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Ms. Susan Hugo
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1131 Harbor Bay Parkway 2ND Flr
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1649.02

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REVISION DATE 4/94

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Quarterly Monitoring Report for October 1 through December 31, 1994 East Baybridge Center Emeryville and Oakland, California

January 31, 1995
1649.02

Prepared for
Catellus Development Corporation
201 Mission Street
San Francisco, California 94105

LEVINE·FRICKE

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

January 31, 1995 LF 1649.02

Ms. Susan Hugo
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Second Floor
Alameda, California 94502

Subject: Quarterly Monitoring Report for October 1 through December 31, 1994, East Baybridge Center, Emeryville and Oakland, California

Dear Ms. Hugo:

The enclosed report presents the results of quarterly groundwater monitoring for October 1 through December 31, 1994, at the Yerba Buena/East Baybridge Center in Emeryville and Oakland, California.

Monitoring was conducted in accordance with Levine•Fricke's "Ground-Water Monitoring Plan for the East Baybridge Center, Emeryville and Oakland, California" dated December 19, 1994 and submitted to the Alameda County Health Care Services Agency.

If you have any questions or comments concerning this report, please call me.

Sincerely,

Ron Goloubow
Senior Project Geologist

Enclosure

cc: James Adams, Catellus Development
Sumadhu Arigala, Regional Water Quality Control Board

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CERTIFICATION

All hydrogeologic and geologic information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a Levine·Fricke California Registered Geologist.

Donald T. Bradshaw
Senior Associate Hydrogeologist
California Registered Geologist (5300)

11/30/95
Date

January 31, 1995 LF 1649.02

QUARTERLY GROUND-WATER MONITORING REPORT FOR OCTOBER 1 THROUGH DECEMBER 31, 1994 EAST BAYBRIDGE CENTER EMERYVILLE AND OAKLAND, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of ground-water monitoring conducted by Levine·Fricke during the quarterly period from October 1 through December 31, 1994, at the East Baybridge Center in Emeryville and Oakland, California ("the Site"; Figure 1). The Site covers approximately 51 acres and is partially developed and undergoing further development. To aid in organizing environmental investigation, remediation, and monitoring activities, the Site has been divided into Areas A, B, and C (Figure 2).

Levine·Fricke completed monitoring activities and submits this report on behalf of the Catellus Development Corporation ("Catellus") in accordance with the December 19, 1994 ground-water monitoring plan (Levine·Fricke 1994) submitted to the Alameda County Health Care Services Agency (ACHA). Quarterly monitoring activities included measuring water levels in all accessible wells and collecting ground-water samples from selected wells. Ground-water monitoring is being conducted to monitor volatile organic compound (VOC) concentrations in ground water and assess the effectiveness of a ground-water extraction system installed at the Site during the summer 1994. In addition, soils affected with total petroleum hydrocarbons (TPH) have been contained on site beneath building pads. Monitoring data are being collected to assess possible effects to ground-water quality beneath the Site related to the contained soils.

2.0 BACKGROUND

From the early 1900s to approximately 1990, the Site was used by a variety of industrial and commercial businesses. These businesses included warehouse storage of predominantly dry goods and limited quantities of hazardous materials (oxides and acids [a complete record of materials stored at the Site is not available]); metal foundries; truck maintenance and repair; an auto storage and wrecking yard; a construction yard; and several passenger and freight rail lines.

In preparation for site development, Levine·Fricke initiated environmental investigations at the Site on behalf of Catellus in September 1989. Site investigation and remediation activities continued for approximately five years. Results of the Phase I and Phase II Investigation indicated VOCs were present in shallow ground water beneath the Site. During site development activities, underground storage tanks (USTs) were excavated at several locations across the Site. Ground-water monitoring wells were installed in the vicinity of those former UST locations (Figure 2) to monitor ground-water quality in accordance with agency guidelines.

2.1 Areas A and B

As illustrated on Figure 2, Area A and a portion of Area B have been developed for commercial use, including a large retail store, several smaller retail stores, and two large parking areas. Areas north of the parking lots and west of Emery Street have not yet been developed.

A ground-water monitoring program was implemented at the Site in January 1992 to monitor VOC concentrations in ground water in Area A. To reduce the potential for off-site migration of shallow VOC-affected ground water, a ground-water extraction and treatment system was installed in Area A (Figure 2). This extraction system began operation in August 1994. Details regarding the operation of the extraction and treatment system were presented in Levine·Fricke's October 31, 1994 quarterly self-monitoring report, which was submitted to the East Bay Municipal Utilities District (Levine·Fricke 1994b).

Approximately 25,000 cubic yards of petroleum hydrocarbon-affected soil was excavated from Area B and contained beneath building pads in Areas A and B in accordance with Levine·Fricke's March 10, 1992 containment plan (Levine·Fricke 1992a). Details regarding the removal of soil from this area of the Site were presented in Levine·Fricke's December 21, 1992 soil remediation activities report (Levine·Fricke 1992b). To assess ground-water quality in Areas A and B, five monitoring wells were installed and sampled on a quarterly basis for over a year. Analytical results for this area indicate that ground water had not been affected by petroleum hydrocarbon-affected soil in this area. In response to a request from the RWQCB, Levine·Fricke prepared a soils management plan for the contained soils (Levine·Fricke 1994c). That plan outlines periodic ground-water monitoring to evaluate the possible effects to ground water of soils contained at the Site.

During site development activities, all ground-water monitoring wells east of Hollis Street were destroyed in July 1993 as approved by the ACHA in an August 4, 1993 letter from Ms. Susan Hugo to Catellus. Following completion of site development activities in Area A and a portion of Area B, 17 replacement wells were installed in July 1994. Installation of those wells was described in Levine·Fricke's October 27, 1994 quarterly monitoring report (Levine·Fricke 1994a). The replacement wells were installed so that the ground-water monitoring program for the Site could continue.

2.2 Area C

Area C (the area west of Hollis Street) is currently being developed for commercial use, including construction of two retail stores, one smaller retail store, and large parking areas.

VOCs have been detected in ground-water samples collected in Area C of the Site. Based on the distribution of VOCs detected, it appears that the VOCs have migrated from an off-site source. The Regional Water Quality Control Board (RWQCB) concurs with this conclusion as demonstrated by the RWQCB's letter to Catellus and others dated May 11, 1994.

Several USTs were identified at various locations within Area C during environmental investigations and site grading activities. Ground-water monitoring wells were installed following the excavation of some of these USTs. Those wells (LF-31 and LF-32 installed at the former Bashland and Bay Area Warehouse properties, respectively) were monitored on a quarterly basis until they were destroyed during site development activities in June 1994 along with all other wells located west of Hollis Street (except well LF-13).

Replacement wells for those wells (MW-31R and MW-32R) will be installed following completion of site development in Area C, with installation anticipated to occur in mid- to late-1995. In addition, well MW-12R will be installed downgradient from (west of) USTs formerly located along Beach Street, to monitor ground-water quality in that area. Wells MW-10R and MW-24R will be installed in locations presented on Figure 2 to monitor possible on-site migration of VOCs from a known source located north of the property.

3.0 GROUND-WATER ELEVATIONS AND FLOW DIRECTION

On November 30, 1994, depth to water was measured in all accessible on- and off-site wells to the nearest 0.01 foot using an electric water-level sounding probe. Table 1 summarizes the depth-to-water and ground-water elevation data collected. As shown, depth to ground water in shallow wells (less than 25 feet deep) ranged from 6.84 feet below ground surface (bgs) in well MW-2 to 17.65 feet bgs in well MW-9.

Figure 3 is a ground-water elevation contour map for water levels measured on November 30, 1994. As illustrated, the direction of shallow ground-water flow beneath the Site is toward the west-southwest, in the direction of the ground-water extraction wells (EX-3 and EX-4) and interceptor trench. The hydraulic gradient across the Site is 0.015 ft/ft, as measured between wells MW-2 and MW-9. The direction and gradient are consistent with the ground-water flow direction previously reported at the Site (Levine·Fricke 1993a,b,c,d).

The influence of pumping from the shallow extraction wells and trench on the ground-water flow pattern is illustrated in Figure 3 by depressions in the ground-water surface and by the deflection of contour lines in the vicinity of the extraction wells and trench.

4.0 GROUND-WATER SAMPLING AND ANALYSIS

Ground-water samples were collected between November 30, and December 2, 1994 for chemical analysis. A total of eleven samples were collected from twelve shallow ground-water monitoring wells (less than 25 feet deep; MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, LF-22 and LF-23) and two shallow extraction wells (less than 25 feet deep; EX-3 and EX-4). A total of four samples was collected from three intermediate-depth wells (30 to 45 feet deep; MW-6D, MW-7D, and MW-9D) and one deeper well (50 to 65 feet deep; MW-7Z).

Before ground-water samples were collected, three to four well volumes of water were purged from each well in accordance with field procedures for quarterly ground-water sampling described in Appendix A. Indicator parameters such as pH, temperature, and specific conductance were recorded during purging on water-quality sampling sheets, copies of which are included in Appendix B.

After collection, samples were submitted to American Environmental Network, Inc., a state-certified laboratory, under strict chain-of-custody procedures.

All samples, with the exception of those collected from wells MW-2 and MW-4, were analyzed for VOCs using EPA Method 8010. In addition, ground-water samples collected from wells MW-1, MW-3, MW-4, MW-5, and MW-6 were analyzed for TPH as diesel (TPHd; carbon chain length C_{12} to C_{22}), and TPH as oil (TPHo; carbon chain length C_{22} to C_{36}) in accordance with the November 30, 1994 soils management plan (Levine·Fricke 1994c). Samples from well MW-2 also were analyzed for TPH as gasoline (TPHg) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) to monitor whether TPHg-affected ground water is migrating onto the Site. A sample from well MW-1 was also analyzed for BTEX. Results of chemical analyses are discussed in Section 5.0.

For QA/QC purposes, a duplicate sample was collected from well MW-9 and analyzed for VOCs. Results of the duplicate sample were similar to results of the primary sample.

