000	34.21	None	5.60
8/30/2000		None	7.37		26.84	NA
12/18/2000		None	6.44		27.77	NA
1/23/2001						abandoned
W-3	5/17/2000	37.46	None	6.38	31.08	NA
	8/30/2000		None	8.16	29.30	NA
	12/18/2000		None	7.19	30.27	NA
	3/20/2001		None	5.70	31.76	NA
	6/7/2001		None	7.51	29.95	NA
	9/20/2001		None	7.83	29.63	NA
	12/14/2001		None	4.76	32.70	NA
	2/27/2002		None	5.32	32.14	NA
	5/16/2002		None	6.45	31.01	NA
	9/18/2002		None	7.10	30.36	NA
	10/30/2002		None	7.30	30.16	NA
	2/6/2003		None	5.69	31.77	NA
	5/1/2003		None	4.97	32.49	NA
	8/26/2003		None	7.52	29.94	NA
11/20/2003	None	7.58	29.88	NA		

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

Well	Date	Top of Casing Elevation (ft-msl)	Product Thickness (feet)	DTW (feet)	Groundwater Elevation (ft-msl)	Groundwater Elevation Corrected from Product Thickness* (ft-msl)
W-4	3/2/2000	31.72	None	3.34	28.38	NA
	5/17/2000		None	3.86	27.86	NA
	8/30/2000		None	4.99	26.73	NA
	12/18/2000		None	4.20	27.52	NA
	3/20/2001		None	3.75	27.97	NA
	6/7/2001		None	4.67	27.05	NA
	9/20/2001		None	4.80	26.92	NA
	12/14/2001		None	3.22	28.50	NA
	2/27/2002		None	3.58	28.14	NA
	5/16/2002		None	3.89	27.83	NA
	9/18/2002		None	4.24	27.48	NA
	10/30/2002		None	4.56	27.16	NA
	2/6/2003		None	3.67	28.05	NA
	5/1/2003		None	2.61	29.11	NA
	8/26/2003		None	4.47	27.25	NA
	11/20/2003		None	4.42	27.30	NA

Notes:

* used 0.8 specific gravity of product

ft-msl: feet mean sea level

DTW: Depth to water

NA: not applicable

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

Well	Date	TPH-8015 (diesel)	TPH-8015 (gas)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MCL (ppb)		None	None	1.0	150	700	1750	13	
MW-1	8/31/1999	310	NA	<1.0	2.4	1	1.6	NA	
	11/23/1999	250	NA	<1.0	<1.0	<1.0	<1.0	NA	
	3/1/2000	310	62	<1.0	<1.0	<1.0	<2.0	687	
	5/17/2000	390	63	<1.0	<1.0	<1.0	<2.0	74	
	8/31/2000	180	<50	<1.0	<1.0	<1.0	<2.0	49	
	12/18/2000	310	<50	<1.0	<1.0	<1.0	<2.0	44	
	3/21/2001	240	<50	<1.0	<1.0	<1.0	<2.0	17	
	6/7/2001	540	<50	<1.0	<1.0	<1.0	<2.0	32	
	9/20/2001	290	<50	<1.0	<1.0	<1.0	<2.0	29	
	2/27/2002	<250	<50	<1.0	<1.0	<1.0	<2.0	14	
	9/18/2002	230	<50	<1.0	<1.0	<1.0	<2.0	30	
	2/6/2003	82	<50	<0.5	<0.5	<0.5	<1.0	17	
	8/26/2003	200	<50	<0.5	<0.5	<0.5	<1.0	9.8	
	MW-2	8/31/1999	180	NA	<1.0	<1.0	<1.0	1.2	NA
		11/23/1999	120	NA	<1.0	<1.0	<1.0	<5.0	NA
		3/1/2000	510	<50	<1.0	<1.0	<1.0	<2.0	81
5/17/2000		1,100	<50	<1.0	<1.0	<1.0	<2.0	87	
8/31/2000		620	<50	<1.0	<1.0	<1.0	<2.0	65	
12/19/2000		830	<50	<1.0	<1.0	<1.0	<2.0	70	
3/21/2001		900	<50	<2.0	<2.0	<2.0	<4.0	33	
6/7/2001		810	<50	<1.0	<1.0	<1.0	<2.0	43	
9/20/2001		1,200	<50	<1.0	<1.0	<1.0	<2.0	35	
2/27/2002		<250	<50	<1.0	<1.0	<1.0	<2.0	19	
9/18/2002		180	<50	<1.0	<1.0	<1.0	<2.0	17	
2/6/2003		58	<50	<0.5	<0.5	<0.5	<1.0	18	
8/26/2003		150	<50	<0.5	<0.5	<0.5	<1.0	15	
MW-3	8/31/1999	2,700	NA	<1.0	<1.0	<1.0	<1.0	NA	
	11/23/1999	640	NA	<1.0	<1.0	<1.0	<1.0	NA	
	3/1/2000	<250	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	5/17/2000	620	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	8/31/2000	1,800	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	12/18/2000	NA	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	3/21/2001	1,700	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	6/7/2001	770	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	9/21/2001	260	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	2/27/2002	560	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	9/18/2002	340	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	2/6/2003	<50	<50	<0.5	<0.5	<0.5	<1.0	3.9	
	8/26/2003	5,800	<50	<0.5	<0.5	<0.5	<1.0	4.9	
	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	
	9/18/2002	320,000	2000	74	7.3	22	25	<5.0	
	2/6/2003	4,300	2600	63	8.2	18	15	<1.0	
	8/26/2003	68,000	6500	110	16	44	42	<10	
	MW-7	8/31/1999	1,400	NA	<1.0	2.9	2.3	2.7	NA
		11/23/1999	530	NA	<1.0	<1.0	<1.0	<1.0	NA
3/1/2000		640	860	<1.0	<1.0	<1.0	<2.0	<20	
5/17/2000		430	410	<1.0	<1.0	<1.0	<2.0	9.5	
8/31/2000		950	1100	<1.0	<1.0	<1.0	<2.0	<5.0	
12/18/2000		1,100	820	<1.0	<1.0	<1.0	<2.0	<5.0	
3/20/2001		770	1000	<1.0	1.4	<1.0	<2.0	<5.0	
6/7/2001		1,400	870	<1.0	<1.0	<1.0	<2.0	<5.0	
9/21/2001		940	1000	<1.0	<1.0	<2.0	<5.0	<5.0	
2/27/2002		430	930	<1.0	<1.0	<1.0	<2.0	<5.0	
9/18/2002		440	870	<1.0	<1.0	<1.0	<2.0	<5.0	
2/6/2003		230	890	<0.5	<0.5	<0.5	<1.0	1.6	
8/26/2003		470	590	<0.5	<0.5	<0.5	<1.0	1.5	
MW-8		8/31/1999	230	NA	<1.0	<1.0	1.2	<1.0	NA
		11/23/1999	220	NA	<1.0	<1.0	<1.0	<1.0	NA
	3/1/2000	260	150	<1.0	<1.0	<1.0	<2.0	<5.0	
	5/17/2000	660	310	<1.0	<1.0	<1.0	<2.0	<5.0	
	8/31/2000	460	300	<1.0	<1.0	<1.0	1.4	<5.0	
	12/18/2000	370	230	<1.0	<1.0	<1.0	<2.0	<5.0	
	3/20/2001	1,700	64	<1.0	<1.0	<1.0	<2.0	<5.0	
	6/7/2001	1,300	180	<1.0	<1.0	<1.0	<2.0	<5.0	
MW-9	8/31/1999	2,800	NA	<1.0	<1.0	<1.0	1.1	NA	
	11/23/1999	1,300	NA	<1.0	<1.0	<1.0	<1.0	NA	
	3/1/2000	510	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	5/17/2000	990	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	8/31/2000	1,100	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
	12/18/2000	1,900	<50	<1.0	<1.0	<1.0	<2.0	5.9	
	3/20/2001	1,500	<50	<1.0	<1.0	<1.0	<2.0	5.5	
	6/7/2001	590	<50	<1.0	<1.0	<1.0	<2.0	8.1	
	9/20/2001	790	<50	<1.0	<1.0	<1.0	<2.0	8.5	
	2/27/2002	650	<50	<1.0	<1.0	<1.0	<2.0	9.5	
	9/18/2002	480	<50	<1.0	<1.0	<1.0	<2.0	6.2	
	2/6/2003	54	<50	<0.5	<0.5	<0.5	<1.0	5.5	
8/26/2003	1,300	<50	<0.5	<0.5	<0.5	<1.0	6.6		

