

**SITE INVESTIGATION REPORT
LANEY COLLEGE
OAKLAND, CALIFORNIA**

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Prepared for
Kaiser Foundation Health Plan, Inc.

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1.0 INTRODUCTION

This report presents the results of ENVIRON's preliminary Phase II Site Investigation of a portion of Laney College in Oakland, California (the Site). The Site is located in the southern area of downtown Oakland, between Lake Merritt and the Oakland Inner Harbor, as shown on Figure 1. Kaiser Permanente (Kaiser) may purchase the Site and construct buildings for a new medical center, and the location of these planned buildings also is illustrated on Figure 1. Kaiser retained ENVIRON to evaluate whether or not past activities at the Site have caused significant soil and ground water contamination. This Phase II Site Investigation followed ENVIRON's *Work Plan and Cost Estimate, Preliminary Phase II Investigation, Laney College, Oakland, California*, dated August 14, 1992.

1.1 Purpose

The purpose of this investigation is to evaluate whether or not significant soil and ground water contamination has resulted from previous activities at the Site. More than twenty areas of former chemical use were identified at the Site, and this investigation provides a screening-level evaluation of these areas.

1.2 Source Areas

The Site is separated into two parcels by 7th Street. Athletic fields are east of 7th Street, and Peralta College support buildings are west of 7th Street. A map of the Site showing current structures is presented on Figure 2. The current chemical use areas that were identified during preparation of the August 14, 1992 Work Plan also are shown on Figure 2. During a visit to the Site, ENVIRON identified current chemical use areas which are shown in Figure 2. Two of the areas on Figure 2 appeared to have the potential for significant chemical releases and were targeted for this Site investigation: the Vehicle Maintenance Building and the Active Gasoline USTs.

Prior to acquisition of the Site by Peralta Colleges in the late 1960's, the Site and

surrounding areas were highly urbanized with land use consisting of light industry, automotive services, residences, and offices. Kaiser provided to ENVIRON two draft reports that summarize research of past site uses (ENTRIX 1992a, 1992b). These reports were based on review of historical Sanborn maps, historical aerial photographs, property titles, and regulatory agency files. ENVIRON prepared maps of the potentially significant source areas identified in these reports and identified several additional areas from other sources (ENVIRON August 14, 1992). A total of 20 potential source areas were identified at the Site which pre-date Laney College. These areas are listed in Table 1 and their locations are illustrated on Figure 3.

1.3 Approach

For this site investigation, soil samples were collected from soil borings at each potential source area in the footprint of Kaiser's planned buildings. The locations of the soil borings relative to the potential source areas are illustrated on Figures 2 and 3. The soil samples were designed to provide the basis for a screening-level evaluation of potential impediments to future construction activities.

Additionally, ground water grab samples were collected in the presumed downgradient direction of the potentially significant source areas in order to evaluate whether or not significant contamination is present at the Site. Figures 2 and 3 illustrate the ground water grab sample locations relative to the current and pre-Laney College potential source areas.

The soil and ground water samples were analyzed for the chemicals that were considered likely to have been associated with the source areas. Samples were tested for fuels and solvents, as described in Section 2.2.

2.0 FIELD PROGRAM RESULTS

A total of 23 borings were completed during this investigation, and their locations are shown in Figure 2. Soil samples were collected for analysis at 16 of the boring locations and ground water grab samples were collected at 17 of the boring locations. Appendix A presents a discussion of field procedures and includes boring logs.

2.1 Site Hydrogeology

All soil borings encountered artificial fill and some penetrated through the fill to Bay Mud. The artificial fill west of 7th Street ranged from approximately 5 to 7 feet in thickness. Fill materials west of 7th Street were comprised of coarse sands and gravels, broken asphalt and concrete, and dredged Bay Muds. East of 7th Street, the thickness of the artificial fill ranged from approximately 5 feet (boring B-14) to 15 feet (boring B-15), though the base of the fill was not evident in all borings.

Shallow ground water was encountered from a depth of 2 feet (boring B-1) to 5 feet (boring B-7) along the western boundary of the Site. The depth to ground water increases toward the east, as the ground surface elevation increases. Ground water was encountered at a depth of 7 feet in borings B-8 and B-9. On the baseball diamond, ground water was encountered at a depth of approximately 10 feet. In borings B-11 and B-24, which flank the football field, ground water was encountered at depths of 18 and 26.5 feet, respectively.

The water table at the Site occurs within the fill, which is comprised of variegated materials with widely varying hydraulic conductivities. Some fill areas are largely comprised of clayey materials that were likely dredged from the Bay and shallow ground water in these areas is expected to flow at relatively low velocities. In areas where sandy gravel or construction rubble were used as fill material, ground water is expected to flow at greater velocity.