5.0 GROUND-WATER QUALITY

Table 3 summarizes the analytical results for ground-water samples collected. Appendix C presents laboratory data sheets and chain-of-custody forms for the samples analyzed.

5.1 Volatile Organic Compounds

In general, the concentration of VOCs detected in samples collected during this monitoring period are within the same order of magnitude as samples previously collected at the Site (Table 2). No VOCs were detected at concentrations above method detection limits in ground-water samples collected from shallow wells MW-1, MW-3, and MW-8, or from deeper wells MW-6D, MW-9D and MW-7Z.

1,1-Dichlorethene (1,1-DCE) was detected in eight shallow wells at concentrations ranging from 0.0006 parts per million (ppm) (wells LF-22 and LF-23) to 0.300 ppm (well MW-6). A sample collected from deeper well MW-7D contained 0.003 ppm. This concentration is significantly lower than that reported for shallow well MW-7 (0.170 ppm), located within 10 feet of deeper well MW-7D.

Trichloroethene (TCE) was detected at 0.004 ppm in off-site shallow monitoring well LF-23 and shallow extraction well EX-3. TCE was not detected in the other shallow or deeper wells sampled during the current monitoring event.

Tetrachloroethene (PCE) was detected at 0.0005 ppm and 0.008 ppm in shallow monitoring wells MW-5 and off-site well LF-22, respectively. Higher concentrations of PCE were detected in shallow extraction wells EX-3 (0.015 ppm) and EX-4 (0.020 ppm). PCE was not detected in the remaining shallow or deeper wells sampled during the current monitoring event.

1,1,1-Trichloroethane (1,1,1-TCA) was detected at concentrations ranging from 0.0007 ppm (MW-5) to 0.041 ppm (MW-6) in six shallow wells (MW-5, MW-6, MW-7, MW-9, EX-3 and EX-4). 1,1,1-TCA was not detected in deeper wells.

5.2 Total Petroleum Hydrocarbons

In accordance with the November 30, 1994 Soils Management Plan (Levine·Fricke 1994c), samples collected from shallow wells MW-1 through MW-6 were analyzed for selected TPH compounds, as follows:

- TPHd, wells MW-1 and MW-3 through MW-6
- TPHo, well MW-1, and MW-3 through MW-6
- TPHg, well MW-2
- BTEX, well MW-1 and MW-2

TPHd was detected in the five samples analyzed during this monitoring event, at concentrations ranging from 0.050 ppm (well MW-5) to 0.100 ppm (well MW-1).

TPHo was not present above the detection limit (0.200 ppm) in the four samples analyzed during this monitoring period.

TPHg was detected at 7.10 ppm in well MW-2.

BTEX was not present above method detection limits in well MW-1 (0.0005 ppm). The sample collected from well MW-2 contained benzene (0.065 ppm), ethylbenzene (0.130 ppm), and total xylenes (0.470 ppm). Toluene was not present above the analytical detection limit (0.010 ppm) in well MW-2.

6.0 SUMMARY

Ground-water gradient and flow direction measured in November 1994 are consistent with the ground-water flow direction previously reported for the Site (Levine•Fricke 1993a,b,c,d). Additionally, the direction of shallow ground-water flow beneath the western portion of the Site is being influenced by the ground-water extraction wells and extraction trench at the Site, as shown in Figure 3.

Analytical results for ground-water samples collected in November/December 1994 are similar to results previously reported for the Site during 1992 and 1993 (Table 2). Results indicate that the plume of VOC-affected ground water likely extends to the north between wells MW-3 and MW-6 and to the south between wells MW-7 and MW-8. The plume extends approximately 800 feet southwest (downgradient) of well MW-6 towards the extraction wells and trench, and is approximately 300 feet wide. Based on ground-water elevations in area wells, the extraction system is effectively capturing VOC-affected ground water and inhibiting off-site migration of affected ground water.

7.0 ACTIVITIES PROPOSED FOR JANUARY THROUGH MARCH 1994

Ground-water monitoring activities planned for January through March 1995 include water-level measurements and quarterly ground-water sampling. The sampling schedule is summarized in Table 3. It is anticipated that a report summarizing those activities will be submitted to the Alameda County Health Care Services Agency by April 30, 1995.

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Levine•Fricke, Inc. 1992a. Containment Plan for Total Petroleum Hydrocarbon-Affected Soils, Yerba Buena Project Site, Emeryville and Oakland, California. March 10.

Levine•Fricke, Inc. 1992b. Soil Remediation Activities Report, Former Ransome Property, Yerba Buena Project Site, Emeryville, California. December 21.

Levine•Fricke, Inc. 1993a. Quarterly Monitoring Report for July 1 through September 30, 1993, Area A and the South-Central Portion of Area B, Yerba Buena/East Baybridge Center Project Site, Emeryville and Oakland, California. October 29.

Levine•Fricke, Inc. 1993b. Quarterly Monitoring Report for July 1 through September 30, 1993, Former Bashland Property Emeryville, California. October 29.

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Levine•Fricke, Inc. 1993d. Quarterly Monitoring Report for July 1 through September 30, 1993, Former Ransome Property Yerba Buena/East Baybridge Project Site, Emeryville, California. October 29.

Levine•Fricke, Inc. 1994a. Combined Well Replacement and Quarterly Monitoring Report for July 1 through September 30, 1994, Yerba Buena/East Baybridge Center, Emeryville and Oakland, California. October 27.

Levine•Fricke, Inc. 1994b. Quarterly Self-Monitoring Report, Ground-Water Extraction and Treatment System, Catellus Development Corporation, East Baybridge Center, 3838 Hollis Street, Emeryville, California. October 31.

Levine•Fricke, Inc. 1994c. Soils Management Plan for Petroleum Hydrocarbon-Affected Soils, Yerba Buena/East Baybridge Center, Emeryville and Oakland, California. November 30.

Levine•Fricke, Inc. 1994d. Ground-Water Monitoring Plan East Baybridge Center, Emeryville and Oakland, California, December 19.

TABLE 1
WELL CONSTRUCTION AND GROUND-WATER ELEVATION DATA
East Baybridge Center
Emeryville and Oakland, California

Well Number	Well Elevation (1)	Well Depth (2)	Screened Interval (2)	Date Measured	Depth to Water	Ground-Water Elevation (3)
Shallow Wells						
MW-1	27.47	30	15-30	12-Sep-94	14.88	12.59
				30-Nov-94	14.61	12.86
MW-2	37.23	18	8-18	12-Sep-94	8.00	29.23
				30-Nov-94	6.84	30.39
MW-3	32.05	25	14-25	12-Sep-94	9.88	22.17
				30-Nov-94	9.96	22.09
MW-4	24.28	25	12-25	12-Sep-94	17.01	7.27
				30-Nov-94	16.15	8.13
MW-5	22.19	21.5	11.5-21.5	12-Sep-94	17.15	5.04
				30-Nov-94	15.94	6.25
MW-6	28.54	21.5	11.5-21.5	12-Sep-94	12.58	15.96
				30-Nov-94	12.75	15.79
MW-7	26.29	23.5	13.5-23.5	12-Sep-94	11.60	14.69
				30-Nov-94	11.53	14.76
MW-8	24.40	20.5	10.5-20.5	12-Sep-94	9.96	14.44
				30-Nov-94	9.96	14.44
MW-9	24.17	26	14-26	12-Sep-94	19.70	4.47
				30-Nov-94	17.65	6.52
LF-22	17.99	20	10-20	12-Sep-94	11.96	6.03
				30-Nov-94	9.69	8.30
LF-23	17.99	20	10-20	12-Sep-94	12.24	5.75
				30-Nov-94	10.05	7.94
Extraction Wells						
EX-1	23.51	NA	NA	12-Sep-94	24.83	-1.32
				30-Nov-94	19.16	4.35
EX-2	20.03	NA	NA	12-Sep-94	20.11	-0.08
				30-Nov-94	15.68	4.35
EX-3	20.96	24	7.5-24	12-Sep-94	22.33	-1.37
				30-Nov-94	15.50	5.46
EX-4	24.40	25	8-25	12-Sep-94	22.61	1.79
				30-Nov-94	20.70	3.70
Deeper Wells						
MW-6D	28.48	45	32-40	12-Sep-94	11.09	17.39
				30-Nov-94	11.46	17.02
MW-7D	26.27	40	27-40	12-Sep-94	11.32	14.95
				30-Nov-94	11.30	14.97

TABLE 1
WELL CONSTRUCTION AND GROUND-WATER ELEVATION DATA
East Baybridge Center
Emeryville and Oakland, California

Well Number	Well Elevation (1)	Well Depth (2)	Screened Interval (2)	Date Measured	Depth to Water	Ground-Water Elevation (3)
MW-9D	24.17	45	32-45	12-Sep-94	18.38	5.79
				30-Nov-94	16.35	7.82
Deep Well						
MW-7Z	25.96	65	50-65	12-Sep-94	11.78	14.18
				30-Nov-94	10.76	15.20

Notes:
(1) Well elevation is in feet mean sea level
as surveyed by Nolte and Assoicates in August 1994.
(2) Well depth and screened interval are in feet below ground surface
as measured at the time of well installation.
(3) Water level elevation is in feet mean sea level.
NA denotes not applicable, well associated with extraction trench.
NM denotes water level not measured.