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-10	8/31/1999	1,100	NA	<1.0	1.2	2.0	<1.0	NA	
	11/23/1999	1,200	NA	<1.0	<1.0	<1.0	<1.0	NA	
	3/1/2000	1,300	540	<1.0	<1.0	<1.0	<2.0	NA	
	5/17/2000	990	460	<1.0	<1.0	<1.0	<2.0	6.9	
	8/31/2000	840	320	<1.0	<1.0	<1.0	<2.0	25	
	12/18/2000	900	290	<1.0	<1.0	<1.0	<2.0	<9.0	
	3/21/2001	620	220	<1.0	<1.0	<1.0	<2.0	<5.0	
	6/7/2001	1,300	360	<1.0	<1.0	<1.0	<2.0	15	
	9/20/2001	1,000	350	<1.0	<1.0	<1.0	<2.0	44	
	2/27/2002	610	150	<1.0	<1.0	<1.0	<2.0	<5.0	
	9/18/2002	850	240	<1.0	1.2	<1.0	<2.0	20	
	2/6/2003	510	200	<0.5	<0.5	<0.5	<1.0	2.8	
	8/26/2003	1,100	250	<0.5	<0.5	<0.5	<1.0	14	
	MW-11	9/20/2001	460	88	<1.0	<1.0	<1.0	<2.0	<5.0
		12/14/2002	320	<50	<1.0	<1.0	<1.0	<2.0	<5.0
2/27/2002		<50	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
5/16/2002		380	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
9/18/2002		250	<50	<1.0	<1.0	<1.0	<2.0	<5.0	
10/30/2002		260	<50	<0.5	<0.5	<0.5	<1.5	<2.5	
2/6/2003		250	<50	<0.5	<0.5	<0.5	<1.0	<1.0	
5/1/2003		220	<50	<0.5	<0.5	<0.5	<1.0	<1.0	
8/26/2003		300	<50	<0.5	<0.5	<0.5	<1.0	<1.0	
11/20/2003		77	<50	<0.5	<0.5	<0.5	<1.0	<1.0	
MW-12	9/20/2001	540	960	<1.0	<1.0	<2.0	<5.0	11	
	12/14/2002	170	670	<1.0	<1.0	<1.0	<2.0	9.4	
	2/27/2002	350	950	<1.0	<1.0	<1.0	<2.0	11	
	5/16/2002	500	1100	<1.0	<1.0	<1.0	<2.0	6.7	
	9/18/2002	1,600	570	<1.0	<1.0	<1.0	<3.0	7.1	
	10/30/2002	440	420	<0.5	<0.5	<0.5	<1.5	<2.5	
	2/6/2003	190	340	<0.5	<0.5	<0.5	<1.0	6.8	
	5/1/2003	580	950	<2.5	<2.5	3.7	9.0	8.8	
	8/26/2003	110	260	<0.5	<0.5	<0.5	<1.0	11	
	11/20/2003	100	160	<0.5	<0.5	<0.5	<1.0	8.9	
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	5/16/2002	520	150	<1.0	<1.0	<1.0	<2.0	8.7	
	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	
	2/6/2003	990	5300	11	4.7	27	24	<1.0	
	8/26/2003	1,700	5800	7.5	5.4	24	25	<10	

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
W-2	9/18/2002	1,000	5900	11	<22	23	22	<5.0
	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
W-3	12/19/2000	10,000	290	8.8	3.4	8.6	17.4	<5.0
	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
W-4	6/7/2001	1,200	<50	<1.0	<1.0	<1.0	<2.0	<5.0
	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

Table 3
Analytical Results
AC Transit - Emeryville

Soil Boring	Date	Matrix	TPH-d	TPH-ss	TPH-g	TPH-mo	MTBE	B	T	E	X
SB-1	2/18/2003	Water	<50	17,000	<50	<250	NA	NA	NA	NA	NA
SB-2	2/18/2003	Water	<50	1,400	<50	<250	NA	NA	NA	NA	NA
SB-3	2/18/2003	Water	9,500	<50	<50	34,000	NA	NA	NA	NA	NA
SB-6	2/18/2003	Water	<50	<50	630	<250	NA	NA	NA	NA	NA
SB-7	10/02/03	Water	<50	<50	<50	NA	14	<0.5	<0.5	<0.5	<1
SB-8	10/03/03	Water	110,000	84,000	26,000	NA	<250	<125	<125	160	<250
SB-9	10/03/03	Water	11,000	2,000	140	NA	11	<0.5	<0.5	<0.5	<1
SB-10	10/03/03	Water	<60	<60	<50	NA	3.8	<0.5	0.98	<0.5	<0.5
SB-11 4'	10/02/03	Soil	1.6	<1	<2.5	NA	<0.25	<0.025	<0.025	<0.025	<0.05
SB-11 8'	10/02/03	Soil	1.2	<1	<2.5	NA	<0.25	<0.025	<0.025	<0.025	<0.05
SB-12 8'	10/03/03	Soil	37	2.6	5.2	NA	<0.25	<0.025	<0.025	<0.025	<0.05
SB-13	10/02/03	Water	160	120	240	NA	1.7	0.9	<0.5	<0.5	1.9
SB-14	10/02/03	Water	110,000	85,000	42,000	NA	54	35	76	200	200

Notes:

All concentrations in micrograms per liter (ug/L)

NA = not analyzed

TPH-ss = total petroleum hydrocarbon as stoddard solvent

TPH-d = total petroleum hydrocarbon as diesel

TPH-mo = total petroleum hydrocarbon as motor oil

TPH-g = total petroleum hydrocarbon as gasoline

B = benzene

T = toluene

E = ethylbenzene

X = xylenes

APPENDIX A

FIELD DATA SHEETS

AC TRANSIT - EMERYVILLE
FOURTH QUARTER 2003

FIELD PERSONNEL: *AW-MP*

WELL OR LOCATION	DATE	TIME	MEASUREMENT	CODE	COMMENTS
MW-1	11/20/03	0911	4.57	SWL	
MW-2	11/20/03	0915	4.35		
MW-3	11/20/03	0920	5.92		
MW-4	11/20/03	0918	5.84		
MW-5	11/20/03	0913	4.20		
MW-6	11/20/03	0925	3.78	OIL	
MW-6	11/20/03	0925	3.78	OWI	OL: 3.78
MW-7	11/20/03	0904	5.26	SWL	
MW-8	11/20/03	0900	4.69		
MW-9	11/20/03	0902	3.83		
MW-10	11/20/03	0927	9.62		
MW-11	11/20/03	0906	3.66		
MW-12	11/20/03	0928	10.53		
MW-13	11/20/03	1024	9.00	OIL	bailed off product
MW-13	11/20/03	1024	9.85	OWI	
W-1	11/20/03	0909	6.19	SWL	
W-3	11/20/03	1020	7.58		
W-4	11/20/03	0922 0909	6.19 4.42		

SWL - Static Water Level

OIL - Oil Level

OWI - Oil/Water Interface

MTD - Measured Total Depth

Well ID: MW-11

Project Name: AE Emeryville, AC Transit Project Number: 2016
Casing Diameter (in): 2" Sample Date: 11/20/03
Total Well Depth (ft): 17.40 Sample ID: MW-11
Depth to Water (ft) before purging: 3.67

Development Method:

NA Bailer: NA Teflon NA Stainless Steel NA PVC NA ABS Plastic

NA Pump: NA Dedicated Submersible Pump NA Bladder Pump
NA Non-Dedicated Submersible Pump

Time	pH	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft)	Cum. Vol. (gal)	Pump Rate (GPM)
1002	7.79	575	25.2	3.71	2.0	1.0
1004	7.68	571	25.0	3.70	4.0	↓
1006	7.65	578	24.8	3.70	6.0	↓
				Total gal.:	7.0	

Water Volume to be Purged (gal):

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

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

$(17.40 - 3.67) (13.73 \times 0.165) = 2.27 \times 3 = 6.80$

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: NA Teflon NA Stainless Steel NA PVC NA ABS Plastic

NA Pump: NA Dedicated Submersible Pump NA Bladder Pump
NA Non-Dedicated Submersible Pump

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

Parameter Collected: BOD TPHgas TPHdiesel

Sample Appearance

NA OVA Reading (ppm)
NA Suspended Solids (describe):

Decontamination Performed:

washed/rinsed sonder, meters

cent pump used to purge
disposable bailer to sample

Comments / Calculations:

pump start: 1000
pump stop: 1007
sample time: 1010

DO: 0.51 mg/L
Fe: 0.91 mg/L
ORP: 60 mv

11/20/03

11/20/03

Well ID: MW-12

Project Name: Emenville, Ac Transit
Casing Diameter (in): 2"
Total Well Depth (ft): 29.88
Depth to Water (ft) before purging: 10.53

Project Number: 2016
Sample Date: 11/20/08
Sample 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	Conductivity (umho/cm)	Temperature (Celsius)	Water Level (to 0.01 ft.)	Cum. Vol. (gal)	Pump Rate (GPM)
0934	7.21	608	23.9	12.65	3.0	0.77
0937	7.12	596	23.7	13.91	6.0	↓
0941	7.10	599	23.8	14.06	9.0	↓
				Total gal: 10 gal.		

Water Volume to be Purged (gal):

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

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

$$(29.88 - 10.53)(19.35 \times 0.165) = 3.19 \times 3 = 9.58$$

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:

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 TPH diesel

Sample Appearance

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

Decontamination Performed:

was washed/rinsed sounder, meter

trip blank collected @ 0920

recent pump used to purge
disposable bailer to sample

Comments / Calculations:

pump start: 0930
pump stop: 0943
sample time: 0945

DO: 0.87 mg/L
Fe: 1.23 mg/L
orp: 50 mv

APPENDIX B

CERTIFIED ANALYTICAL REPORTS

Entech Analytical Labs, Inc.

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

December 01, 2003

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

Order: 36681
Project Name: ACTransit
Project Number: 2016
Project Notes:

Date Collected: 11/20/2003
Date Received: 11/20/2003
P.O. Number:

On November 20, 2003, samples were received under documented chain of custody. Results for the following analyses are attached:

<u>Matrix</u>	<u>Test</u>	<u>Method</u>
Liquid	EPA 8021B by EPA 8260B	EPA 8260B
	TPH as Diesel	EPA 8015 MOD. (Extractable)
	TPH as Gasoline	EPA 8015 MOD. (Purgeable)

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

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

Sincerely,



Patti Sandrock
QA/QC Manager

Entech Analytical Labs, Inc.