2.2 Chemical Testing

Soil and ground water samples were analyzed for Total Petroleum Hydrocarbons, as gasoline (TPH/G), and volatile components (benzene, toluene, ethylbenzene, and xylenes [BTEX]) by LUFT Manual Test Method 8015. Samples were also analyzed by EPA Test Method 8010 for halogenated volatile organic compounds (VOCs) and for Total Recoverable Petroleum Hydrocarbons (TRPH) by EPA Test Method 418.1. Test Method 418.1 for TRPH is sensitive to gasoline, diesel, motor oil and other heavy oils and provides a non-specific, screening-level result. One exception to this testing program occurred in the sample collected at boring B-11 which is in an area with very low hydraulic conductivity. Not enough ground water could be collected for the complete suite of tests and therefore analysis was completed for VOCs by EPA Test Method 8010 and BTEX compounds by EPA Test Method 8020.

The soil samples from boring B-11, located in the footprint of the former match factory, were also tested for semivolatile organic compounds by EPA Test Method 8270.

Analytical results for ground water samples are presented in Table 1 and the analytical results for soil samples are summarized in Table 2. The distribution of chemicals detected in soil and ground water are illustrated on Figures 4 through 7.

All testing was completed by NATEX/ETC Laboratories of Mountain View, California, a California-certified laboratory. Copies of NATEX/ETC's laboratory reports are presented in Appendix B, which also includes a discussion of data quality.

2.3 Tank Removal from Former City of Oakland Gas and Oil Depot

Laney College recently removed five USTs from the former City of Oakland Gas Station and Oil Depot, Site 1 on Figure 3. The tanks were removed on September 3, 1992 under the direct supervision of ACC Environmental Consultants of Alameda, California. As requested by Kaiser, ENVIRON inspected the excavation and condition of some of the tanks as they were removed. The tanks were the following:

- two 6000-gallon gasoline USTs;
- one 2000-gallon diesel UST;

- one 2000-gallon ethyl (leaded) gasoline UST; and
- one 550-gallon waste oil UST.

According to Ms. Misty Kaltreider, geologist for ACC Environmental Consultants (ACC), all five USTs contained product and/or water which was pumped out for disposal prior to removal. ENVIRON observed soil and ground water contamination in the excavation after the tanks were removed. Soil had a significant petroleum odor and a dark stain, and floating product was observed on ground water in the excavation. All five of the USTs appeared to have had at least partial contact with shallow ground water, and the two 2000-gallon tanks were apparently installed completely below the water table.

Excavated material was tested with an on-site mobile laboratory and was found to be contaminated with petroleum hydrocarbons and BTEX. The excavated soil is currently stockpiled on-site. Additional contaminated material remains in the tank pit, and ACC is working with Laney to develop a plan to proceed.

Mr. Don Hwang, an inspector from Alameda County Health Agency Division of Hazardous Materials was on site during the tank removal. Mr. Hwang said that the case would be turned over to the County Remediation Section headed by Mr. Barney Chan. Because of the apparent impact to ground water, it is likely that the Regional Water Quality Control Board (RWQCB) will also review the case. In our opinion, additional excavation of contaminated soil is needed to remove the source. At least three monitoring wells are also needed to evaluate the direction of ground water flow and to confirm whether or not ground water is contaminated by these tanks. More wells may be required to assess the extent of contamination.

3.0 ASSUMED CLEANUP LEVELS

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To provide a context to interpret chemical results, we have drawn on our recent experience with the Regional Water Quality Control Board (RWQCB) decisions regarding site cleanup levels for the detected compounds in soils. Cleanup levels for ground water at this site have been assumed to be set by levels protective of drinking water supplies and marine resources.

The cleanup standards presented here are for use in this discussion only. Site specific standards would require regulatory agency approval and final standards may vary from those presented here.

3.1 Soil

Based on the results of ENVIRON's preliminary site investigation, the parameters of potential concern in vadose zone soils are VOCs, TPHg, BTEX compounds and TRPH, (which includes diesel, oils and other heavier compounds) Since there are no federal or state promulgated requirements that prescribe applicable remediation levels in soils, specific remediation goals for each of these parameters have been assumed for the Site as presented below.

VOCs

The South Bay Toxics Clean-up Division of the RWQCB has been accepting a remediation goal of 1.0 mg/kg for total VOCs in unsaturated soils. We have assumed that a soil remediation goal of 1.0 mg/kg for total VOCs, including the BTEX compounds, could be applied to Site soils.

TPHg

The LUFT Field Manual (RWQCB April 5, 1989) was developed to permit estimation of the concentrations of TPH that can be left in place without threatening ground water. We evaluated the site using the LUFT Manual leaching potential analysis. Because of

the shallow water table, the most stringent remediation goal which can result from this analysis appears to apply to the Site. We have assumed that a cleanup goal of 10 mg/kg of TPHg would apply to this Site. It is important to note, however, that a more stringent remediation goal may be applied in areas of the site where the depth to ground water is less than 5 feet and the LUFT Manual does not apply.