TABLE 2
QUARTERLY SUMMARY OF GROUND-WATER QUALITY DATA
East Baybridge Center
Emeryville and Oakland, California
(concentrations expressed in parts per million)

Well ID	Notes	Date	Lab	TPH(g)	TPH(d)	TPH(o)	benzene	toluene	ethyl-benzene	total xylenes	TCE	1,1,1-TCA	PCE	1,1-DCE	1,1-DCA	1,2-DCA
Shallow Wells (20 to 25 feet below grade)																
MW-1		13-Sep-94	AEN	<0.005	0.300	<0.500	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA	NA	NA
		30-Nov-94	AEN	NA	0.100	<0.200	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MW-2		01-Dec-94	AEN	7.10	NA	NA	0.065	<0.010	0.130	0.470	NA	NA	NA	NA	NA	NA
MW-3		12-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
		01-Dec-94	AEN	NA	0.070	<0.200	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MW-4		01-Dec-94	AEN	NA	0.090	<0.200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		13-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.001	0.0007	0.003	0.002	<0.0005
		01-Dec-94	AEN	NA	0.050	<0.200	NA	NA	NA	NA	<0.0005	0.0007	0.0005	0.004	0.003	<0.0005
MW-6	(2)	13-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	0.0005	0.041	<0.0005	0.280	0.005	0.001
	(6)	01-Dec-94	AEN	NA	0.080	NA	NA	NA	NA	NA	0.0006	0.041	<0.0005	0.300	0.004	<0.0005
MW-7		12-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.017	<0.0005	0.160	0.003	0.0009
		30-Nov-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.016	<0.0005	0.170	0.003	<0.0005
MW-8	(3)	13-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
		02-Dec-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MW-9		12-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.017	<0.0005	0.120	0.0005	0.006
Duplicate		12-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.015	<0.0005	0.120	0.0005	0.009
		30-Nov-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.016	<0.0005	0.150	0.0005	<0.0005
Duplicate		30-Nov-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.016	<0.0005	0.160	0.0005	<0.0005
LF-22		12-Jul-91	ANA	NA	NA	NA	NA	NA	NA	NA	0.0007	0.012	0.0017	0.053	0.0063	0.0016
		07-Jan-92	ANA	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.009	0.0037	0.041	0.0054	0.0011
		16-Apr-92	ANA	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.0026	0.0018	0.015	0.0021	<0.0005
	(1)	23-Jul-92	ANA	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.0034	0.0014	0.027	0.0052	<0.0005
		20-Oct-92	ANA	NA	NA	NA	NA	NA	NA	NA	0.00078	0.0013	0.00066	0.014	0.004	<0.0005
		25-May-93	ANA	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.00084	0.00058	0.0061	0.0024	<0.0005
		13-Jul-93	ANA	NA	NA	NA	NA	NA	NA	NA	0.00069	0.00095	0.00088	0.0077	0.0033	<0.0005
	(4)	13-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	0.004	<0.0005	0.008	0.003	0.001	0.0007
		01-Dec-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	0.0006	0.0009	<0.0005
LF-23		12-Jul-91	ANA	NA	NA	NA	NA	NA	NA	NA	0.0039	0.0009	0.027	0.0012	0.011	0.0009
		07-Jan-92	ANA	NA	NA	NA	NA	NA	NA	NA	0.007	0.0023	0.056	0.0034	0.012	0.0013
		16-Apr-92	ANA	NA	NA	NA	NA	NA	NA	NA	0.0036	0.00068	0.020	0.0044	0.0044	0.0011
		23-Jul-92	ANA	NA	NA	NA	NA	NA	NA	NA	0.0038	0.0013	0.029	0.0061	0.0044	0.0014
		20-Oct-92	ANA	NA	NA	NA	NA	NA	NA	NA	0.0033	0.00054	0.023	0.0047	0.002	0.0015
		25-May-93	ANA	NA	NA	NA	NA	NA	NA	NA	0.0042	0.00065	0.016	0.0035	0.0017	0.0019
		13-Jul-93	ANA	NA	NA	NA	NA	NA	NA	NA	0.0081	0.0015	0.018	0.0074	0.0033	0.0051
		13-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	0.0006	0.002	0.003	0.0007
	(7)	01-Dec-94	AEN	NA	NA	NA	NA	NA	NA	NA	0.004	<0.0005	0.008	0.0006	<0.0005	<0.0005

TABLE 2
QUARTERLY SUMMARY OF GROUND-WATER QUALITY DATA
East Baybridge Center
Emeryville and Oakland, California
(concentrations expressed in parts per million)

Well ID	Notes	Date	Lab	TPH(g)	TPH(d)	TPH(o)	benzene	toluene	ethyl-benzene	total xylenes	TCE	1,1,1-TCA	PCE	1,1-DCE	1,1-DCA	1,2-DCA
Shallow Extraction Wells (20 to 30 feet below grade)																
EX-3	(5)	14-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	0.004	0.014	0.042	0.100	0.005	0.001
		02-Dec-94	AEN	NA	0.100	<0.200	NA	NA	NA	NA	0.004	0.015	0.045	0.140	0.005	<0.0005
EX-4		14-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	0.025	0.010	0.220	0.006	0.001
		02-Dec-94	AEN	NA	0.090	<0.200	NA	NA	NA	NA	<0.0005	0.020	0.011	0.240	0.006	<0.0005
Deeper Wells (40 to 45 feet below grade)																
MW-6D		13-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	0.003	<0.0005	0.0005
		01-Dec-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MW-7D		13-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	0.003	<0.0005	<0.0005
		30-Nov-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	0.003	<0.0005	<0.0005
MW-9D		12-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
		30-Nov-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Deep Well (65 feet below grade)																
MW-7Z		13-Sep-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
		30-Nov-94	AEN	NA	NA	NA	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Data entered by REG/22-Dec-94. Data proofed by JCK/28-Dec-94 and QA/QC by REG.

Key to abbreviations:
TPH(g) = Total petroleum hydrocarbons as gasoline
TPH(d) = Total petroleum hydrocarbons as diesel
TPH(o) = Total petroleum hydrocarbons as oil
TCE = Trichloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
PCE = Tetrachloroethene
1,1-DCE = 1,1-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane

Notes:

(1) 0.00081 ppm vinyl chloride detected.
(2) 0.002 ppm chloroform detected.
(3) 0.0008 ppm chloroform detected.
(4) 0.002 ppm chloroform detected.
(5) 0.0008 ppm cis-1,2-DCE detected.
(6) 0.002 ppm chloroform detected.
(7) 0.0002 ppm chloroform, 0.002 ppm cis-1,2-DCE detected.

AEN = American Environmental Network in Pleasant Hill, California
ANA = Inchcape Testing Anametrix, Inc., in San Jose, California
NA = parameter not analyzed

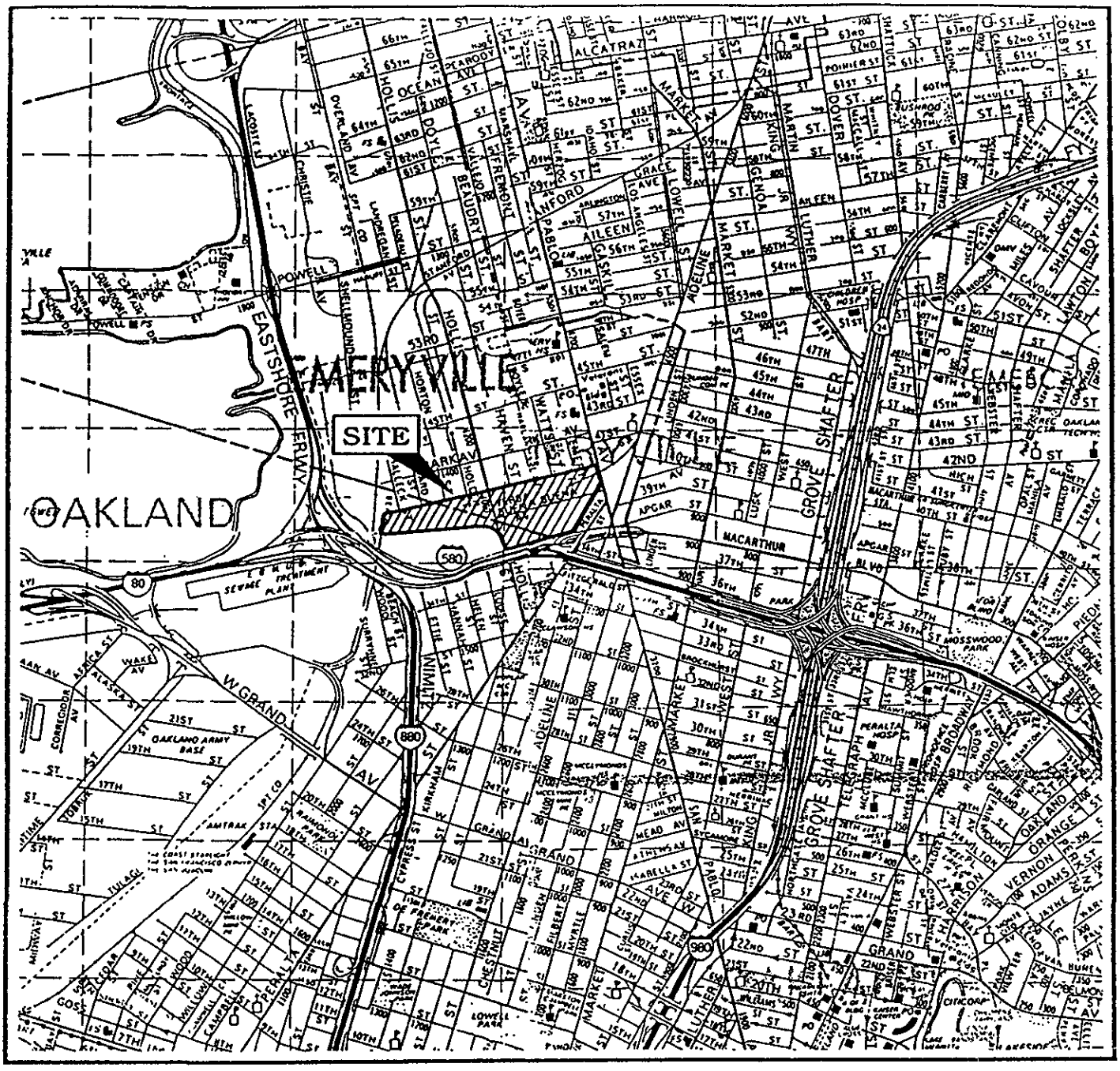
TABLE 3
GROUND-WATER SAMPLING SCHEDULE
East Baybridge Center
Emeryville and Oakland, California

Quarterly Period	Area	Well Depth	Well Identification	Analysis
JANUARY	Area A	20' to 25'	MW-2	TPHg, TPHd, BTEX
through			MW-3, MW-5, MW-6, MW-7, MW-8,	VOCs
MARCH			MW-9, LF-22, LF-23	VOCs
1995				
			EX-3 & EX-4	VOCs
		40' to 45'	MW-6D, MW-7D, MW-9D	VOCs
		60'	MW-7Z	VOCs
	Area B	30'	MW-1	TPHg, BTEX, TPHd, TPHo
	Area C		Area C wells MW-10R, MW-12R, MW-31R, and MW-32R are scheduled to be installed in mid- to late-1995.	