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

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

Date: 12/01/03
 Date Received: 11/20/2003
 Project Name: ACTransit
 Project Number: 2016
 P.O. Number:
 Sampled By: Andrew Wyckoff

Certified Analytical Report

Order ID: 36681

Lab Sample ID: 36681-001

Client Sample ID: Trip Blank

Sample Time: 9:20 AM

Sample Date: 11/20/2003

Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	11/26/2003	WMS110386	EPA 8260B
Ethyl Benzene	ND		1	0.5	0.5	µg/L	11/26/2003	WMS110386	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	11/26/2003	WMS110386	EPA 8260B
Toluene	ND		1	0.5	0.5	µg/L	11/26/2003	WMS110386	EPA 8260B
Xylenes, Total	ND		1	1	1	µg/L	11/26/2003	WMS110386	EPA 8260B
Surrogate			Surrogate Recovery			Control Limits (%)			
4-Bromofluorobenzene			100.0			68 - 118			
Dibromofluoromethane			124.0			57 - 156			
Toluene-d8			120.0			77 - 150			

DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

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

Date: 12/01/03
Date Received: 11/20/2003
Project Name: ACTransit
Project Number: 2016
P.O. Number:
Sampled By: Andrew Wyckoff

Certified Analytical Report

Order ID: 36681

Lab Sample ID: 36681-002

Client Sample ID: MW-12

Sample Time: 9:45 AM

Sample Date: 11/20/2003

Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	11/21/2003	WMS110375	EPA 8260B
Ethyl Benzene	ND		1	0.5	0.5	µg/L	11/21/2003	WMS110375	EPA 8260B
Methyl-t-butyl Ether	8.9		1	1	1	µg/L	11/21/2003	WMS110375	EPA 8260B
Toluene	ND		1	0.5	0.5	µg/L	11/21/2003	WMS110375	EPA 8260B
Xylenes, Total	ND		1	1	1	µg/L	11/21/2003	WMS110375	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	122.0	68 - 118
Dibromofluoromethane	107.0	57 - 156
Toluene-d8	119.0	77 - 150

Comment: Surrogate outside of control limit due to matrix interference.

DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

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

Date: 12/01/03
Date Received: 11/20/2003
Project Name: ACTransit
Project Number: 2016
P.O. Number:
Sampled By: Andrew Wyckoff

Certified Analytical Report

Order ID: 36681

Lab Sample ID: 36681-003

Client Sample ID: MW-11

Sample Time: 10:10 AM

Sample Date: 11/20/2003

Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	11/21/2003	WMS110375	EPA 8260B
Ethyl Benzene	ND		1	0.5	0.5	µg/L	11/21/2003	WMS110375	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	11/21/2003	WMS110375	EPA 8260B
Toluene	ND		1	0.5	0.5	µg/L	11/21/2003	WMS110375	EPA 8260B
Xylenes, Total	ND		1	1	1	µg/L	11/21/2003	WMS110375	EPA 8260B
	Surrogate			Surrogate Recovery			Control Limits (%)		
	4-Bromofluorobenzene			100.0			68 - 118		
	Dibromofluoromethane			128.0			57 - 156		
	Toluene-d8			124.0			77 - 150		

DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

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

Date: 11/24/03
 Date Received: 11/20/03
 Project Name: ACTransit
 Project Number: 2016
 P.O. Number:
 Sampled By: Andrew Wyckoff

Certified Analytical Report

Order ID: 36681 Lab Sample ID: 36681-002 Client Sample ID: MW-12
 Sample Time: 9:45 AM Sample Date: 11/20/03 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	160	x	1	50	50	µg/L	N/A	11/21/03	WGC42998	EPA 8015 MOD. (Purgeable)
							Surrogate	Surrogate Recovery		Control Limits (%)
							4-Bromofluorobenzene	187.5		65 - 135
							aaa-Trifluorotoluene	107.2		65 - 135

Comment: Reported TPH as Gasoline value contains high boiling compounds in the TPH as Gasoline quantitation range. High surrogate recovery of 4-BFB due to matrix interference, see TFT result.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

11/25/03

11/25/03
 Analyst Date Supervisor Date

Entech Analytical Labs, Inc.

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

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

Date: 11/24/03
Date Received: 11/20/03
Project Name: ACTransit
Project Number: 2016
P.O. Number:
Sampled By: Andrew Wyckoff

Certified Analytical Report

Order ID: 36681 Lab Sample ID: 36681-003 Client Sample ID: MW-11
Sample Time: 10:10 AM Sample Date: 11/20/03 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	11/21/03	WGC42998	EPA 8015 MOD. (Purgeable)
							Surrogate	Surrogate Recovery		Control Limits (%)
							4-Bromofluorobenzene	99.0		65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst 11/25/03 _____ 11/28/03
Date Supervisor Date

Entech Analytical Labs, Inc.

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

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

Date: 12/01/03
Date Received: 11/20/2003
Project Name: ACTransit
Project Number: 2016
P.O. Number:
Sampled By: Andrew Wyckoff

Certified Analytical Report

Order ID: 36681	Lab Sample ID: 36681-002	Client Sample ID: MW-12								
Sample Time: 9:45 AM	Sample Date: 11/20/2003	Matrix: Liquid								
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	100	x	1	50	50	µg/L	11/21/2003	11/22/2003	DW4459A	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl	Surrogate Recovery 56.0		Control Limits (%) 21 - 142	
Comment:	Reported TPH-Diesel value is the result of overlapping Hydraulic Oil into the Diesel quantitation range.									

Order ID: 36681	Lab Sample ID: 36681-003	Client Sample ID: MW-11								
Sample Time: 10:10 AM	Sample Date: 11/20/2003	Matrix: Liquid								
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	77	x	1	50	50	µg/L	11/21/2003	11/22/2003	DW4459A	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl	Surrogate Recovery 92.0		Control Limits (%) 21 - 142	
Comment:	Reported TPH-Diesel value is the result of overlapping Hydraulic Oil into the Diesel quantitation range.									

DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

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

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

STANDARD LAB QUALIFIERS (FLAGS)

All Entech lab reports now reference standard lab qualifiers. These qualifiers are noted in the adjacent column to the analytical result and are adapted from the U.S. EPA CLP program. The current qualifier list is as follows:

Qualifier (Flag)	Description
U	Compound was analyzed for but not detected
J	Estimated value for tentatively identified compounds or if result is below PQL but above MDL
N	Presumptive evidence of a compound (for Tentatively Identified Compounds)
B	Analyte is found in the associated Method Blank
E	Compounds whose concentrations exceed the upper level of the calibration range
D	Multiple dilutions reported for analysis; discrepancies between analytes may be due to dilution
X	Results within quantitation range; chromatographic pattern not typical of fuel
Y	PQL is reported below MDL but verified against a standard analyzed at the client requested reporting limit of 0.5 ppb
C	Reported results affected by contaminated reagent materials. See narrative for further explanation

Entech Analytical Labs, Inc.

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

Quality Control Results Summary

QC Batch #: DW4459A
Matrix: Liquid

Units: $\mu\text{g/L}$
Date Analyzed: 11/21/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Diesel											
TPH as Diesel	EPA 8015 M	ND		1000		914.61	LCS	91.5			51.7 - 126.0
	Surrogate			Surrogate Recovery				Control Limits (%)			
	o-Terphenyl			103.0				21 - 142			
Test: TPH as Diesel											
TPH as Diesel	EPA 8015 M	ND		1000		972.21	LCSD	97.2	6.11	25.00	51.7 - 126.0
	Surrogate			Surrogate Recovery				Control Limits (%)			
	o-Terphenyl			105.0				21 - 142			

Entech Analytical Labs, Inc.

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

Quality Control Results Summary

QC Batch #: WGC42998
Matrix: Liquid

Units: $\mu\text{g/L}$
Date Analyzed: 11/21/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		269.55	LCS	107.8			65.0 - 135.0
	Surrogate			Surrogate Recovery		Control Limits (%)					
	4-Bromofluorobenzene			84.2		65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		264.54	LCSD	105.8	1.88	25.00	65.0 - 135.0
	Surrogate			Surrogate Recovery		Control Limits (%)					
	4-Bromofluorobenzene			84.3		65 - 135					

Entech Analytical Labs, Inc.

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

Quality Control Results Summary

QC Batch #: WMS110375
Matrix: Liquid

Units: µg/L
Date Analyzed: 11/21/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: EPA 8260B											
1,1-Dichloroethene	EPA 8260B	ND		20		13.8	LCS	69.0			60.0 - 132.0
Benzene	EPA 8260B	ND		20		20.3	LCS	101.5			77.0 - 154.0
Chlorobenzene	EPA 8260B	ND		20		17.9	LCS	89.5			66.0 - 141.0
Methyl-t-butyl Ether	EPA 8260B	ND		20		13.9	LCS	69.5			58.0 - 127.0
Toluene	EPA 8260B	ND		20		19.4	LCS	97.0			47.0 - 137.0
Trichloroethene	EPA 8260B	ND		20		17.9	LCS	89.5			57.0 - 159.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	98.2	68 - 118
Dibromofluoromethane	71.2	57 - 156
Toluene-d8	100.0	77 - 150

Test: EPA 8260B											
1,1-Dichloroethene	EPA 8260B	ND		20		13.9	LCSD	69.5	0.72	25.00	60.0 - 132.0
Benzene	EPA 8260B	ND		20		20.7	LCSD	103.5	1.95	25.00	77.0 - 154.0
Chlorobenzene	EPA 8260B	ND		20		18.7	LCSD	93.5	4.37	25.00	66.0 - 141.0
Methyl-t-butyl Ether	EPA 8260B	ND		20		13.8	LCSD	69.0	0.72	25.00	58.0 - 127.0
Toluene	EPA 8260B	ND		20		19.8	LCSD	99.0	2.04	25.00	47.0 - 137.0
Trichloroethene	EPA 8260B	ND		20		18.	LCSD	90.0	0.56	25.00	57.0 - 159.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	96.4	68 - 118
Dibromofluoromethane	69.9	57 - 156
Toluene-d8	100.0	77 - 150

Entech Analytical Labs, Inc.