TRPH

A soil remediation goal of 500 mg/kg for TRPH has been assumed for the Site. The analytical method for this parameter (EPA Method 418.1) is a screening level method which includes a range of petroleum hydrocarbons with different hazardous properties which would have individual cleanup levels. Although the exact composition of TRPH measured in soil samples collected at the Site is unknown and likely varies with location, it is reasonable to assume that these constituents on the whole would be less mobile in the subsurface than either gasoline or diesel. This assumption is supported by soil sampling results from soil boring B-8, which contained a TRPH concentration of 20,000 mg/kg at a depth of 2 feet bgs, and a non-detectable TRPH concentration at a depth of 5.5 feet bgs. Since LUFT Manual calculations support a soil remediation goal of 100 mg/kg for diesel and TRPH is likely to be less mobile in the subsurface than diesel, we have assumed a soil remediation goal of 500 mg/kg for TRPH.

3.2 Ground Water

We have used state and federal Maximum Contaminant Levels (MCLs) to assess the need for ground water remediation at the Site. The California MCL for benzene is 1.0 $\mu\text{g/L}$. No MCLs have been established for TPH/G or TRPH and actual cleanup levels for TRPH and TPH/G would have to result from negotiation with applicable agencies. For the purposes of this report, we have assumed that concentrations of TRPH greater than 1000 $\mu\text{g/L}$ and TPH/G greater than 100 $\mu\text{g/L}$ in ground water would trigger some sort of remediation.

4.0 DISCUSSION

Inspection of Figures 5 and 7 indicates that the cleanup levels for halogenated VOCs assumed for this discussion are not exceeded in soil and are exceeded in only one ground water grab sample collected at the Site. However, the data presented in Figures 4 and 6 indicate that the assumed cleanup levels for TPH/G, BTEX, and TRPH are exceeded in many samples of both soil and ground water. These exceedences are localized in three areas, as follows:

- the former Truck Stop (Site 8),
- the former City of Oakland Vehicle and Equipment Maintenance Yard (includes Sites 1, 2, 3, 4, 5, 19 and 20); and
- the area of the former Service Station (with gas pumps) (Site 14) and Municipal Equipment Garages (Site 15).

The results in these areas are discussed briefly below.

Former Truck Stop (Site 8)

The former Truck Service Station shown on Figure 3 had fuel pump islands, a grease pit, and a truck wash rack. Though no documentation of tanks has been found, the site very likely also had USTs to store fuel. Boring B-20 was drilled in the vicinity of the former fuel pump islands. Results of the soil test at 6.5 feet show that TPHg was reported at 20 mg/kg, greater than the assumed cleanup goal of 10 mg/kg. ENVIRON also observed fuel on the samples collected from 10 feet. These results indicate that soil remediation is likely to be necessary in this area to a depth of approximately 12 feet, though the areal extent of contamination is not yet known.

The ground water grab sample from Boring B-20 had benzene reported at a concentration of 780 $\mu\text{g/L}$ and 1,2-dichloroethane (1,2-DCA) reported at a concentration of 110 $\mu\text{g/L}$. California's MCL for benzene is 1 $\mu\text{g/L}$ and the MCL for 1,2-DCA is 5 $\mu\text{g/L}$. If these concentrations are representative of ground water, ground water remediation is likely to be required in this area. Because this area will likely require

remediation, the area of boring B-20 is included the stippled pattern of "Plume A" on Figure 6.

Oakland Vehicle and Equipment Maintenance Yard

Petroleum hydrocarbons or BTEX were detected at all of the six boring on the former Oakland Vehicle and Equipment Maintenance Yard which had soil samples collected and the assumed cleanup goals were exceeded in borings B-1, B-3, B-8 and B-9 (Figure 4). Soil remediation will probably eventually be needed in this area to protect ground water quality and would likely be necessary to protect workers during preconstruction grading at the Site. Ground water was encountered between 2 and 5 feet deep in this area and concentrations of petroleum hydrocarbons exceed the assumed cleanup goals in ground water grab samples from borings B-2, B-5, B-8 and B-9. The area where test results of ground water exceed the assumed cleanup goals is shown in a stippled pattern called "Plume A" on Figure 6. At a minimum, ground water remediation will likely be required to prevent this ground water from migrating off-site.

Former Service Station and Oakland Municipal Equipment Garages

Ground water quality exceeds the assumed cleanup goal for TRPH in borings B-10 and B-14 which are in the area of the former Service Station (Site 14) and Municipal Equipment Garages (Site 15). The approximate area where ground water appears to be degraded is shown as "Plume B" on Figure 6. It appears that ground water remediation could be necessary in this area. However, before implementing remediation, these values should be confirmed with additional tests to evaluate the type of hydrocarbon present.

Other Sites

This investigation was not designed to address in detail each of the potential source areas illustrated on Figures 2 and 3. The test results therefore can not be used to make conclusions regarding the presence of small areas of soil or ground water contamination caused by previous activities at these potential source areas. Many of the potential

source areas which pre-date Laney College are the types of sites which in ENVIRON's experience have a real potential to have had releases which might be discovered during excavation for Kaiser's planned buildings. The results of this investigation suggest that past releases at Sites 1, 3, 4 and 8 on Figure 3 have affected soil and ground water. However, insufficient information is available to assess whether releases have occurred at the other 16 potential source areas shown in Figure 3. We believe it is likely that some of these sites have local soil or ground water contamination that has not yet been detected.