NOTES:
The sampling proposed is in accordance with Levine-Fricke's December 19, 1994 "Ground-Water Monitoring Plan, East Baybridge Center, Emeryville and Oakland, California"

Analysis for TPHg will use EPA Method 5030.
Analysis for BTEX will use EPA Method 8020.
Analysis for TPHd and TPHo will use EPA Method 3510.
Analysis for VOCs will use EPA Method 8010.

One duplicate sample, a trip blank, and bailer rinsate blank will be anlayzed for VOCs.



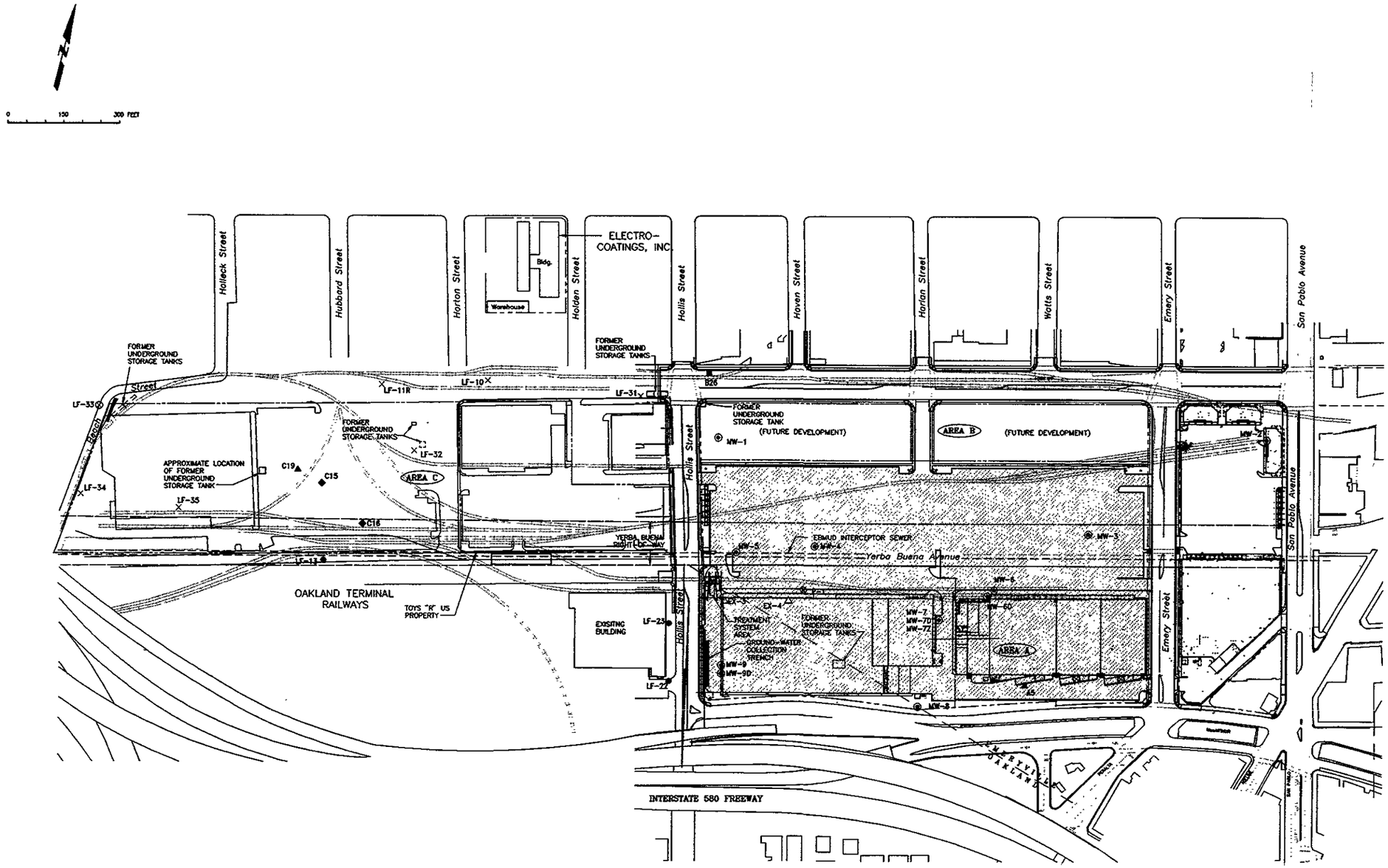
MAP SOURCE:
Alameda & Contra Costa Counties,
Thomas Bros. map, 1990 Edition

Figure 1 : SITE LOCATION MAP
YERBA BUENA PROJECT SITE

Project No. 1649

LEVINE • FRICKE
CONSULTING ENGINEERS AND HYDROGEOLOGISTS

1649ALS-SEP91-YR2



	REVISION	DESIGN	DRAWN	CHECKED	DATE

SCALE :
DESIGN
DRAWN
CHECKED

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS
Emeryville, California

CATELLUS DEVELOPMENT CORPORATION

YERBA BUENA/EAST BAYBRIDGE DEVELOPMENT

Figure 2
SITE PLAN SHOWING LOCATION OF CONTAINED SOILS AND UNDERGROUND STORAGE TANKS

Project No 1649
Date JAN. 95
Sheet of

N

0 150 FEET

EXPLANATION

- o SHALLOW MONITORING WELL LOCATION (LESS THAN 30 FEET)
- □ INTERMIDIATE DEPTH MONITORING WELL (35–45 FEET)
- △ DEEPER MONITORING WELL LOCATION (65 FEET)
- ● EXTRACTION WELL
- 12.59 WATER LEVEL ELEVATION (FEET MSL)
- GROUND–WATER ELEVATION CONTOUR LINE

40TH STREET

HOLLIS STREET

EMERY STREET

SAN PABLO AVENUE

LOT 1

LOT 3

LOT 4

LOT 5

AVE. BLDG. 1

AVE. BLDG. 2

AVE. BLDG. 3

MW1 12.86

MW2 30.39

MW3 22.09

MW4 8.13

MW5 6.25

MW6 MW6D 15.79

MW7D 14.76 MW7 MW7Z

MW8 14.44

MW9D MW9 6.52

EX1 4.35

EX2 4.35

EX3 5.46

EX4 3.70

LF–22 8.30

LF–23 7.94

EXTRACTION TRENCH

HOME DEPOT

REGIONAL RETAIL

PAK–N–SAVE

Figure 3:

SITE PLAN SHOWING GROUND–WATER ELEVATIONS IN SHALLOW WELLS NOVEMBER 30, 1994

Project No.1649

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

S:\ENGCAD\1649\SITEPL19.DWG GM

APPENDIX A

FIELD PROCEDURES

FIELD PROCEDURES

QUARTERLY GROUND-WATER SAMPLING

Before sample collection, depth to static water was measured in each well and the volume of water in the well casing was calculated. Three to five well casing volumes of ground-water were then purged from each well using a centrifugal pump or a bailer until indicator parameter readings (pH, specific conductance, and temperature) stabilized. Indicator parameters were measured using portable field instruments and measurements were recorded on water-quality sampling forms. Purging and sampling equipment was steam cleaned before use at each well. Purged ground water was pumped into the on-site treatment system.

After the well had been purged, ground-water samples were collected using a clean Teflon bailer. Samples were collected in containers appropriate for the laboratory analysis to be performed. Samples collected for VOC analyses were collected by pouring ground water directly from the bailer into laboratory-supplied, 40-milliliter volatile organic analysis (VOA) glass vials. Vials were gently filled to overflowing, capped, and then inverted to check for trapped air. If an air bubble was observed, the vial was discarded and a new vial filled. Samples were immediately capped and placed in an ice-chilled cooler for transportation to the analytical laboratory.

Ground-water samples were submitted to American Environmental Network, a state-certified laboratory, under strict chain-of-custody protocol. For quality assurance/quality control measures, a duplicate sample was collected from well MW-9 and analyzed for VOCs using EPA Method 8010. Laboratory certificates are presented in Appendix D.

APPENDIX B

WATER-QUALITY SAMPLING SHEETS

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SGL

Sampling Plan Prepared By: REG

Sampling Method:

Date: 11/30/94

Sample No.: MW-1

☐ FB:

☐ DUP:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☑ Teflon Bailer

☑ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
TPHg + BTEX	3 VOA/HCl
TPHd	2 glass L/HCl
Total O+G	2 glass L/HCl

Method of Shipment: AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number: MW-1

Depth of Water: 14.61

Well Depth: 32.24

Height of Water Column: 17.63

Volume in Well: 2.82 ≈ 3

Well Diameter:

☑ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

32.24
14.61
17.63
16
10578
17630
2.821

80% = .2 x 17.63 + 14.61
2 | 353
352 | 18.14

80% DTW 18.14

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1210								Calibrate pH, COND.
1215								Start bailing
1218		3		18.9	6.77	707		Mod. Turbid
1222		6		18.7	6.75	716		"
1227		9		18.6	6.81	715		" /Stop
1235	14.65							Sample MW-1

Inlet Depth:

Comments:
(Recommended Method For Purging Well)

WTRQLTY.SMPLNG.INFO.22JUL94RYL

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Page ____ of ____

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 11/30/94

Sample No.: MW-9D

☐ FB:

☐ DUP:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☑ Teflon Bailer (double)

☑ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
8010	3 VOA/HCl

Method of Shipment: AEL (Lab Name) ☑ Courier ☐ Hand Deliver:

Well Number: MW-9D

Depth of Water: 16.35

Well Depth: 44.80

Height of Water Column: 28.45

Volume in Well: 4.55 ≅ 5

Well Diameter:

☑ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

44.80
16.35
28.45
16
17070
28450
4.552

80% = .2×28.45 + 16.35
5.69
22.04

80% DTW 22.04

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1312								start bailing
1318		5		18.4	7.43	707		mod. Turbid
1322		10		18.3	7.11	728		"
1327		15		18.5	7.08	743		" /stop
1333	16.49							
1335								sample MW-9D

Inlet Depth:

Comments: (Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22/UL94RYL

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Page ____ of ____

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 11/30/94

Sample No.: MW-9

☐ FB:

☑ DUP: MW-109

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☑ Teflon Bailer

☑ Hand Bail ☐ _____ (Other)

Analyses Requested: 8010

Number and Types of Bottle used: 3 VOA/HCl

Method of Shipment: AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number: MW-9

Depth of Water: 17.65

Well Depth: 25.82

Height of Water Column: 8.17

Volume in Well: 1.31 ≈ 1.5

Well Diameter:

☑ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

25.82
17.65
8.17
16
4902
8170
1307

80% = .2 x 8.17 + 17.65
163
19.28

80% DTW 19.28

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1346								Start bailing
1347		1.5		19.1	6.82	890		Turbid
1349		3.0		19.0	6.78	893		"
1352		4.5		18.8	6.76	895		" /stop
1358	17.78							
1400								sample MW-9
1500								Dup MW-109

Inlet Depth: _____

Comments: (Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02
Project Name: East Bayridge
Sample Location: Emeryville, CA
Samplers Name: SCH
Sampling Plan Prepared By: REG
Sampling Method:

Date: 11/30/94
Sample No.: MW-7D
☐ FB:
☐ DUP:

☐ Centrifugal Pump
☐ Submersible Pump
☑ Hand Bail
☐ Disposable Bailer
☑ Teflon Bailer
☐ _____ (Other)

Analyses Requested: 8010

Number and Types of Bottle used:

39.90
11.30
2860
16
17160
28600
4.576

80% = .2 x 28.60 + 11.30
2
5720 5.72
17.02

Method of Shipment: AEN (Lab Name)
☑ Courier
☐ Hand Deliver:

Well Number: MW-7D
Depth of Water: 11.30
Well Depth: 39.90
Height of Water Column: 28.60
Volume in Well: 4.57 5

Well Diameter:
☑ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

80% DTW 17.02

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1430								start bailing
1433		5		14.5	6.78	742		Mod. TNbid
1437		10		14.5	6.73	752		"
1442		15		14.3	6.69	753		" /stop
1450	11.50							sample MW-7D

Inlet Depth: _____

Comments: _____
(Recommended Method For Purging Well)

WTR.QLTY.SAMPLNG.INFO.22JUL94YL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Bay bridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method: ____

Date: 11/30/94

Sample No.: MW-7Z

☒ ~~Trip~~ Trip Blank

☐ DUP: ____

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☑ Hand Bail
- ☐ Disposable Bailer
- ☑ Teflon Bailer (Double)
- ☐ ____ (Other)

Analyses Requested

8010

Number and Types of Bottle used

64.70
10.76
53.94
16
32364
53940
86304

80% = .2 × 53.94 + 10.76

2 10.79

10 788 21.55

Method of Shipment

AEN (Lab Name)

☑ Courier ____

☐ Hand Deliver:

Well Number: MW-7Z

Depth of Water: 10.76

Well Depth: 64.70

Height of Water Column: 53.94

Volume in Well: 8.63 ≅ 9

Well Diameter:

- ☑ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

80% DTW 21.55

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1501								Start bailing
1509		9		18.3	6.78	676		V. Sl. Turbid
1521		18		18.0	6.83	676		Sl. Turbid
1532		27		17.7	6.83	673		Sl. Turbid / Stop
1544	21.55							
1550								Sample MW-7Z
0800	11/30							Trip Blank

Inlet Depth: ____ MM

Comments: ____

(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Bayridge

Sample Location: Emeryville, CA

Samplers Name: SGH

Sampling Plan Prepared By: REG

Sampling Method:

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☑ Hand Bail
- ☐ Disposable Bailer
- ☑ Teflon Bailer
- ☐ _____ (Other)

Date: 11/30/94

Sample No.: MW-7

- ☐ FB:
- ☐ DUP:

Analyses Requested

TPH & TO

8010

Number and Types of Bottle used

Method of Shipment

AEN (Lab Name)

- ☑ Courier
- ☐ Hand Deliver:

Well Number: MW-7

Depth of Water: 11.53

Well Depth: 23.30

Height of Water Column: 11.77

Volume in Well: 1.88 ≈ 2

Well Diameter:

- ☑ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

23.30
11.53
11.77
16
7062
11770
18832

80% = -2x 11.77 + 11.53
235
1388

80% DTW 13.88

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1542								start bailing
1544		2		17.5	6.78	776		mod. Turbid. / stop to sample MW-7
1555								start
1557		4		17.9	6.67	872		Mod. Turbid
1600		6		19.0	6.68	938		"
1602		8		19.3	6.72	953		" / stop
1605	11.60							
1610								Sample MW-7

Inlet Depth: _____

Comments: (Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02
Project Name: East Baybridge
Sample Location: Emeryville, CA
Samplers Name: SCH
Sampling Plan Prepared By: REG
Sampling Method:

Date: 12/1/94
Sample No.: MW-6
☑ FB: MW-6-FB
☐ DUP:

☐ Centrifugal Pump
☐ Submersible Pump
☑ Hand Bail
☐ Disposable Bailer
☑ Teflon Bailer
☐ _____ (Other)

Analyses Requested
TPHd40
8010

Number and Types of Bottle used
2 glass L/HCl
6 VOA/HCl

21.40
12.68
8.72
16
5232
872
140

80% = .2x8.72 + 12.68
1.74
14.42

Method of Shipment
AEN (Lab Name)
☑ Courier
☐ Hand Deliver:

Well Number: MW-6
Depth of Water: 12.68
Well Depth: 21.40
Height of Water Column: 8.72
Volume in Well: 1.40 ≈ 1.5

Well Diameter:
☑ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

80% DTW 14.42

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
0945								MW-6-FB
0956								start bailing
0958		1.5		19.8	6.44	1009		Turbid
0959		3.0		19.9	6.47	1024		"
1002		4.5		20.0	6.51	1037		" /stop
1008	12.76							
1010								sample MW-6
0940								Calibrate Cond., pH

Inlet Depth: _____

Comments: _____
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 12/1/94

Sample No.: MW-6D

☐ FB:

☐ DUP:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☑ Teflon Bailer (double)

☑ Hand Bail ☐ _____ (Other)

Analyses Requested: 8010

Number and Types of Bottle used: 3 VOA/HCl

Method of Shipment: AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number: MW-6D

Depth of Water: 11.32

Well Depth: 39.80

Height of Water Column: 28.48

Volume in Well: 4.55 ≈ 5

Well Diameter:

☑ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

39.80
11.32
28.48
16
17088
28480
4.55

80% = .2 × 28.48 + 11.32
2 5.70
5696 17.02

80% DTW 17.02

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1022								start bailing
1027		5		18.3	9.01	408		Sl. Turbid
1033		10		18.8	9.67	404		Mod. Turbid
1041	DWTRD	15		19.2	11.20	838		Sl. Turbid/dwtrd.
1149	14.86			18.2* SCH				Start
1154		20		~~18.7~~	9.71	420		Sl. Turbid
1201	near bottom	25		19.3	9.75	435		" /Stop
1312	14.86							
1315								Sample MW-6D

Inlet Depth:

* Temp probe out of water at 1st measurement. 18.2° measured at 1201.

Comments:

(Recommended Method For Purging Well) DRAWS DOWN

WTR.QLTY.SMPLNG.INFO.22JUL94.TYL

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Page ____ of ____

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Bay bridge

Sample Location: Emeryville, CA

Samplers Name: SEH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 12-1-94

Sample No.: MW-2

☐ FB:

☐ DUP:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☑ Teflon Bailer

☑ Hand Bail ☐ _____ (Other)

Analyses Requested: TPHg + BTEX

Number and Types of Bottle used: 3 VOA/HCl

Method of Shipment: AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number: MW-2

Depth of Water: 6.88

Well Depth: 18.30 (meas.)

Height of Water Column: 11.42

Volume in Well: 1.83 ≈ 2

Well Diameter:

☑ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

18.30
6.88
11.42
16
6852
1.1420
1.83

80% = .2 × 11.42 + 6.88
2.28
9.16

80% DTW 9.16

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1218								start bailing
1219		2		20.1	6.75	1085		Mod. Turbid / Sl. Sheen
1221		4		20.1	6.71	1085		" "
1225		6		20.1	6.63	1085		Mod. Turbid, sheen heavier
1230	6.96							Sample MW-2

Inlet Depth:

Comments: Sheen grew ~~heavier~~ heavier during purging.