3334 Victor Court
Santa Clara, CA 95054

(408) 588-0200
(408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to: Brad Wright	Phone No.: (510) 337-8464	Purchase Order No (Reqd.):	Send Invoice to (if Different)	Phone
Company Name: Cameron-Cole	Fax No.: (510) 337-3994	Project Number: 2016	Company	
Mailing Address: 101 W. Atlantic Ave Bldg #90	email:	Project Name: ACTransit	Billing Address (if Different)	
City: Alameda	State: CA	Zip: 94501	Project Location: Emeryville	City: State: Zip:

Sampler:	Field Org. Code:	Turn Around Time	
Global ID:		<input type="checkbox"/> Same Day	<input type="checkbox"/> 1 Day
		<input type="checkbox"/> 2 Day	<input type="checkbox"/> 3 Day
		<input type="checkbox"/> 4 Day	<input checked="" type="checkbox"/> 5 Day
		<input type="checkbox"/> Standard (10 Day)	

Order ID: 36681	Sampling	Matrix H₂O	Composite	Grab	Containers	Preservative HCl	<input type="checkbox"/> Volatile Organics by GCMS: 824 <input type="checkbox"/> 8210 by 8230 <input type="checkbox"/> 82308 <input type="checkbox"/> 82309 <input type="checkbox"/> 82308 <input type="checkbox"/> Fuel Organics by 8230 <input type="checkbox"/> 82308 <input type="checkbox"/> 82309 <input type="checkbox"/> 82308 <input type="checkbox"/> Pesticides-8081 <input type="checkbox"/> PCBs - 8082 <input type="checkbox"/> 8021 BTEX / MTBE <input type="checkbox"/> TPH as Gas/BTEX <input type="checkbox"/> <input type="checkbox"/> TPH as Gas/BTEX/MTBE <input type="checkbox"/> <input type="checkbox"/> Base/Neutralized Organics <input type="checkbox"/> <input type="checkbox"/> 8270 <input type="checkbox"/> 8270-SIM <input type="checkbox"/> PVA <input type="checkbox"/> <input type="checkbox"/> Fuel Scan Extractable <input type="checkbox"/> Purgeable <input type="checkbox"/> <input type="checkbox"/> Diesel <input type="checkbox"/> w/ Signal Standard Cleanup <input type="checkbox"/> <input type="checkbox"/> Motor Oil U <input type="checkbox"/> w/ Signal Column Cleanup <input type="checkbox"/> <input type="checkbox"/> pH <input type="checkbox"/> CN <input type="checkbox"/> TPH <input type="checkbox"/> Oil & Grease <input type="checkbox"/> TPH gas TPH diesel <input type="checkbox"/> Metals - Circle Below <input type="checkbox"/> Total <input type="checkbox"/> Dissolved <input type="checkbox"/> <input type="checkbox"/> STC <input type="checkbox"/> TLC									
------------------------	----------	------------------------------	-----------	------	------------	-------------------------	--	--	--	--	--	--	--	--	--	--

Client ID:	Field PT	Lab. No.	Date	Time	Matrix H₂O	Composite	Grab	Containers	Preservative HCl	Volatile Organics by GCMS: 824 <input type="checkbox"/> 8210 by 8230 <input type="checkbox"/> 82308 <input type="checkbox"/> 82309 <input type="checkbox"/> 82308	Fuel Organics by 8230 <input type="checkbox"/> 82308 <input type="checkbox"/> 82309 <input type="checkbox"/> 82308	Pesticides-8081 <input type="checkbox"/> PCBs - 8082 <input type="checkbox"/>	8021 BTEX / MTBE	TPH as Gas/BTEX <input type="checkbox"/>	TPH as Gas/BTEX/MTBE <input type="checkbox"/>	Base/Neutralized Organics <input type="checkbox"/>	8270 <input type="checkbox"/> 8270-SIM <input type="checkbox"/> PVA <input type="checkbox"/>	Fuel Scan Extractable <input type="checkbox"/> Purgeable <input type="checkbox"/>	Diesel <input type="checkbox"/> w/ Signal Standard Cleanup <input type="checkbox"/>	Motor Oil U <input type="checkbox"/> w/ Signal Column Cleanup <input type="checkbox"/>	pH <input type="checkbox"/> CN	TPH <input type="checkbox"/> Oil & Grease <input type="checkbox"/>	TPH gas	TPH diesel	Metals - Circle Below	Total <input type="checkbox"/> Dissolved <input type="checkbox"/>	STC <input type="checkbox"/> TLC <input type="checkbox"/>	Remarks				
Trip Blank		-001	11/20/03	0920	X			3	X																							
MW-12		-002		0945				3	X																							
								3	X																							
								3	X																							
MW-11		-003		1010				3	X																							
								3	X																							

Relinquished by: <i>[Signature]</i>	Received by: Balli	Date: 11-20-03	Time: 4:30	Special Instructions or Comments
Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Date: 11-20-03	Time: 7:02	
Relinquished by:	Received by:	Date:	Time:	
Relinquished by:	Received by:	Date:	Time:	

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

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

Entech Analytical Labs, Inc.

RECEIVED OCT 27 2003

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

October 17, 2003

Brad Wright

Cameron-Cole

101 W. Atlantic Ave., Bldg#90

Alameda, CA 94501

Order: 36054

Date Collected: 10/2/2003

Project Name: AC Transit Hyd. Oil

Date Received: 10/3/2003

Project Number: 2017

P.O. Number: 2017

Project Notes:

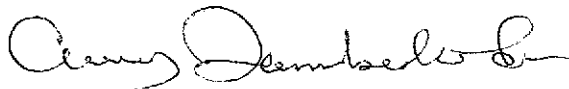
On October 03, 2003, samples were received under documented chain of custody. Results for the following analyses are attached:

<u>Matrix</u>	<u>Test</u>	<u>Method</u>
Liquid	Gas/BTEX/MTBE	EPA 8015 MOD. (Purgeable)
		EPA 8020
	PDF	PDF
	TPH as Diesel	EPA 8015 MOD. (Extractable)
Solid	TPH as Stoddard Solvent	EPA 8015 MOD. (Extractable)
	Gas/BTEX/MTBE	EPA 8015 MOD. (Purgeable)
		EPA 8020
	TPH as Diesel	EPA 8015 MOD. (Extractable)
	TPH as Stoddard Solvent	EPA 8015 MOD. (Extractable)

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

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

Sincerely,



Patti Sandrock
QA/QC Manager

Entech Analytical Labs, Inc.

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

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

Date: 10/17/03
Date Received: 10/3/2003
Project Name: AC Transit Hyd. Oil
Project Number: 2017
P.O. Number: 2017
Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-001 Client Sample ID: SB-7
Sample Time: 11:30 AM Sample Date: 10/2/2003 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	ND		1	50	50	µg/L	10/3/2003	10/7/2003	DW4430B	EPA 8015 MOD. (Extractable)
					Surrogate o-Terphenyl			Surrogate Recovery 82.0		Control Limits (%) 21 - 142

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	ND		1	50	50	µg/L	10/3/2003	10/7/2003	DW4430B	EPA 8015 MOD. (Extractable)
					Surrogate o-Terphenyl			Surrogate Recovery 82.0		Control Limits (%) 32 - 145

Order ID: 36054 Lab Sample ID: 36054-002 Client Sample ID: SB-14
Sample Time: 1:30 PM Sample Date: 10/2/2003 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	110000	x	100	83.3	8330	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
					Surrogate o-Terphenyl			Surrogate Recovery NR		Control Limits (%) 21 - 142

Comment: Reported TPH as Diesel value is a result of overlapping Stoddard into the Diesel quantitation range. Reporting limits increased due to limited sample volume.

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

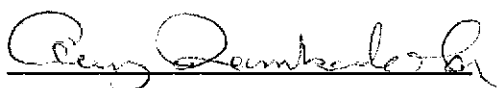
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	85000		100	83.3	8330	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
					Surrogate o-Terphenyl			Surrogate Recovery NR		Control Limits (%) 32 - 145

Comment: Reporting limits increased due to limited sample volume.

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

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

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



Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

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

Date: 10/17/03
Date Received: 10/3/2003
Project Name: AC Transit Hyd. Oil
Project Number: 2017
P.O. Number: 2017
Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-003 Client Sample ID: SB-13
Sample Time: 10:40 AM Sample Date: 10/2/2003 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	160	x	1	69	69	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 62.0		Control Limits (%) 21 - 142

Comment: Not a TPH as Diesel pattern; Value due to overlapping Motor Oil and an unknown hydrocarbon (C8 - C14), in the Diesel quantitation range. Reporting limits increased due to limited sample volume.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	120	x	1	69	69	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 62.0		Control Limits (%) 32 - 145

Comment: Not a TPH as Stoddard pattern; Value due to an unknown hydrocarbon (C8 - C14), in the Stoddard quantitation range. Reporting limits increased due to limited sample volume.

Order ID: 36054 Lab Sample ID: 36054-004 Client Sample ID: SB-11 4'
Sample Time: 9:20 AM Sample Date: 10/2/2003 Matrix: Solid

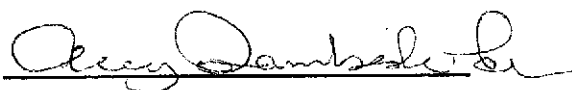
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	1.6	x	1	1	1	mg/Kg	10/3/2003	10/13/2003	DS4316A	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 85.0		Control Limits (%) 40 - 128

Comment: Reported TPH as Diesel value is a result of overlapping Motor Oil into the Diesel quantitation range.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	ND		1	1	1	mg/Kg	10/3/2003	10/13/2003	DS4316A	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 85.0		Control Limits (%) 40 - 128

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

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



Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

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

Date: 10/17/03
Date Received: 10/3/2003
Project Name: AC Transit Hyd. Oil
Project Number: 2017
P.O. Number: 2017
Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-005 Client Sample ID: SB-11 8'
Sample Time: 9:20 AM Sample Date: 10/2/2003 Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	1.2	x	1	1	1	mg/Kg	10/3/2003	10/13/2003	DS4316A	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 85.0		Control Limits (%) 40 - 128

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	ND		1	1	1	mg/Kg	10/3/2003	10/13/2003	DS4316A	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 85.0		Control Limits (%) 40 - 128

Order ID: 36054 Lab Sample ID: 36054-006 Client Sample ID: SB-12
Sample Time: 8:10 AM Sample Date: 10/3/2003 Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	37		1	1	1	mg/Kg	10/3/2003	10/13/2003	DS4316A	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 66.0		Control Limits (%) 40 - 128

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	2.6	x	1	1	1	mg/Kg	10/3/2003	10/13/2003	DS4316A	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 66.0		Control Limits (%) 40 - 128

Comment: Reported TPH as Stoddard value is a result of overlapping Diesel into the Stoddard quantitation range.

DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

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



Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

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

Date: 10/17/03
Date Received: 10/3/2003
Project Name: AC Transit Hyd. Oil
Project Number: 2017
P.O. Number: 2017
Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-007 Client Sample ID: SB-8
Sample Time: 8:50 AM Sample Date: 10/3/2003 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	110000	x	50	66.66	3333	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 116.0		Control Limits (%) 21 - 142
Comment:	Not a TPH as Diesel pattern; Value due to an unknown hydrocarbon (C8 - C26), in the Diesel quantitation range. Reporting limits increased due to limited sample volume.									

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	84000	x	50	66.66	3333	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
						Surrogate o-Terphenyl		Surrogate Recovery 116.0		Control Limits (%) 32 - 145
Comment:	Not a TPH as Stoddard pattern; Value due to an unknown hydrocarbon (C8 - C26), in the Stoddard quantitation range. Reporting limits increased due to limited sample volume.									

DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

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



Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

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

Date: 10/17/03
Date Received: 10/3/2003
Project Name: AC Transit Hyd. Oil
Project Number: 2017
P.O. Number: 2017
Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-008 Client Sample ID: SB-9
Sample Time: 10:05 AM Sample Date: 10/3/2003 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	11000		10	71.4	714	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
					Surrogate o-Terphenyl			Surrogate Recovery 75.0		Control Limits (%) 21 - 142

Comment: Reporting limits increased due to limited sample volume.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	2000	x	10	71.4	714	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
					Surrogate o-Terphenyl			Surrogate Recovery 75.0		Control Limits (%) 32 - 145

Comment: Reported TPH as Diesel value is a result of overlapping Diesel into the Stoddard quantitation range. Reporting limits increased due to limited sample volume.

Order ID: 36054 Lab Sample ID: 36054-009 Client Sample ID: SB-10
Sample Time: 11:30 AM Sample Date: 10/3/2003 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Diesel	ND		1	60	60	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
					Surrogate o-Terphenyl			Surrogate Recovery 63.0		Control Limits (%) 21 - 142

Comment: Reporting limits increased due to limited sample volume.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Stoddard Solvent	ND		1	60	60	µg/L	10/3/2003	10/13/2003	DW4430B	EPA 8015 MOD. (Extractable)
					Surrogate o-Terphenyl			Surrogate Recovery 63.0		Control Limits (%) 32 - 145

Comment: Reporting limits increased due to limited sample volume.

DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

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


Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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

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

Date: 10/7/03
 Date Received: 10/3/03
 Project Name: AC Transit Hyd. Oil
 Project Number: 2017
 P.O. Number: 2017
 Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-001 Client Sample ID: SB-7
 Sample Time: 11:30 AM Sample Date: 10/2/03 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Xylenes, Total	ND		1	1	1	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							97.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	14		1	1	1	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							97.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	10/6/03	WGC42947B	EPA 8015 MOD. (Purgeable)
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							97.0		65 - 135	

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

_____ 10/7/03 _____ 10/7/03
 Analyst Date Supervisor Date

Entech Analytical Labs, Inc.

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

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

Date: 10/7/03
 Date Received: 10/3/03
 Project Name: AC Transit Hyd. Oil
 Project Number: 2017
 P.O. Number: 2017
 Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-002 Client Sample ID: SB-14
 Sample Time: 1:30 PM Sample Date: 10/2/03 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	35		50	0.5	25	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Toluene	76		50	0.5	25	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Ethyl Benzene	200		50	0.5	25	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Xylenes, Total	200		50	1	50	µg/L	N/A	10/6/03	WGC42947B	EPA 8020

Surrogate Surrogate Recovery Control Limits (%)
 4-Bromofluorobenzene 88.1 65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	54		50	1	50	µg/L	N/A	10/6/03	WGC42947B	EPA 8020

Surrogate Surrogate Recovery Control Limits (%)
 4-Bromofluorobenzene 88.1 65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	42000	x	50	50	2500	µg/L	N/A	10/6/03	WGC42947B	EPA 8015 MOD. (Purgeable)

Surrogate Surrogate Recovery Control Limits (%)
 4-Bromofluorobenzene NR 65 - 135
 aaa-Trifluorotoluene 112.1 65 - 135

Comment: TPH as Gasoline value contains heavy hydrocarbon compounds in the TPH as Gasoline quantitation range. High surrogate recovery of 4-BFB due to matrix interference, see TFT result.

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

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

Analyst: JL Date: 10/7/03 Supervisor: WLC Date: 10/7/03

Entech Analytical Labs, Inc.

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

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

Date: 10/7/03
 Date Received: 10/3/03
 Project Name: AC Transit Hyd. Oil
 Project Number: 2017
 P.O. Number: 2017
 Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-003 Client Sample ID: SB-13
 Sample Time: 10:40 AM Sample Date: 10/2/03 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	0.90		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Xylenes, Total	1.9		1	1	1	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							131.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	1.7		1	1	1	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							131.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	240	x	1	50	50	µg/L	N/A	10/6/03	WGC42947B	EPA 8015 MOD. (Purgeable)
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							151.0		65 - 135	
aaa-Trifluorotoluene							100.7		65 - 135	

Comment: TPH as Gasoline value contains heavy hydrocarbon compounds in the TPH as Gasoline quantitation range. High surrogate recovery of 4-BFB due to matrix interference, see TFT result.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst: Jc Date: 10/7/03 Supervisor: Jc Date: 10/7/03

Entech Analytical Labs, Inc.

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

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

Date: 10/7/03
 Date Received: 10/3/03
 Project Name: AC Transit Hyd. Oil
 Project Number: 2017
 P.O. Number: 2017
 Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-004 Client Sample ID: SB-11 4'
 Sample Time: 9:20 AM Sample Date: 10/2/03 Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Toluene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Ethyl Benzene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Xylenes, Total	ND		1	0.05	0.05	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							108.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.25	0.25	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							108.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	2.5	2.5	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8015 MOD. (Purgeable)
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							85.7		65 - 135	

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst: MIL Date: 10/16/03 Supervisor: MCS Date: 10/18/03

Entech Analytical Labs, Inc.

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

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

Date: 10/7/03
Date Received: 10/3/03
Project Name: AC Transit Hyd. Oil
Project Number: 2017
P.O. Number: 2017
Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-005 Client Sample ID: SB-11 8'
Sample Time: 9:20 AM Sample Date: 10/2/03 Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Toluene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Ethyl Benzene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Xylenes, Total	ND		1	0.05	0.05	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							93.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.25	0.25	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							93.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	2.5	2.5	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8015 MOD. (Purgeable)
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							87.2		65 - 135	

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst: WLR Date: 10/06/03 Supervisor: WLR Date: 10/08/03

Entech Analytical Labs, Inc.

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

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

Date: 10/7/03
 Date Received: 10/3/03
 Project Name: AC Transit Hyd. Oil
 Project Number: 2017
 P.O. Number: 2017
 Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-006 Client Sample ID: SB-12
 Sample Time: 8:10 AM Sample Date: 10/3/03 Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Toluene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Ethyl Benzene	ND		1	0.025	0.025	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Xylenes, Total	ND		1	0.05	0.05	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							118.0		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	0.25	0.25	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							118.0		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	5.2	x	1	2.5	2.5	mg/Kg	10/3/03	10/6/03	SGC62944B	EPA 8015 MOD. (Purgeable)
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							93.6		65 - 135	

Comment: Reported TPH as Gasoline value is the result of heavy hydrocarbons within the TPH as Gasoline quantitation range.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

mk 10/06/03 Wes 10/08/03
 Analyst Date Supervisor Date

Entech Analytical Labs, Inc.

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

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

Date: 10/7/03
Date Received: 10/3/03
Project Name: AC Transit Hyd. Oil
Project Number: 2017
P.O. Number: 2017
Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-007 Client Sample ID: SB-8
Sample Time: 8:50 AM Sample Date: 10/3/03 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		250	0.5	125	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Toluene	ND		250	0.5	125	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Ethyl Benzene	160		250	0.5	125	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Xylenes, Total	ND		250	1	250	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							97.8		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		250	1	250	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							97.8		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	26000	x	250	50	12500	µg/L	N/A	10/6/03	WGC42947B	EPA 8015 MOD. (Purgeable)
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							84.0		65 - 135	

Comment: TPH as Gasoline value contains heavy hydrocarbon compounds in the TPH as Gasoline quantitation range.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

JK
10/7/03
WLS
10/7/03
 Analyst Date Supervisor Date

Entech Analytical Labs, Inc.

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

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

Date: 10/7/03
 Date Received: 10/3/03
 Project Name: AC Transit Hyd. Oil
 Project Number: 2017
 P.O. Number: 2017
 Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-008 Client Sample ID: SB-9
 Sample Time: 10:05 AM Sample Date: 10/3/03 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Xylenes, Total	ND		1	1	1	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							115.5		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	11		1	1	1	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							115.5		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	140	x	1	50	50	µg/L	N/A	10/6/03	WGC42947B	EPA 8015 MOD. (Purgeable)
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							133.0		65 - 135	

Comment: TPH as Gasoline value contains heavy hydrocarbon compounds in the TPH as Gasoline quantitation range.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

JK 10/7/03 WWT 10/7/03
 Analyst Date Supervisor Date

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

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

Date: 10/7/03
 Date Received: 10/3/03
 Project Name: AC Transit Hyd. Oil
 Project Number: 2017
 P.O. Number: 2017
 Sampled By: Client

Certified Analytical Report

Order ID: 36054 Lab Sample ID: 36054-009 Client Sample ID: SB-10
 Sample Time: 11:30 AM Sample Date: 10/3/03 Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Toluene	0.98		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Xylenes, Total	ND		1	1	1	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							98.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	3.8		1	1	1	µg/L	N/A	10/6/03	WGC42947B	EPA 8020
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							98.9		65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	10/6/03	WGC42947B	EPA 8015 MOD. (Purgeable)
Surrogate							Surrogate Recovery		Control Limits (%)	
4-Bromofluorobenzene							96.8		65 - 135	

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst: Ja Date: 10/17/03 Supervisor: Wes Date: 10/17/03

Entech Analytical Labs, Inc.