5.0 REFERENCES

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- Woodward-Clyde-Sherard & Associates. 1966. *Soil Investigation for the Proposed Peralta Junior College Civic Center Site, Oakland, California, Phase I - Preliminary Studies*. March 9.
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TABLE 1. PRE-LANEY COLLEGE POTENTIAL SOURCE AREAS
Laney College, Oakland, California

Map Site #	Site Name	Time Present	Chemicals Expected*	Available Records Indicate UST Present
1	City of Oakland Gas Station/Oil Depot	1936-1960s	Fuels, oil, solvents	Yes
2	Surface Debris Area	1953	Fuels, oil, solvents	No
3	Soil Stain Area near the Canal	1959, 1968	Oil, solvents(?)	No
4	City of Oakland Vehicle Maintenance Garage	1936-1966	Used oils, solvents	No
5	Auto Repair Shed	1950-	Used oils, solvents	No
6	Clinton Mill and Lumber	1911-1968	Oils, creosote, arsenic, pentachlorophenol	No
7	Electric Shop and Gas Pump	1952-1968	Solvents, metals, fuels	Probable
8	Truck Service Station Gas Pumps and Grease Pit	1947-1969	Fuels, oils, solvents	Yes
9	Auto Equip and Serv Gas Pump	1947-1969	Fuels, oils, solvents	Yes
10	Auto Repair Shop	1953-1968	Fuels, oils, solvents	No
11	Auto Repair Shop	1947-1969	Fuels, oils, solvents	No
12	Neon Sign Factory	1953-1968	Unknown	No
13	Stair Factory and Cabinet Shop	1911-1950	Paints, lacquers, solvents	No
14	Service Station w/ Gas Pumps	1959-1969	Fuels, oils, solvents	Yes

TABLE 1 (cont.). PRE-LANEY COLLEGE POTENTIAL SOURCE AREAS
Laney College, Oakland, California

Map Site #	Site Name	Time Present	Chemicals Expected*	Available Records Indicate UST Present
15	Municipal Equipment Garages	1953-1968	Oils, solvents	No
16	Old Lake Merrit Pump Station	1936-1969	Fuel tank	No
17	California Match Co and Soap Mfg	1903	Lead Acrolein	No
18	Laney Trade and Tech. Institute	1947-1950	Unknown	No
19	Steam Cleaning	1953-1971	Oil and grease	No
20	Chemical Storage	1959-1971	Unknown	No

* Based on ENVIRON's experience and upon Historical Hazardous Substance Database, Illinois State Museum, Springfield, IL 1991

References:

Sanborn Maps 1903, 1911, 1950, 1952

Aerial Photos 1936, 1947, 1953, 1959, 1968, 1969, 1971, 1973, 1975, 1979, 1983, 1985, 1987, 1990

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TABLE 2. RESULTS OF SOIL ANALYSES

Preliminary Phase II Investigation

Laney College; Oakland, California

Boring	Sample Depth (feet)	Laboratory Report	EPA 8010		EPA 8015M				Unknown		EPA 418.1
			Freon 12	Freon 113	Benzene	Ethyl- Benzene	Toluene	Total Xylenes	TPHg	HCs	TRPH
B-1	2.5	9208084	<0.011	0.02	<0.005	<0.005	<0.005	<0.005	<1		310
B-1	5.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		3900
B-3	3.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		9200
B-5	2.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		290
B-5	5.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1	1.4	130
B-6	2.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<29
B-6	5.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		180
B-8	2	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		20000
B-8	5.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<32
B-9	3	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<30
B-9	5.5	9208084	<0.0062	<0.0062	<0.005	0.018	0.061	0.24	<1	18	<33
B-11	4	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<29
B-11	6.5	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		450
B-13	3.5	9208090	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<29
B-13	6.5	9208090	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		120
B-14	2	9208070	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<27
B-14	4.5	9208070	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		44
B-16	3	9208070	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<29
B-16	5	9208070	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<30
B-19	3.5	9208084	0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<27
B-19	5.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<29
B-20	3.5	9208084	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<29
B-20	6.5	9208084	<0.0062	<0.0062	<0.005	0.14	0.09	0.59	20		<30
B-21	3	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		80
B-21	6	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<29

TABLE 2. RESULTS OF SOIL ANALYSES

Preliminary Phase II Investigation
Laney College; Oakland, California

Boring	Sample		EPA 8010		EPA 8015M				EPA 418.1		
	Depth (feet)	Laboratory Report	Freon 12	Freon 113	Benzene	Ethyl- Benzene	Toluene	Total Xylenes	TPHg	Unknown HCs	TRPH
B-22	4.5	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<28
B-22	7.5	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<29
B-23	4.5	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<27
B-23	7.5	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<31
B-24	3.5	9208078	<0.0062	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<28
B-24	6.5	9208078	0.14	<0.0062	<0.005	<0.005	<0.005	<0.005	<1		<27