(Recommended Method For Purging Well)

WTR QLTY SMPLNG.INFO.22JUL94/YL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 12-1-94

Sample No.: MW-3

☐ FB:

☑ DUP: MW-103 (VOC's)

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☑ Teflon Bailer

☑ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
TPHd+O	2 glass 4/HCl
8010	6 VOA/HCl

Method of Shipment: AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number: MW-3

Depth of Water: 9.97

Well Depth: 25.10

Height of Water Column: 15.13

Volume in Well: 2.42 ≈ 2.5

Well Diameter:

☑ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

25.10
9.97
15.13
16
9078
15130
24208

80% = .2 × 15.13 + 9.97
3.03
13.00

80% DTW 13.00

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1248								start bailing
1251		2.5		21.1	6.71	908		Mod. Turbid
1254		5.0		21.0	6.71	912		"
1258	near Bottom	7.5		20.7	6.67	903		" /stop
1306	16.1							
1325	10.28							
1330								Sample MW-3
1430								Dup - MW-103 (8010)

Inlet Depth: _____

Comments: (Recommended Method For Purging Well)

WTRQUAL\SMPLNG.INF0.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☑ Hand Bail
- ☐ Disposable Bailer
- ☑ Teflon Bailer
- ☑ 3" PVC Bailer (Other)

Date: 12/1/94

Sample No.: LF·23

- ☐ FB:
- ☐ DUP:

Analyses Requested: 8010

Number and Types of Bottle used: 2 VOA/HCl

Method of Shipment: AEN (Lab Name)

- ☑ Courier
- ☐ Hand Deliver:

Well Number: LF·23

Depth of Water: 10.06

Well Depth: 18.36

Height of Water Column: 8.30

Volume in Well: 5.40 ≈ 5.5

Well Diameter:

- ☐ 2" (0.16 Gallon/Feet)
- ☑ 4" (0.65 Gallon/Feet)
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

18.36
10.06
8.30
65
4150
49800
5.40

80% = .2 x 8.30 + 10.06
1.66
11.72

80% DTW 11.72

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1408								Start bailing
1410		5.5		17.5	6.85	812		Sl. Turbid
1413		11		17.5	6.79	764		"
1418		16.5		17.5	6.73	813		" /stop
1424	11.30							
1425								sample LF·23

Inlet Depth:

Comments: (Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 12/1/94

Sample No.: MW-5

☐ FB:

☐ DUP:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☑ Teflon Bailer

☑ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
TPHd+O	2 glass L/HCl
8010	3 VOA/HCl

Method of Shipment: AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number: MW-5

Depth of Water: 15.90

Well Depth: 20.80

Height of Water Column: 4.90

Volume in Well: 0.78 ≈ 1

Well Diameter:

☑ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

20.80
15.90
4.90
16
2940
4900
7840

80% = .2×4.90 + 15.90
.98
16.88

80% DTW 16.88

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1442								start bailing
1444		1		20.7	6.79	825		mod. Turbid
1446		2		20.6	6.76	846		"
1449	near bottom	3		20.5	6.73	859		" /stop
1458	16.76							
1500								sample MW-5

Inlet Depth:

Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG INFO.ZZ.JUL.94.HYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☑ Hand Bail
- ☐ Disposable Bailer
- ☑ Teflon Bailer
- ☐ _____ (Other)

Date: 12/1/94

Sample No.: MW-4

- ☐ FB: _____
- ☐ DUP: _____

Analyses Requested: TPHd+O

Number and Types of Bottle used: 2 glass L/HCl

Method of Shipment: AEN (Lab Name)

- ☑ Courier
- ☐ Hand Deliver:

Well Number: MW-4

Depth of Water: 16.10

Well Depth: 24.84

Height of Water Column: 8.74

Volume in Well: 1.40 ≅ 1.5

Well Diameter:

- ☑ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

24.84
16.10
8.74
16
5244
8740
1398

80% = .2x8.74 + 16.10
175
17.85

80% DTW 17.85

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1515								start bailing
1517		1.5		20.9	6.73	829		Mod. Turbid
1519		3.0		20.8	6.68	822		"
1522		4.5		20.5	6.66	820		" /stop
1527	17.67							
1530								sample MW-4

Inlet Depth: _____

Comments: _____
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94YL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02
Project Name: East Baybridge
Sample Location: Emeryville, CA
Samplers Name: SCH
Sampling Plan Prepared By: REG
Sampling Method:

Date: 12/2/94
Sample No.: MW-8
☒ FB: MW-8-FB
☐ DUP:

☐ Centrifugal Pump
☐ Submersible Pump
☑ Hand Bail
☐ Disposable Bailer
☑ Teflon Bailer
☐ _____ (Other)

Analyses Requested: 8010

Number and Types of Bottle used: 6 VOA/HCl

20.10
9.98
10.12
16
6072
10120
1.62

80% = .2x10.12+9.98
2.02
12.00

Method of Shipment: AEN (Lab Name)
☑ Courier
☐ Hand Deliver:

Well Number: MW-8
Depth of Water: 9.98
Well Depth: 20.10
Height of Water Column: 10.12
Volume in Well: 1.62 x 3 = 4.86

Well Diameter:
☑ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

80% DTW 12.00

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
0950								MW-8-FB
0953								Start bailing
0955		2		18.4	7.00	1842		Turbid
0958		4		18.4	6.92	~~1749~~ 1749		"
1002		6		18.2	6.89	1736		" /stop
1013	12.00							
1015								sample MW-8

Inlet Depth: _____

Comments: (Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

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Page ____ of ____

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 12-2-94

Sample No.: LF-22

☐ FB:

☒ DUP: LF-122

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☑ Teflon Bailer

☑ Hand Bail ☑ 3" PVC bailers (Other)

Analyses Requested: 8010

Number and Types of Bottle used: 4 VOA/HCl

Method of Shipment: AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number: LF-22

Depth of Water: 9.88

Well Depth: 19.50

Height of Water Column: 9.62

Volume in Well: 6.25 ≈ 6.5

Well Diameter:

☐ 2" (0.16 Gallon/Feet)

☑ 4" (0.65 Gallon/Feet)

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

19.50
9.88
9.62
65
4810
57720
6.253

80% = .2 × 9.62 + 9.88
1.92
11.80

80% DTW 11.80

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
0900								Calib. pH, Cond.
0908								Start bailing
0911		6.5		17.3	6.68	1021		Sl. Turbid
0914		13		17.5	6.62	1047		"
0919	near Bottom	19.5		18.0	6.63	1065		" / stop
1028	10.51							
1030								Sample LF-22
1130								Dup. LF-122

Inlet Depth:

Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 164902

Project Name: East Bay bridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 12-2-94

Sample No.: EX-4

☐ FB:

☐ DUP:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☐ Teflon Bailer

☐ Hand Bail ☑ Extraction/grab (Other)

Analyses Requested	Number and Types of Bottle used
8010	3 VOA/HCl
TPH d+o	2 glass L/HCl

Method of Shipment

AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number:

Depth of Water:

Well Depth:

Height of Water Column:

Volume in Well:

Well Diameter:

☐ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☑ 6" (1.47 Gallon/Feet)

80% DTW

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1238		2		17.6	6.85	944		Clear
1240								sample EX-4

Inlet Depth:

Comments: (Recommended Method For Purging Well) Sampling required shutting off flow from other wells to identify well and keep tank from filling too fast. Sample taps are now labeled.

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 1649.02

Project Name: East Baybridge

Sample Location: Emeryville, CA

Samplers Name: SCH

Sampling Plan Prepared By: REG

Sampling Method:

Date: 12-2-94

Sample No.: EX-3

☐ FB:

☐ DUP:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☐ Teflon Bailer

☐ Hand Bail ☑ grab/Extraction well (Other)

Analyses Requested	Number and Types of Bottle used
8010	3 VOA/HCl
TPHd+o	2 glass L/HCl

Method of Shipment: AEN (Lab Name)

☑ Courier

☐ Hand Deliver:

Well Number:

Depth of Water:

Well Depth:

Height of Water Column:

Volume in Well:

Well Diameter:

☐ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

80% DTW

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1203		2		18.3	6.81	904		SCH Sl. TWbiQ
1205								Sample EX-3

Inlet Depth:

Comments: See note for EX-4.

(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

1649.02
11/30/94
SCH

WATER LEVEL FORM MONTH OF: _____
East Baybridge Yerba Buena Project Site
Oakland/Emeryville, California

Well ID	Depth to Water	Comments
MW-1	14.61	1108
MW-2	6.84	1102
MW-3	9.96	1113
MW-4	16.15	1052
MW-5	15.94	1049
MW-6	12.75	1056
MW-7	11 53	1024
MW-8	9.96	1606
MW-9	17.65	1010
LF-22	9.69	0946
LF-23	10.05	0943
EX-1	19.16	0958
EX-2	15.68	0954
EX-3	15.50	0951
EX-4	20.70	1019 (P)
MW-6D	11.46	1055
MW-7D	11 30	1026
MW-9D	16.35	1013
MW-7I	10.76	1024

APPENDIX C

LABORATORY CERTIFICATES

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

LEVINE-FRICKE
1900 POWELL ST. 12TH FL.
EMERYVILLE, CA 94608

ATTN: RON GOLOUBOW
CLIENT PROJ. ID: 1649.02
CLIENT PROJ. NAME: EAST BAYBRIDGE
C.O.C. NUMBER: 013220

REPORT DATE: 12/19/94
DATE(S) SAMPLED: 11/30/94
DATE RECEIVED: 12/01/94
AEN WORK ORDER: 9412007

PROJECT SUMMARY:

On December 1, 1994, this laboratory received 7 water sample(s).

Client requested sample(s) be analyzed for organic parameters. Results of analysis are summarized on the following page(s).

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry Klein
Laboratory Director

DEC 2 1
LEVINE-FRICKE

LEVINE-FRICKE

SAMPLE ID: MW-1
AEN LAB NO: 9412007-01
AEN WORK ORDER: 9412007
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 11/30/94
DATE RECEIVED: 12/01/94
REPORT DATE: 12/19/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/06/94
TPH as Diesel	GC-FID	0.1 *	0.05	mg/L	12/07/94
TPH as Oil	GC-FID	ND	0.2	mg/L	12/07/94
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-9D
AEN LAB NO: 9412007-02
AEN WORK ORDER: 9412007
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 11/30/94
DATE RECEIVED: 12/01/94
REPORT DATE: 12/19/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-9
AEN LAB NO: 9412007-03
AEN WORK ORDER: 9412007
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 11/30/94
DATE RECEIVED: 12/01/94
REPORT DATE: 12/19/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	5 *	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	150 *	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	16 *	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-109
AEN LAB NO: 9412007-04
AEN WORK ORDER: 9412007
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 11/30/94
DATE RECEIVED: 12/01/94
REPORT DATE: 12/19/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	5 *	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	160 *	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	16 *	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-7D
AEN LAB NO: 9412007-05
AEN WORK ORDER: 9412007
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 11/30/94
DATE RECEIVED: 12/01/94
REPORT DATE: 12/19/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	3 *	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-7Z
AEN LAB NO: 9412007-06
AEN WORK ORDER: 9412007
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 11/30/94
DATE RECEIVED: 12/01/94
REPORT DATE: 12/19/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-7
AEN LAB NO: 9412007-07
AEN WORK ORDER: 9412007
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 11/30/94
DATE RECEIVED: 12/01/94
REPORT DATE: 12/19/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/06/94
TPH as Diesel	GC-FID	0.06 *	0.05	mg/L	12/07/94
TPH as Oil	GC-FID	ND	0.2	mg/L	12/07/94
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	3 *	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	170 *	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	16 *	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9412007

CLIENT PROJECT ID: 1649.02

Quality Control Summary

Methylene chloride was found in the 12/05/94 EPA 8010 daily method blank at 0.5 ug/L.