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

STANDARD LAB QUALIFIERS (FLAGS)

All Entech lab reports now reference standard lab qualifiers. These qualifiers are noted in the adjacent column to the analytical result and are adapted from the U.S. EPA CLP program. The current qualifier list is as follows:

Qualifier (Flag)	Description
U	Compound was analyzed for but not detected
J	Estimated value for tentatively identified compounds or if result is below PQL but above MDL
N	Presumptive evidence of a compound (for Tentatively Identified Compounds)
B	Analyte is found in the associated Method Blank
E	Compounds whose concentrations exceed the upper level of the calibration range
D	Multiple dilutions reported for analysis; discrepancies between analytes may be due to dilution
X	Results within quantitation range; chromatographic pattern not typical of fuel
Y	PQL is reported below MDL but verified against a standard analyzed at the client requested reporting limit of 0.5 ppb
C	Reported results affected by contaminated reagent materials. See narrative for further explanation

Entech Analytical Labs, Inc.

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

Quality Control Results Summary

QC Batch #: DS4316A
Matrix: Solid

Units: mg/Kg
Date Analyzed: 10/7/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Diesel											
TPH as Diesel	EPA 8015 M	ND		25		20.356	LCS	81.4			52.9 - 116.0
	Surrogate			Surrogate Recovery		Control Limits (%)					
	o-Terphenyl			84.0		40 - 128					
Test: TPH as Diesel											
TPH as Diesel	EPA 8015 M	ND		25		23.016	LCSD	92.1	12.27	30.00	52.9 - 116.0
	Surrogate			Surrogate Recovery		Control Limits (%)					
	o-Terphenyl			92.0		40 - 128					

Entech Analytical Labs, Inc.

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

Quality Control Results Summary

QC Batch #: DW4430B
Matrix: Liquid

Units: $\mu\text{g/L}$
Date Analyzed: 10/6/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Diesel											
TPH as Diesel	EPA 8015 M	ND		1000		993.03	LCS	99.3			51.7 - 126.0
Surrogate		Surrogate Recovery		Control Limits (%)							
o-Terphenyl		98.0		21 - 142							
Test: TPH as Diesel											
TPH as Diesel	EPA 8015 M	ND		1000		998.59	LCSD	99.9	0.56	25.00	51.7 - 126.0
Surrogate		Surrogate Recovery		Control Limits (%)							
o-Terphenyl		96.0		21 - 142							

Entech Analytical Labs, Inc.

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

Quality Control Results Summary

QC Batch #: SGC62944B
Matrix: Solid

Units: mg/Kg
Date Analyzed: 10/3/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		12.5		12.49	LCS	99.9			65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			96.3		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		0.4		0.36	LCS	90.0			55.0 - 153.0
Ethyl Benzene	EPA 8020	ND		0.4		0.397	LCS	99.3			69.0 - 133.0
Toluene	EPA 8020	ND		0.4		0.347	LCS	86.7			56.1 - 127.0
Xylenes, total	EPA 8020	ND		1.2		1.166	LCS	97.2			64.9 - 130.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			104.2		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		0.4		0.456	LCS	114.0			65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			104.2		65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		12.5		13.11	LCSD	104.9	4.84	30.00	65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			102.2		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		0.4		0.349	LCSD	87.2	3.10	30.00	55.0 - 153.0
Ethyl Benzene	EPA 8020	ND		0.4		0.389	LCSD	97.3	2.04	30.00	69.0 - 133.0
Toluene	EPA 8020	ND		0.4		0.349	LCSD	87.2	0.57	30.00	56.1 - 127.0
Xylenes, total	EPA 8020	ND		1.2		1.162	LCSD	96.8	0.34	30.00	64.9 - 130.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			103.9		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		0.4		0.445	LCSD	111.3	2.44	30.00	65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			103.9		65 - 135					

Entech Analytical Labs, Inc.

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

Quality Control Results Summary

QC Batch #: WGC42947B
Matrix: Liquid

Units: $\mu\text{g/L}$
Date Analyzed: 10/6/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		225.2	LCS	90.1			65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			87.2		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		8		7.82	LCS	97.8			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		7.89	LCS	98.6			65.0 - 135.0
Toluene	EPA 8020	ND		8		7.76	LCS	97.0			65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		23.4	LCS	97.5			65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			102.9		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		8		7.92	LCS	99.0			65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			102.9		65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		219.2	LCSD	87.7	2.70	25.00	65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			89.1		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		8		8.06	LCSD	100.8	3.02	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.19	LCSD	102.4	3.73	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		8		7.94	LCSD	99.3	2.29	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		24.4	LCSD	101.7	4.18	25.00	65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			104.8		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		8		7.73	LCSD	96.6	2.43	25.00	65.0 - 135.0
Surrogate			Surrogate Recovery			Control Limits (%)					
	4-Bromofluorobenzene			104.8		65 - 135					

Entech Analytical Labs, Inc.

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

Chain of Custody / Analysis Request

Attention to: BRAD WRIGHT	Phone No.: (510) 769-3567	Purchase Order No.:	Invoice to: (If Different)	Phone:
Company Name: CHAMELON-COLE	Fax No.:	Project No.: 2017	Company:	
Mailing Address: 101 W. ATLANTIC AVE. #90	Email Address: brwright@chameleon-cole.com	Project Name: HC TRANS - HYDRAULIC OIL	Billing Address: (If Different)	
City: ALAMEDA	State: CA	Zip Code: 94501	Project Location: EMERYVILLE	City:
				State:
				Zip:

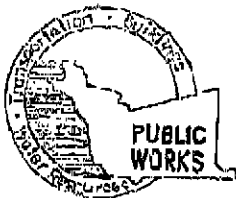
Order ID:	Sample	Turn Around Time				Preservative	Remarks
		<input type="checkbox"/> Same Day	<input type="checkbox"/> 1 Day	<input type="checkbox"/> 2 Day	<input type="checkbox"/> 3 Day		
Client ID / Field Point	Lab. No.	Date	Time	Matrix	Composite	Grab	Containers
SB-7	36054-001	10/2	1130	H2O			3 HCL
" "			1130	H2O			2
SB-14	002		1330	H2O			3 HCL
" "			1330	H2O			2
SB-13	003		1040	H2O			3 HCL
" "			1040	H2O			2
SB-11	004		0920	Soil			2
SB-12	005	10/3	0810	Soil			1
SB-8	006		0850	H2O			3 HCL
" "			0850	H2O			2
SB-9	008		1005	H2O			3
" "			1005	H2O			2

- Volatile Organics by GC/MS: 601/602
- 624 8010 by 8260 8260B 8280B
- Divalentes by 8260 Eth/Meth
- TPH as Gas/BTEX Gas by GC/MS
- Diesel w/ Signal w/ Signal
- Motor Oil w/ Signal w/ Signal
- Fuel Scan Standard Cleanup
- Base/Neutral/Acid Organics Purgeable
- 8270 8270-SM PAH
- Pesticides 8081 PCBs - 8082
- TPH PAH
- PH TSS SC TOC
- TRPH Oil & Grease
- CN Phenols
- Anions: F Cl Br SO4 NO3
- NO2 PO4 NO3
- Perchlorate
- TPH Metals - Circle Below
- Total Dissolved
- STLCO TCLP
- TO-14 TO-15 (Tedlar Bag Only)

Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Date: 10/1/03	Time: 1:00pm	Special Instructions or Comments <input type="checkbox"/> EDD Report <input type="checkbox"/> PDF Report <input type="checkbox"/> EDF Report <input type="checkbox"/> NPDES Detection Limits Semi-Conductor Metals: Bi, Ce, Cs, Ga, Ge, In, Li, P, S, Ta, Te, Zr Metals: Al, As, Sb, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Sr, Ti, Sn, Ti, Zn, V, W <input type="checkbox"/> LUFT-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> PPM-13 <input type="checkbox"/> CAM-17
Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Date: 10/3/03	Time: 1415	
Relinquished by:	Received by:	Date:	Time:	

APPENDIX C

DRILLING PERMITS



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

599 ELMHURST ST. HAYWARD CA. 94541-1395

PHONE (510) 670-6633 *Join us!*

FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT
1177 47th STREET
PORCYVILLE, CA

PERMIT NUMBER W03-0848
WELL NUMBER _____
APN _____

CLIENT
Name AC TRAFFIC
Address 10224 E 14th St Phone 510-577-8869
City ORLANDO Zip 94603

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted no later than arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted or original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

APPLICANT
Name Cameron Cole
Address 101 W. Atlantic Ave Phone 510-782-3517
City ALAMEDA Zip 94501

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	Operal	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input checked="" type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input type="checkbox"/>

C. GROUND WATER MONITORING WELLS INCLUDING PNEUMOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL/ENVIRONMENTAL**
Backfill base hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind.

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>	R. DIRECT PUSH	

DRILLER'S NAME VERONEX

DRILLER'S LICENSE NO 705227

K. CATHODIC

Fill hole inside zone with concrete placed by tremie.

P. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

Q. SPECIAL CONDITIONS

BE-1 ATTACHED

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

WELL PROJECTS

Drill Hole Diameter	_____ in.	Maximum	_____ ft.
Casing Diameter	_____ in.	Depth	_____ ft.
Surface Seal Depth	_____ ft.	Owner's Well Number	_____

GEOTECHNICAL PROJECTS

Number of Borings	<u>5</u>	Maximum	_____ ft.
Hole Diameter	<u>2</u> in.	Depth	<u>30</u> ft.