Notes:

- (1) All concentrations reported in mg/kg
 - (2) Chemical results are shown for all compounds detected in one or more soil samples. All other chemicals included in these tests were not detected in any soil samples during this program.
 - (3) Complete Laboratory Reports are included in Appendix B.
- TPHg = Total petroleum hydrocarbons, gasoline fraction
 HCs = Hydrocarbons
 TRPH = Total recoverable petroleum hydrocarbons

TABLE 3. RESULTS OF GROUND WATER ANALYSES

Preliminary Phase II Investigation

Laney College; Oakland, California

Boring	B-2	B-3	B-4	B-5	B-7	B-8	B-9
Sample Depth (ft)	2.5-5.0	8.5	5.0-9.0	5.5-9.0	5.5-9.5	6.5-11.0	7.5-11.0
Date Collected	27-Aug-92	27-Aug-92	27-Aug-92	27-Aug-92	27-Aug-92	27-Aug-92	27-Aug-92
Lab Report	9208085	9208085	9208085	9208085	9208085	9208085	9208085
<u>EPA Method 8010</u>							
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
2-Chloroethylvinyl Ether	<5	<5	<5	<5	<5	<50	<5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Dibromochloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Freon 113	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Methylene Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Trichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
<u>EPA Method 8015</u>							
Benzene	<0.5	<0.5	<0.5	41	<0.5	<500	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<500	<0.5
Gasoline	<50	<50	<50	390	<50	<50000	470
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<500	4.6
Total Xylenes	<0.5	<0.5	<0.5	1.9	<0.5	<500	5
Unknown Hydrocarbons						730000	
<u>EPA Method 418.1</u>							
TRPH	1000	<500	<500	<500	<500	110000	<500

Notes:

(1) All concentrations reported in ug/L.

TABLE 3. RESULTS OF GROUND WATER ANALYSES

Preliminary Phase II Investigation
Laney College; Oakland, California

Boring	B-10	B-11*	B-12	B-14	B-15	B-16
Sample Depth (ft)	7.0-10.0	18.2-21.5	11.0-15.0	9.0-12.0	15.0	13.0-17.0
Date Collected	25-Aug-92	26-Aug-92	28-Aug-92	25-Aug-92	26-Aug-92	28-Aug-92
LabReport	9208078	9208085	9208090	9208070	9208085	9208090
<u>EPA Method 8010</u>						
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chloroethylvinyl Ether	<.5	<.5	<.5	<.5	<.5	<.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Freon 113	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<u>EPA Method 8015</u>						
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Gasoline	<50		<50	<50	<50	<50
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Unknown Hydrocarbons						
<u>EPA Method 418.1</u>						
TRPH	23000		< 500	5800	< 500	< 500

Notes:

(1) All concentrations reported in ug/L.

* Due to lack of water at this location, samples tested by EPA Methods 8010 and 8020 only.