All other laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9412007
DATE EXTRACTED: 12/06/94
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
12/07/94	MW-1	01	91
12/07/94	MW-7	07	94
QC Limits:			30-120

DATE EXTRACTED: 12/05/94
DATE ANALYZED: 12/07/94
SAMPLE SPIKED: DI WATER
INSTRUMENT: C

Method Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	2.01	87	2	65-103	12

AEN LAB NO: 1206-BLANK
DATE EXTRACTED: 12/06/94
DATE ANALYZED: 12/07/94

Method Blank

	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

QUALITY CONTROL DATA

AEN JOB NO: 9412007
DATE ANALYZED: 12/06/94
AEN LAB NO: 1206-BLANK
INSTRUMENT: G
MATRIX: WATER

EPA Method 8010
Halogenated Volatile Organics

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	0.5	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9412007
INSTRUMENT: G
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery: Bromochloro-methane	Percent Recovery: 1-Bromo-3-chloro-propane
12/06/94	MW-1	01	87	96
12/06/94	MW-9D	02	87	98
12/06/94	MW-9	03	101	103
12/06/94	MW-109	04	98	98
12/06/94	MW-7D	05	100	97
12/06/94	MW-7Z	06	91	103
12/06/94	MW-7	07	102	106
QC Limits:			78-153	74-143

DATE ANALYZED: 12/06/94
SAMPLE SPIKED: 9412007-02
INSTRUMENT: G

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits: Percent Recovery	QC Limits: RPD
1,1-Dichloroethene	50	91	7	40-130	18
Trichloroethene	50	105	13	67-136	17
Chlorobenzene	50	76	2	59-123	15

*** END OF REPORT ***

R-3, S-3
R-7, S-L

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9412007

Project No.: 1649.02	Field Logbook No.:	Date: 12-1-94	Serial No.: № 013220
Project Name: East Bayridge	Project Location: Emeryville, CA		
Sampler (Signature): Prescott C. Hudd			Samplers: SCH

SAMPLES						ANALYSES								
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	Total Pb & Lead Scav.	8010	TPHd	TPHo	TPHgas + BTEX	HOLD	RUSH	REMARKS
MW-1	11-30-94	1235	01A-G	7	H2O		2	3	2	✓				Contact Ron Golombow
MW-9D	↓	1335	02A-C	3	↓			3						
MW-9		1400	03A-C	3				3						Normal TAT
MW-10D		1500	04A-C	3				3						
MW-7D		1450	05A-C	3				3						
MW-7Z		1550	06A-C	3				3						
MW-7	↓	1610	07A-E	5	↓			3	X	X				
														12-2-94 Per Ron Golombow, Cancel O&G for mw-1. Analyze for TPNd & O. RB

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
Prescott C. Hudd	12/1/94	16:20		12/1/94	16:20
RELINQUISHED BY: (Signature)	12/1/94	13:40	RECEIVED BY: (Signature) Gina Gillespie	12-1-94	1340
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT: Courier	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, California 94608
(510) 652-4500

Analytical Laboratory:
AEN; Pleasant Hill, CA

Shipping Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink)

FORM NO. 86/COC/ARF

LEVINE-FRICKE
1900 POWELL ST. 12TH FL.
EMERYVILLE, CA 94608

ATTN: RON GOLOUBOW
CLIENT PROJ. ID: 1649.02
CLIENT PROJ. NAME: EAST BAYBRIDGE
C.O.C. NUMBER: 013223

REPORT DATE: 12/22/94
DATE(S) SAMPLED: 12/01/94-12/02/94
DATE RECEIVED: 12/02/94
AEN WORK ORDER: 9412032

PROJECT SUMMARY:

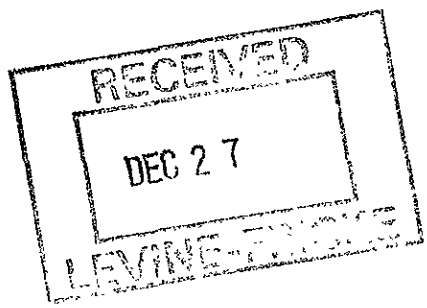
On December 2, 1994, this laboratory received 16 water sample(s).

Client requested 13 samples be analyzed for organic parameters; three samples were placed on hold. Results of analysis are summarized on the following page(s).

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry Klein
Laboratory Director



LEVINE-FRICKE

SAMPLE ID: MW-6-FB
AEN LAB NO: 9412032-01
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/01/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	**EPA 8010**				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-6
AEN LAB NO: 9412032-02
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/01/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/07/94
TPH as Diesel	GC-FID	0.08 *	0.05	mg/L	12/10/94
TPH as Oil	GC-FID	ND	0.2	mg/L	12/10/94
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	2 *	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	4 *	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	300 *	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	41 *	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	0.6 *	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

ND = Not detected at or above the reporting limit.
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-6D
AEN LAB NO: 9412032-03
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/01/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/07/94
Bromoform	75-25-2	ND	0.5	ug/L	12/07/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/07/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/07/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/07/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/07/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/07/94
Chloroform	67-66-3	ND	0.5	ug/L	12/07/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/07/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/07/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/07/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/07/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/07/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/07/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/07/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/07/94
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/07/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/07/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/07/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/07/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/07/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/07/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/07/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/07/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/07/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/07/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/07/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/07/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/07/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/07/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-2
AEN LAB NO: 9412032-04
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/01/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	65 *	10	ug/L	12/12/94
Toluene	108-88-3	ND	10	ug/L	12/12/94
Ethylbenzene	100-41-4	130 *	10	ug/L	12/12/94
Xylenes, Total	1330-20-7	470 *	40	ug/L	12/12/94
Purgeable HCs as Gasoline	5030/GCFID	7.1 *	1	mg/L	12/12/94

Reporting limits elevated due to high levels of target compounds. Sample run at dilution.