STARTING DATE 9/24/03

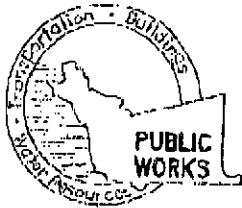
COMPLETION DATE 9/26/03

APPROVED _____ DATE 9-5-03

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 9/19/03

PLEASE PRINT NAME BRAD WRIGHT Rev. 9-18-02



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

199 ELMHURST ST. HAYWARD, CA. 94544-1395

PHONE (510) 670-6633 James Yoo FAX (510) 782-1939

PERMIT NO. W03-0848

WATER RESOURCES SECTION GROUNDWATER PROTECTION ORDINANCE

B/I-GENERAL CONDITIONS: GEOTECHNICAL & CONTAMINATION BOREHOLES

1. Prior to any drilling activities shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that Federal, State, County or to the City and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on-or off site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
4. Permit is valid only for the purpose specified herein September 24, to September 26, 2003. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.
5. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
6. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.

City of Emeryville, Department of Public Works
ENCROACHMENT PERMIT
 (rev. 9/22/00)

FOR CITY USE ONLY

Permit No. RW030906 Date 9-24-03

Permit Admin. Fee \$150
 Est. Inspection Time 2
 Permit Insp. Deposit (2 hr. min.) \$150
 Required Security Deposit:
 \$1,000 cash \$1000
 \$10,000 Bond
 Bond No. _____
 100% Perf. Bond
 Bond Value _____
 Bond No. _____

Total Payment Required \$1300
 Received: Wm Date 9/24/03
 Receipt No. 46131

APPLICANT CAMERON-COLE for AC TRANSIT
 CONTACT PERSON ANDREW WYCKOFF
 ADDRESS 101 W. ATLANTIC AVE. BLDG 490 ALBANY, CA
 PHONE (510) 769-3567 FAX (510) 357-5994

OWNER/DEVELOPER OF FACILITIES AC TRANSIT
 ADDRESS 10626 E. 14th ST. OAKLAND, CA
 PHONE (510) 577-8869 FAX (510) 577-8859
 Yes no CURRENT CITY BUSINESS LICENSE ON FILE

CONTRACTOR DOING WORK VIRONEX
 CONTACT PERSON TRISHA WHITE
 ADDRESS 2110 ADAMS AVE SAN LEANORA, CA 94577
 PHONE (510) 568-7676 FAX (510) 568-7675
 LICENSE NO. 705927 CLASS C57
 yes no CURRENT CITY BUSINESS LICENSE ON FILE
 yes no PROVIDE PROOF OF INSURANCE

EST. START DATE 9/24/03 EST. COMPLETION DATE 9/26/03 EST. COST IN CITY R/W \$1500
 LOCATION OF WORK 1177 47th STREET, EMERYVILLE, CA

FULLY DESCRIBE PROPOSED WORK WITHIN CITY RIGHT-OF-WAY (additional space on reverse if needed):
 Attach 3 complete sets of plans, if applicable. INSTALL FOUR (4) TWO-INCH DIAMETER BORINGS TO APPROXIMATELY 15 FEET. TWO WILL BE IN THE SIDEWALK ALONG THE WEST SIDE OF DYKE ST. BORINGS WILL BE BACKFILLED AND CAPPED WITH CONCRETE/ASPHALT ON COMPLETION

I hereby agree to protect and indemnify the City of Emeryville and hold it harmless in every way from all claims or suits for injury or damage to persons or property as set forth in the Standard Provisions. I agree not to begin construction until all materials to be used are on hand; to perform all work in accordance with the plans submitted (if any); the Standard Provisions to Encroachment Permit, and all applicable Special Conditions of Approval, and to pay all inspection and engineering costs in addition to those paid at the time of issuance of this permit. I further agree to complete the work to the satisfaction of the City Engineer and if for any reason the City of Emeryville is required to complete this work, I will pay all costs for such work.

Applicant Signature [Signature] Date 9/11/03

FOR CITY USE ONLY

The following documents are attached and incorporated into this permit and have been given to the applicant:

yes no Standard Provisions to Encroachment Permit
 yes no Special Conditions of Approval
 yes no City Standard Details (List Details)
 yes no Handout, Urban Runoff BMP's
 yes no Other _____

Remarks: _____

yes no 48 HOUR NOTICE PRIOR TO START OF WORK.
 yes no PROVIDE CONSTRUCTION SCHEDULE 5 DAYS PRIOR TO START OF WORK.
 yes no AS-BUILT PLANS REQUIRED.
 yes no PLEASE CALL FOR INSPECTION AT 510-596-4333.
 yes no PLEASE NOTIFY POLICE (510-596-4700) AND FIRE (510-596-3750) 24 HOURS IN ADVANCE.

This permit is void unless the work is completed before 30 Oct 30 Sept, 20 03.
 This permit is to be strictly construed and no other work than is specifically mentioned is hereby authorized.
 APPROVED: [Signature] TITLE Sr CE DATE: 11 Sept 03

FINAL INSPECTION APPROVED: _____ TITLE _____ DATE _____
 After final inspection is approved, please contact the Public Works Department at 510-596-4330 to determine final cost, and for final payment or reimbursement of deposit.



CAMERON-COLE

SOIL BORING LOG AND WELL COMPLETION DATA

BORING NO.:

SB-7

CLIENT/PROJECT:
AC TRANSIT / EMERYVILLE, CA

DRILLER:
VIRONEX

DRILLING RIG TYPE:
GEOPROBE

DRILL METHOD:
DIRECT PUSH

DATE STARTED:
10/2/03

DATE COMPLETED:
10/2/03

PROJECT NUMBER:
2017

TOTAL DEPTH (FT.):
24

WATER DEPTH (FT.):
21.0

LOGGED BY:
ANDREW WYCKOFF

WELL COMPLETION	DEPTH FEET	DESCRIPTION	USCS CODE GRAPHIC	OVM PPM	SAMPLE NUMBER	SAMPLE RESULTS
2" DIAMETER BOREHOLE BACKFILLED WITH PORTLAND CEMENT	0	0 - 2 ft. Asphalt/Roadbase	FILL			
		2 - 6 ft. Sandy Clay (0, 35, 20, 45); dark brown (7.5YR3/2); high plasticity; stiff; slightly moist @4' color change to strong brown (7.5YR5/6)	CH			
		6 - 7 ft. Silty Sand (0, 40, 40, 20); dark yellowish brown (10YR4/4); medium dense; medium grained sand; poorly graded; slightly moist	SM	<1		
		7 - 9 ft. Silty Clay (0, 15, 40, 45); dark brown (10YR3/3); medium plasticity; medium stiff; moist to slightly moist	CL			
		9 - 19 ft. Silty Clay (0, 20, 30, 50); dark gray (2.5Y4/1); medium plasticity; medium stiff; slightly moist @15 ft. color change to black (2.5Y2.5/1)	CL	9.8		
		19 - 22 ft. Clayey Sand (0, 40, 25, 35); olive gray (5Y5/2); medium dense; fine to medium grained sand; moderately graded; moist to very moist	SC	<1		
		22 - 24 ft. Silty Clay (0, 15, 35, 50); very dark gray (5Y3/1); high plasticity; stiff; slightly moist	CH			
		End of borehole				

2017.07



CAMERON-COLE

SOIL BORING LOG AND WELL COMPLETION DATA

BORING NO.:

SB-8

CLIENT/PROJECT:
AC TRANSIT / EMERYVILLE, CA

DRILLER:
VIRONEX

DRILLING RIG TYPE:

GEOPROBE

DRILL METHOD:

DIRECT PUSH

DATE STARTED:
10/3/03

DATE COMPLETED:
10/3/03

PROJECT NUMBER:
2017

TOTAL DEPTH (FT.):

16

WATER DEPTH (FT.):

12

LOGGED BY:

ANDREW WYCKOFF

WELL COMPLETION	DEPTH FEET	DESCRIPTION	USCS CODE GRAPHIC	OVM PPM	SAMPLE NUMBER	SAMPLE RESULTS
<p>2" DIAMETER BOREHOLE BACKFILLED WITH PORTLAND CEMENT</p>	0	0 - 2 ft. Asphalt/Roadbase	FILL			
	2 - 3 ft.	Silty Clay (0, 15, 35, 50); very dark gray (7.5YR3/1); high plasticity; stiff; slightly moist	CH	<1		
	4 - 7 ft.	Silty Sand (0, 40, 35, 25); dark yellowish brown (10YR4/4); medium dense; fine grained sand; poorly graded; slightly moist	SM			
	7 - 16 ft.	Silty Clay (0, 15, 40, 45); dark gray (5Y4/1); low plasticity; soft; moist		154		
	@12 - 14 ft.	subangular gravels present; saturated	CL	72		
	15	End of borehole		687		
	20					
	25					

2017-08



CAMERON-COLE

SOIL BORING LOG AND WELL COMPLETION DATA

BORING NO.:

SB-9

CLIENT/PROJECT: AC TRANSIT / EMERYVILLE, CA

DRILLER: VIRONEX

DRILLING RIG TYPE:

GEOPROBE

DRILL METHOD:

DIRECT PUSH

DATE STARTED: 10/3/03

DATE COMPLETED: 10/3/03

PROJECT NUMBER: 2017

TOTAL DEPTH (FT.): 24

WATER DEPTH (FT.): 20

LOGGED BY: ANDREW WYCKOFF

WELL COMPLETION	DEPTH FEET	DESCRIPTION	JSCS CODE GRAPHIC	OMV PPM	SAMPLE NUMBER	SAMPLE RESULTS
2" DIAMETER BOREHOLE BACKFILLED WITH PORTLAND CEMENT	0	0 - 2 ft. Asphalt/Roadbase	FILL			
	2	2 - 8 ft. Sandy Silt (0, 30, 40, 30); brown (7.5YR4/3); medium plasticity; medium stiff; slightly moist	ML	<1		
	8	8 - 20 ft. Silty Clay (0, 15, 30, 55); black (10YR2/1); medium plasticity; medium stiff; slightly moist to moist		97		
	18	@18 ft. silt/sand content increases (0, 25, 35, 40); color change to very dark grayish brown (2.5Y3/2)		9.2		
	20	20 - 22 ft. Clayey Sand with Gravel (20, 30, 25, 25); very dark grayish brown (2.5Y3/2); medium dense; fine grained sand; subangular gravel; saturated	SC	12.8		
	22	22 - 24 ft. Sandy Clay (0, 35, 25, 40); dark gray (5Y4/1); medium plasticity; medium stiff; moist	CI	12.4		
	25	End of borehole				

2017.09



CAMERON-COLE

SOIL BORING LOG AND WELL COMPLETION DATA

BORING NO.:

SB-10

CLIENT/PROJECT: AC TRANSIT / EMERYVILLE, CA

DRILLER: VIRONEX

DRILLING RIG TYPE: GEOPROBE

DRILL METHOD: DIRECT PUSH

DATE STARTED: 10/3/03

DATE COMPLETED: 10/3/03

PROJECT NUMBER: 2017

TOTAL DEPTH (FT.): 24

WATER DEPTH (FT.): 21

LOGGED BY: ANDREW WYCKOFF

WELL COMPLETION	DEPTH FEET	DESCRIPTION	USCS CODE GRAPHIC	OVM PPM	SAMPLE NUMBER	SAMPLE RESULTS
2" DIAMETER BOREHOLE BACKFILLED WITH PORTLAND CEMENT	0	0 - 2 ft. Asphalt/Roadbase	FILL			
	2	2 - 7 ft. Sandy Silt (0, 30, 40, 30); dark brown (10YR3/3); medium plasticity; medium stiff; slightly moist	ML	<1		
	7	7 - 18 ft. Silty Clay (0, 10, 40, 50); dark gray (10YR4/1); high plasticity; stiff; slightly moist	CL	<1		
	12	@12 ft. color change to very dark gray (10YR3/1)	CL	<1		
	18	18 - 21 ft. Sandy Clay (0, 30, 30, 40); dark gray (2.5Y4/1); medium plasticity; medium stiff; slightly moist	CL	1.4		
	21	21 - 23 ft. Clayey Sand with Gravel (20, 35, 10, 35); very dark gray (2.5Y3/1); medium dense; fine to medium grained sand; subangular gravel; well graded; saturated	SC			
	23	23 - 24 ft. Sandy Clay (0, 30, 30, 40); dark grayish brown (2.5Y4/2); medium plasticity; stiff; moist	CL			
	25	End of borehole				

2017-10



CAMERON-COLE

SOIL BORING LOG AND WELL COMPLETION DATA

BORING NO.:

SB-11

CLIENT/PROJECT: AC TRANSIT / EMERYVILLE, CA

DRILLER: VIRONEX

DRILLING RIG TYPE: GEOPROBE

DRILL METHOD: DIRECT PUSH

DATE STARTED: 10/2/03

DATE COMPLETED: 10/2/03

PROJECT NUMBER: 2017

TOTAL DEPTH (FT.): 8

WATER DEPTH (FT.): NONE ENCOUNTERED

LOGGED BY: ANDREW WYCKOFF

WELL COMPLETION	DEPTH FEET	DESCRIPTION	USCS CODE GRAPHIC	OVM PPM	SAMPLE NUMBER	SAMPLE RESULTS
<p>2" DIAMETER BOREHOLE BACKFILLED WITH PORTLAND CEMENT</p>	0	0 - 2 ft. Asphalt/Roadbase	FLL	<1		
	2 - 7	2 - 7 ft. Clayey Sand (0, 35, 30, 35); dark yellowish brown (10YR4/4); medium dense; fine to medium grained sand; moderately graded; slightly moist	SC	<1		
	7 - 8	7 - 8 ft. Silty Sand (0, 45, 30, 25); dark yellowish brown (10YR4/4); loose; fine grained sand; poorly graded; slightly moist	SM	<1		
	8	End of borehole				

2017-11



CAMERON-COLE

SOIL BORING LOG AND WELL COMPLETION DATA

BORING NO.:

SB-12

CLIENT/PROJECT:
AC TRANSIT / EMERYVILLE, CA

DRILLER:
VIRONEX

DRILLING RIG TYPE:

GEOPROBE

DRILL METHOD:

DIRECT PUSH

DATE STARTED:
10/3/03

DATE COMPLETED:
10/3/03

PROJECT NUMBER:
2017

TOTAL DEPTH (FT.):

8

WATER DEPTH (FT.):

NONE ENCOUNTERED

LOGGED BY:

ANDREW WYCKOFF

WELL COMPLETION	DEPTH FEET	DESCRIPTION	USCS CODE GRAPHIC	OMV PPM	SAMPLE NUMBER	SAMPLE RESULTS
<p>2" DIAMETER BOREHOLE BACKFILLED WITH PORTLAND CEMENT</p>	0	0 - 2 ft. Asphalt/Roadbase	FILL			
	2 - 8 ft.	Silty Clay (0, 15, 40, 45); very dark gray (7.5YR3/1); high plasticity; stiff; slightly moist	CL	<1		
	48					
	5			13		
		End of borehole				
	10					
	15					
	20					
	25					



CAMERON-COLE

SOIL BORING LOG AND WELL COMPLETION DATA

BORING NO.:

SB-13

CLIENT/PROJECT: AC TRANSIT / EMERYVILLE, CA

DRILLER: VIRONEX

DRILLING RIG TYPE:

GEOPROBE

DRILL METHOD:

DIRECT PUSH

DATE STARTED: 10/3/03

DATE COMPLETED: 10/3/03

PROJECT NUMBER: 2017

TOTAL DEPTH (FT.): 32

WATER DEPTH (FT.): 26

LOGGED BY:

ANDREW WYCKOFF

WELL COMPLETION	DEPTH FEET	DESCRIPTION	USCS CODE GRAPHIC	OVM PPM	SAMPLE NUMBER	SAMPLE RESULTS
<p>2" DIAMETER BOREHOLE BACKFILLED WITH PORTLAND CEMENT</p>	0	0 - 2 ft. Concrete/Fill	FILL			
		2 - 4 ft. Silty Sand (0, 35, 35, 30); dense; fine grained sand; poorly to moderately graded; slightly moist	SM			
	5	4 - 17 ft. Silty Clay (0, 10, 40, 50); greenish gray (5GY5/1); medium plasticity; soft to medium stiff; slightly moist	CL	9.7		
	10	@10 ft. sand increasing; low plasticity		16.4		
		@12 ft. sand decreasing; color change to olive gray (5Y4/2)				
	15					
		17 - 18 ft. Silty Sand (0, 35, 35, 30); very dark gray (5Y3/1); medium dense; fine grained sand; poorly graded; moist	SM	<1		
	20	18 - 22 ft. Sandy Clay (10, 35, 20, 35); light olive brown (2.5Y5/3); medium plasticity; medium stiff; slight moist to moist	CL	<1		
		22 - 24 ft. Clayey Sand (0, 35, 30, 35); dark olive gray (5Y3/2); loose; fine grained sand; poorly graded; very moist	SM	8.9		
		@23 ft. gravels present; saturated				
	25	24 - 26 ft. Sandy Clay (0, 35, 30, 35); light olive brown (2.5Y5/4); high plasticity; stiff; slightly moist	CL			
		26 - 28 ft. Silty Sand (0, 35, 35, 30); olive gray (5Y5/2); medium dense; fine grained sand; poorly graded; saturated	SM			
	28 - 32 ft. Sandy Clay (0, 35, 30, 35); light olive brown (2.5Y5/4); low to medium plasticity; medium stiff; moist	CL				
	End of borehole					
	35					

2017.11



CAMERON-COLE

SOIL BORING LOG AND WELL COMPLETION DATA

BORING NO.:

SB-14

CLIENT/PROJECT: AC TRANSIT / EMERYVILLE, CA

DRILLER: VIRONEX

DRILLING RIG TYPE:

GEOPROBE

DRILL METHOD:

DIRECT PUSH

DATE STARTED: 10/2/03

DATE COMPLETED: 10/2/03

PROJECT NUMBER: 2017

TOTAL DEPTH (FT.): 32

WATER DEPTH (FT.): 21

LOGGED BY:

ANDREW WYCKOFF

WELL COMPLETION	DEPTH FEET	DESCRIPTION	USCS CODE GRAPHIC	OVM PPM	SAMPLE NUMBER	SAMPLE RESULTS
<p>2" DIAMETER BOREHOLE BACKFILLED WITH PORTLAND CEMENT</p>	0	0 - 2 ft. Concrete/Fill	FILL			
	2	2 - 11 ft. Silty Clay with Sand (0, 20, 30, 50); very dark gray (10YR3/1); low to medium plasticity; soft to medium stiff; fine grained sand; slightly moist	CL	<1		
	11	11 - 15 ft. Sandy Clay (0-, 35, 20, 45); dark greenish gray (5GY4/1); high plasticity; stiff; slightly moist	CH	580		
	15	15 - 21 ft. Silty Clay with Sand (0, 25, 35, 40); dark greenish gray (5GY4/1); high plasticity; stiff; slightly moist	CH	608		
	21	21 - 26 ft. Clayey Sand with Gravel (20, 40, 10, 30); olive gray (5Y4/2); medium dense fine grained sand; subrounded gravel; well graded; saturated	SC	462		
	26	26 - 32 ft. Sandy Clay (0, 30, 25, 45); yellowish brown (10YR5/8); medium plasticity; medium stiff; slightly moist	CL	<1		
	32	End of borehole				

2017.14