TABLE 3. RESULTS OF GROUND WATER ANALYSES

Preliminary Phase II Investigation
Laney College; Oakland, California

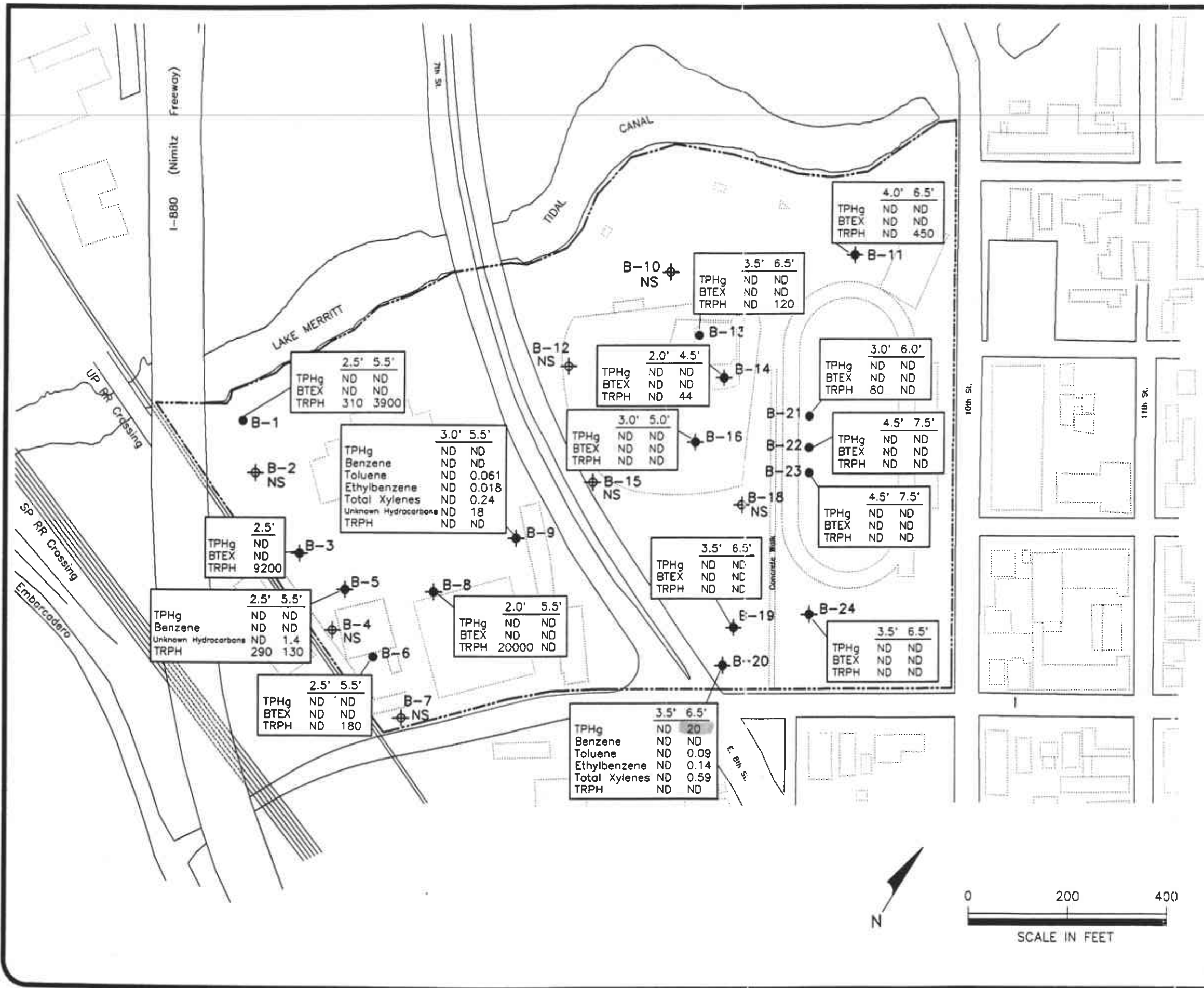
Boring	B-18	B-19	B-20	B-24
Sample Depth (ft)	19.0-22.5	21.5-25.0	21.0-28.0	27.0-31.0
Date Collected	26-Aug-92	27-Aug-92	28-Aug-92	26-Aug-92
Lab Report	9208078	9208085	9208090	9208078
<u>EPA Method 8010</u>				
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	110	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5
2-Chloroethylvinyl Ether	<5	<5	<5	<5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	0.6
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Freon 113	<0.5	<0.5	<0.5	<0.5
Methylene Chloride	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5
<u>EPA Method 8015</u>				
Benzene	<0.5	<0.5	780	<0.5
Ethylbenzene	<0.5	<0.5	210	<0.5
Gasoline	<50	<50	4800	<50
Toluene	<0.5	<0.5	97	<0.5
Total Xylenes	<0.5	<0.5	120	<0.5
Unknown Hydrocarbons				
<u>EPA Method 418.1</u>				
TRPH	<500	<500	800	<500

Notes:

(1) All concentrations reported in ug/L.

**LARGE
MAP
REMOVED**

1, 2 - 3



EXPLANATION

- Existing Buildings
- Site Boundary
- ◆ B-11 Ground Water Grab and Soil Sample Location
- B-21 Soil Sample Location
- ◆ B-18 NS Ground Water Grab Sample Location, No Soil Samples Collected
- 2.5' Sample Depth Below Ground Surface
- ND Compound(s) Not Detected

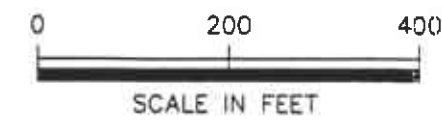
- NOTES:**
1. TPHg = Total Petroleum Hydrocarbons, gasoline fraction, by modified EPA Test Method 8015.
 2. BTEX = Benzene, Toluene, Ethylbenzene and Xylenes by modified EPA Test Method 8015.
 3. TRPH = Total Recoverable Petroleum Hydrocarbons by EPA Test Method 418.1.
 4. Test results are from undisturbed soil samples collected between August 25 and 28, 1992.
 5. All results in mg/kg.