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-3
AEN LAB NO: 9412032-05
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/01/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/07/94
TPH as Diesel	GC-FID	0.07 *	0.05	mg/L	12/10/94
TPH as Oil	GC-FID	ND	0.2	mg/L	12/10/94
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/07/94
Bromoform	75-25-2	ND	0.5	ug/L	12/07/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/07/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/07/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/07/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/07/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/07/94
Chloroform	67-66-3	ND	0.5	ug/L	12/07/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/07/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/07/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/07/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/07/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/07/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/07/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/07/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/07/94
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/07/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/07/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/07/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/07/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/07/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/07/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/07/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/07/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/07/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/07/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/07/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/07/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/07/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/07/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-23
AEN LAB NO: 9412032-07
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/01/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/07/94
Bromoform	75-25-2	ND	0.5	ug/L	12/07/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/07/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/07/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/07/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/07/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/07/94
Chloroform	67-66-3	2 *	0.5	ug/L	12/07/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/07/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/07/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/07/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/07/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/07/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/07/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/07/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/07/94
1,1-Dichloroethene	75-35-4	0.6 *	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	2 *	0.5	ug/L	12/07/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/07/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/07/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/07/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/07/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/07/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/07/94
Tetrachloroethene	127-18-4	8 *	0.5	ug/L	12/07/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/07/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/07/94
Trichloroethene	79-01-6	4 *	0.5	ug/L	12/07/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/07/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/07/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/07/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-5
AEN LAB NO: 9412032-08
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/01/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/07/94
TPH as Diesel	GC-FID	0.05 *	0.05	mg/L	12/10/94
TPH as Oil	GC-FID	ND	0.2	mg/L	12/10/94
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/07/94
Bromoform	75-25-2	ND	0.5	ug/L	12/07/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/07/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/07/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/07/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/07/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/07/94
Chloroform	67-66-3	ND	0.5	ug/L	12/07/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/07/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/07/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/07/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/07/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/07/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/07/94
1,1-Dichloroethane	75-34-3	3 *	0.5	ug/L	12/07/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/07/94
1,1-Dichloroethene	75-35-4	4 *	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/07/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/07/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/07/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/07/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/07/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/07/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/07/94
Tetrachloroethene	127-18-4	0.5 *	0.5	ug/L	12/07/94
1,1,1-Trichloroethane	71-55-6	0.7 *	0.5	ug/L	12/07/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/07/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/07/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/07/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/07/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/07/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-4
AEN LAB NO: 9412032-09
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/01/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/07/94
TPH as Diesel	GC-FID	0.09 *	0.05	mg/L	12/10/94
TPH as Oil	GC-FID	ND	0.2	mg/L	12/10/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-8
AEN LAB NO: 9412032-11
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/02/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	**EPA 8010**				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/07/94
Bromoform	75-25-2	ND	0.5	ug/L	12/07/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/07/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/07/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/07/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/07/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/07/94
Chloroform	67-66-3	ND	0.5	ug/L	12/07/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/07/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/07/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/07/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/07/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/07/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/07/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/07/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/07/94
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/07/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/07/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/07/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/07/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/07/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/07/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/07/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/07/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/07/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/07/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/07/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/07/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/07/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/07/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-22
AEN LAB NO: 9412032-12
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/02/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/07/94
Bromoform	75-25-2	ND	0.5	ug/L	12/07/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/07/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/07/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/07/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/07/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/07/94
Chloroform	67-66-3	ND	0.5	ug/L	12/07/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/07/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/07/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/07/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/07/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/07/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/07/94
1,1-Dichloroethane	75-34-3	0.9 *	0.5	ug/L	12/07/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/07/94
1,1-Dichloroethene	75-35-4	0.6 *	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/07/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/07/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/07/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/07/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/07/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/07/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/07/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/07/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/07/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/07/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/07/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/07/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/07/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/07/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: EX-4
AEN LAB NO: 9412032-14
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/02/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/08/94
TPH as Diesel	GC-FID	0.09 *	0.05	mg/L	12/10/94
TPH as Oil	GC-FID	ND	0.2	mg/L	12/10/94
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/07/94
Bromoform	75-25-2	ND	0.5	ug/L	12/07/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/07/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/07/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/07/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/07/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/07/94
Chloroform	67-66-3	ND	0.5	ug/L	12/07/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/07/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/07/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/07/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/07/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/07/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/07/94
1,1-Dichloroethane	75-34-3	6 *	0.5	ug/L	12/07/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/07/94
1,1-Dichloroethene	75-35-4	240 *	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/07/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/07/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/07/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/07/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/07/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/07/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/07/94
Tetrachloroethene	127-18-4	11 *	0.5	ug/L	12/07/94
1,1,1-Trichloroethane	71-55-6	20 *	0.5	ug/L	12/07/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/07/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/07/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/07/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/07/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/07/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: EX-3
AEN LAB NO: 9412032-15
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED: 12/02/94
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/09/94
TPH as Diesel	GC-FID	0.1 *	0.05	mg/L	12/10/94
TPH as Oil	GC-FID	ND	0.2	mg/L	12/10/94
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/07/94
Bromoform	75-25-2	ND	0.5	ug/L	12/07/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/07/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/07/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/07/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/07/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/07/94
Chloroform	67-66-3	ND	0.5	ug/L	12/07/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/07/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/07/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/07/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/07/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/07/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/07/94
1,1-Dichloroethane	75-34-3	5 *	0.5	ug/L	12/07/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/07/94
1,1-Dichloroethene	75-35-4	140 *	0.5	ug/L	12/07/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/07/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/07/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/07/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/07/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/07/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/07/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/07/94
Tetrachloroethene	127-18-4	45 *	0.5	ug/L	12/07/94
1,1,1-Trichloroethane	71-55-6	15 *	0.5	ug/L	12/07/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/07/94
Trichloroethene	79-01-6	4 *	0.5	ug/L	12/07/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/07/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/07/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/07/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: TRIP BLANK
AEN LAB NO: 9412032-16
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED:
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	**EPA 8020**				
Benzene	71-43-2	ND	0.5	ug/L	12/09/94
Toluene	108-88-3	ND	0.5	ug/L	12/09/94
Ethylbenzene	100-41-4	ND	0.5	ug/L	12/09/94
Xylenes, Total	1330-20-7	ND	2	ug/L	12/09/94
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	12/09/94
EPA 8010 - Water matrix	**EPA 8010**				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	12/06/94
Bromoform	75-25-2	ND	0.5	ug/L	12/06/94
Bromomethane	74-83-9	ND	0.5	ug/L	12/06/94
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	12/06/94
Chlorobenzene	108-90-7	ND	0.5	ug/L	12/06/94
Chloroethane	75-00-3	ND	0.5	ug/L	12/06/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	12/06/94
Chloroform	67-66-3	ND	0.5	ug/L	12/06/94
Chloromethane	74-87-3	ND	0.5	ug/L	12/06/94
Dibromochloromethane	124-48-1	ND	0.5	ug/L	12/06/94
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	12/06/94
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	12/06/94
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	12/06/94
Dichlorodifluoromethane	75-71-8	ND	0.5	ug/L	12/06/94
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	12/06/94
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	12/06/94
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	12/06/94
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	12/06/94
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	12/06/94
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	12/06/94
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	12/06/94
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	12/06/94
Methylene Chloride	75-09-2	ND	0.5	ug/L	12/06/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	12/06/94
Tetrachloroethene	127-18-4	ND	0.5	ug/L	12/06/94
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	12/06/94
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	12/06/94
Trichloroethene	79-01-6	ND	0.5	ug/L	12/06/94
Trichlorofluoromethane	75-69-4	ND	0.5	ug/L	12/06/94
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	12/06/94
Vinyl Chloride	75-01-4	ND	0.5	ug/L	12/06/94

LEVINE-FRICKE

SAMPLE ID: TRIP BLANK
AEN LAB NO: 9412032-16
AEN WORK ORDER: 9412032
CLIENT PROJ. ID: 1649.02

DATE SAMPLED:
DATE RECEIVED: 12/02/94
REPORT DATE: 12/22/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

ND = Not detected at or above the reporting limit
* = Value above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9412032

CLIENT PROJECT ID: 1649.02

Quality Control Summary

Methylene chloride was found in the 12/07/94 EPA 8010 daily method blank at 0.5 ug/L.

All other laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9412032
AEN LAB NO: 1208-BLANK
DATE EXTRACTED: 12/08/94
DATE ANALYZED: 12/10/94

Method Blank

	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

AEN LAB NO: 1209-BLANK
DATE EXTRACTED: 12/09/94
DATE ANALYZED: 12/10/94

Method Blank

	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9412032
DATE(S) EXTRACTED: 12/07-09/94
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
12/10/94	MW-6	02	62
12/10/94	MW-3	05	61
12/10/94	MW-5	08	64
12/10/94	MW-4	09	63
12/10/94	EX-4	14	59
12/10/94	EX-3	15	63
QC Limits:			30-120

DATE EXTRACTED: 12/07/94
DATE ANALYZED: 12/08/94
SAMPLE SPIKED: DI WATER
INSTRUMENT: C

Method Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	2.01	81	7	65-103	12

QUALITY CONTROL DATA

AEN JOB NO: 9412032
DATE ANALYZED: 12/06/94
AEN LAB NO: 1206-BLANK
INSTRUMENT: G
MATRIX: WATER

EPA Method 8010
Halogenated Volatile Organics

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

QUALITY CONTROL DATA

AEN JOB NO: 9412032
DATE ANALYZED: 12/07/94
AEN LAB NO: 1207-BLANK
INSTRUMENT: G
MATRIX: WATER

EPA Method 8010
Halogenated Volatile Organics

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	0.5	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9412032
INSTRUMENT: G
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Bromochloro-methane	Percent Recovery 1-Bromo-3-chloro-propane
12/06/94	MW-6-FB	01	90	93
12/06/94	MW-6	02	94	90
12/07/94	MW-6D	03	96	104
12/07/94	MW-3	05	84	94
12/07/94	LF-23	07	89	91
12/07/94	MW-5	08	95	97
12/07/94	MW-8	11	91	101
12/07/94	LF-22	12	88	99
12/07/94	EX-4	14	104	105
12/07/94	EX-3	15	107	109
12/06/94	Trip Blank	16	94	95
QC Limits:			78-153	74-143

DATE ANALYZED: 12/06/94
SAMPLE SPIKED: 9412007-02
INSTRUMENT: G

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
1,1-Dichloroethene	50	91	7	40-130	18
Trichloroethene	50	105	13	67-136	17
Chlorobenzene	50	76	2	59-123	15

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9412032
AEN LAB NO: 1209-BLANK
DATE ANALYZED: 12/09/94

Method Blank

	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
tert-Butyl Methyl Ether		ND	50
Xylenes, Total	1330-20-7	ND	2
HCs as Gasoline		ND mg/L	0.05 mg/L

AEN LAB NO: 1212-BLANK
DATE ANALYZED: 12/12/94

Method Blank

	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
tert-Butyl Methyl Ether		ND	50
Xylenes, Total	1330-20-7	ND	2
HCs as Gasoline		ND mg/L	0.05 mg/L

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9412032
INSTRUMENT: H
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
12/12/94	MW-2	04	100
12/09/94	Trip Blank	16	99
QC Limits:			92-109

DATE ANALYZED: 12/12/94
SAMPLE SPIKED: LCS
INSTRUMENT: H

Laboratory Control Sample

Analyte	Spike Added (ug/L)	Percent Recovery	QC Limits Percent Recovery
Benzene	33.3	106	63-117
Toluene	97.5	106	67-114
Hydrocarbons as Gasoline	1000	101	63-120

*** END OF REPORT ***

R-1,3-F

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9412032

Project No.: 1649.02	Field Logbook No.:	Date: 12-2-94	Serial No.: № 013223
Project Name: East Baybridge	Project Location: Emeryville, CA		
Sampler (Signature): Prescott C. Gould			Samplers: SCH

SAMPLES						ANALYSES								
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	EPA 624	EPA 8010	TPHd	TPHg	TPH/BTEX	HOLD	RUSH	REMARKS
MW-6-FB	12/1/94	0945	01A-C	3	H_2O			X						Contact Ron Goloubow
MW-6		1010	02A-E	5				X	X	X				
MW-6D		1315	03A-C	3				X						Normal TAT
MW-2		1230	04A-C	3							X			
MW-3		1330	05A-E	5				X	X	X				
MW-103		1430	06A-C	3				X				X		
LF-23		1425	07A-C	3				X						
MW-5		1500	08A-E	5				X	X	X				
MW-4	↓	1530	09AB	2					X	X				
MW-8-FB	12/2/94	0950	10A-C	3				X				X		
MW-8		1015	11A-C	3				X						
LF-22		1030	12AB	~~3~~ 2SH				X						
LF-122		1130	13AB	~~3~~ 2SH				X				X		
EX-4		1240	14A-E	5				X	X	X				
EX-3	↓	1305	15A-E	5	↓			X	X	X				
T.B.			16AB	2				X			X			rec'd but not listed on COC 12-2-94

RELINQUISHED BY: (Signature) Prescott C. Gould	DATE 12-2-94	TIME 16:10	RECEIVED BY: (Signature) Michael E McKetta	DATE 12-2-94	TIME 16:10
RELINQUISHED BY: (Signature) Michael E McKetta	DATE 12-2-94	TIME 17:00	RECEIVED BY: (Signature) Ajna Gillespie	DATE 12-2-94	TIME 1700
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT: Courier	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, California 94608
(510) 652-4500

Analytical Laboratory:
AEN, Pleasant Hill, CA

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