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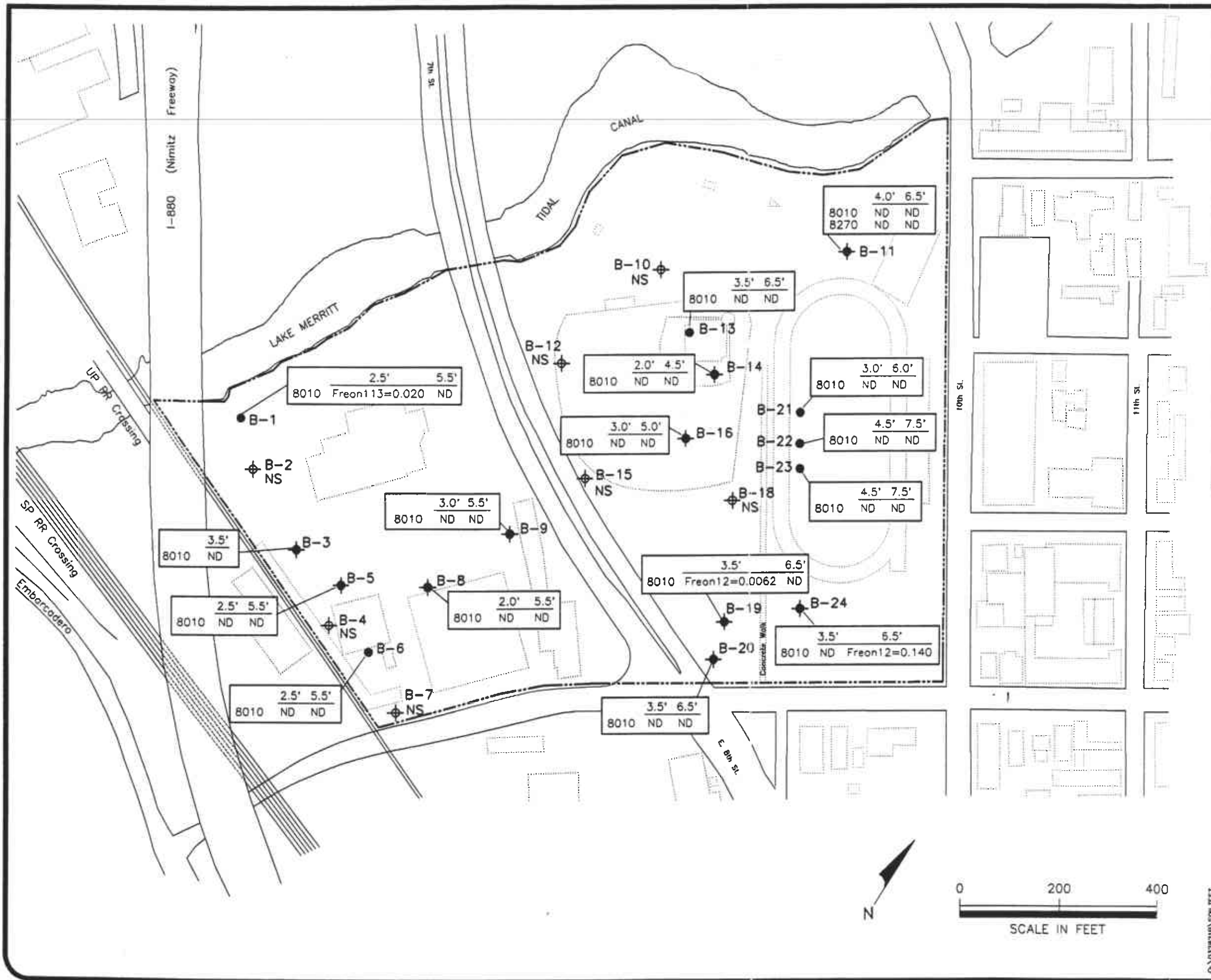
Consult in Health and Environmental Science
5820 Shellmound Street, Suite 700, Emeryville, California 94608

Soil Test Results, Petroleum Hydrocarbons and BTEX Compounds
Laney College
Oakland, California

DATE: 9/9/92	CONTRACT NUMBER: 03-2821B	FIGURE: 4
DRAFTER: DC	APPROVED:	REVISED:



Q:\032821B\CHEMAP



EXPLANATION

- Existing Buildings
- Site Boundary
- B-11 Ground Water Grab and Soil Sample Location
- B-21 Soil Sample Location
- B-18 NS Ground Water Grab Sample Location, No Soil Samples Collected
- 2.5' Sample Depth, Below Ground Surface
- ND Compound(s) Not Detected

NOTES:

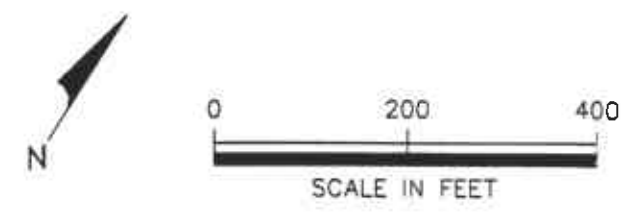
- 8010 = Volatile Organic Compounds by EPA Test Method 8010.
- Soil collected at B-11 was analyzed by EPA Test Methods 8010 and 8270.
- Test results are from undisturbed soil samples collected between August 25 and 28, 1992.
- All results in mg/kg.

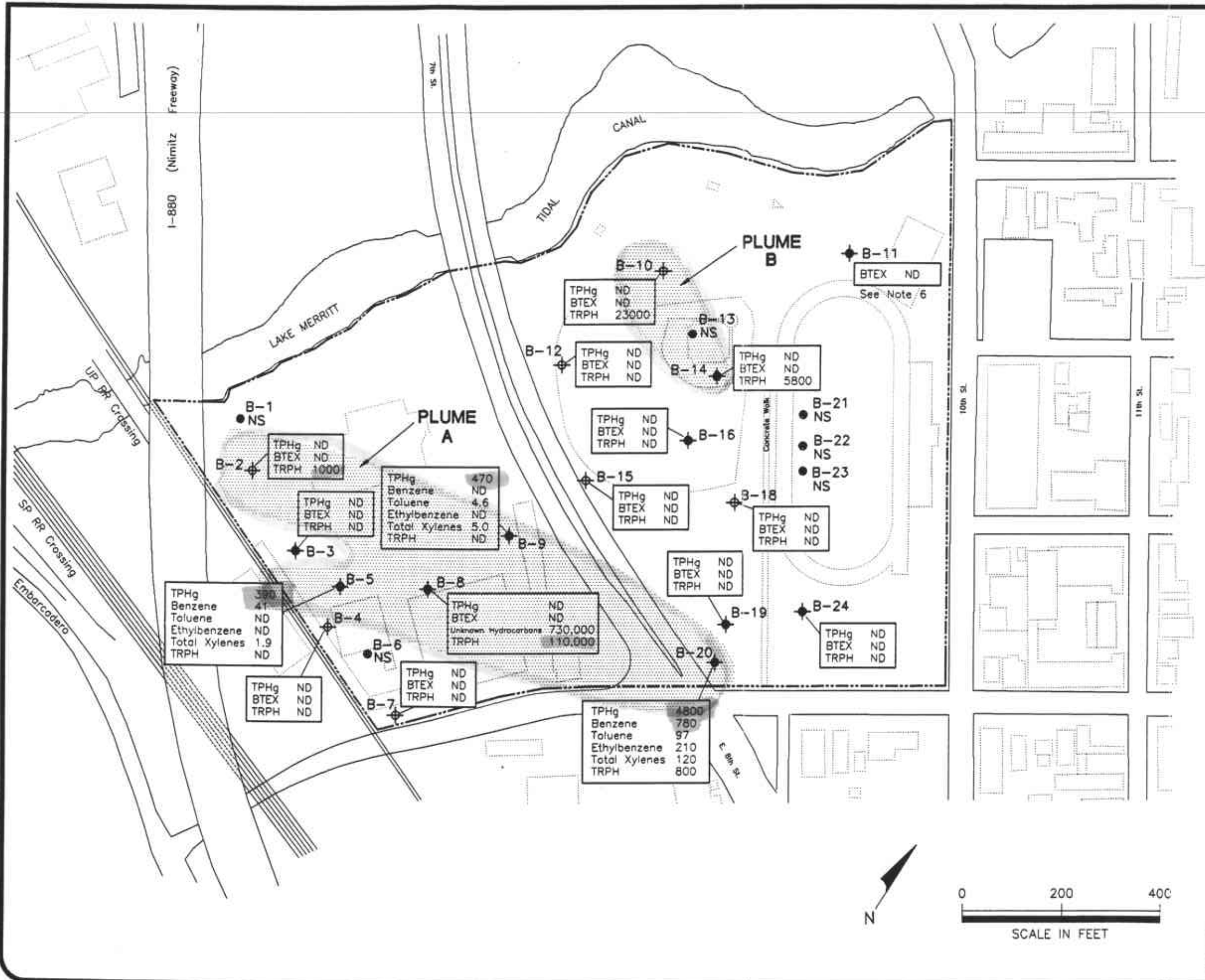
ENVIRON
 Council in Health and Environmental Science
 5820 Shellmound Street, Suite 700, Emeryville, California 94608

Soil Test Results, Halogenated VOCs
 Laney College
 Oakland, California

DATE: 9/10/92	CONTRACT NUMBER: 03-2821B	FIGURE 5
DRAFTER: DC	APPROVED:	REVISED:

Q:\032821B\SOILTEST





EXPLANATION	
	Existing Buildings
	Site Boundary
	B-11 Ground Water Grab and Soil Sample Location
	B-21 NS Soil Sample Location, No Ground Water Sample Collected
	B-18 Ground Water Grab Sample Location
ND	Compound(s) Not Detected

NOTES:

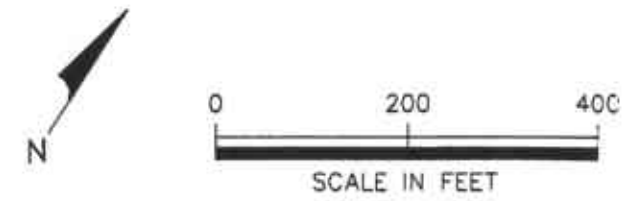
1. TPHg = Total Petroleum Hydrocarbons, gasoline fraction, by modified EPA Test Method 8015.
2. BTEX = Benzene, Toluene, Ethylbenzene and Xylenes by modified EPA Test Method 8015.
3. TRPH = Total Recoverable Petroleum Hydrocarbons by EPA Test Method 418.1.
4. Test results are from ground water grab samples collected between August 25 and 28, 1992.
5. All results in $\mu\text{g/l}$.
6. Because of very fine-grained soils at this location, only enough sample could be collected to test by EPA Test Methods 8010 and 8020.

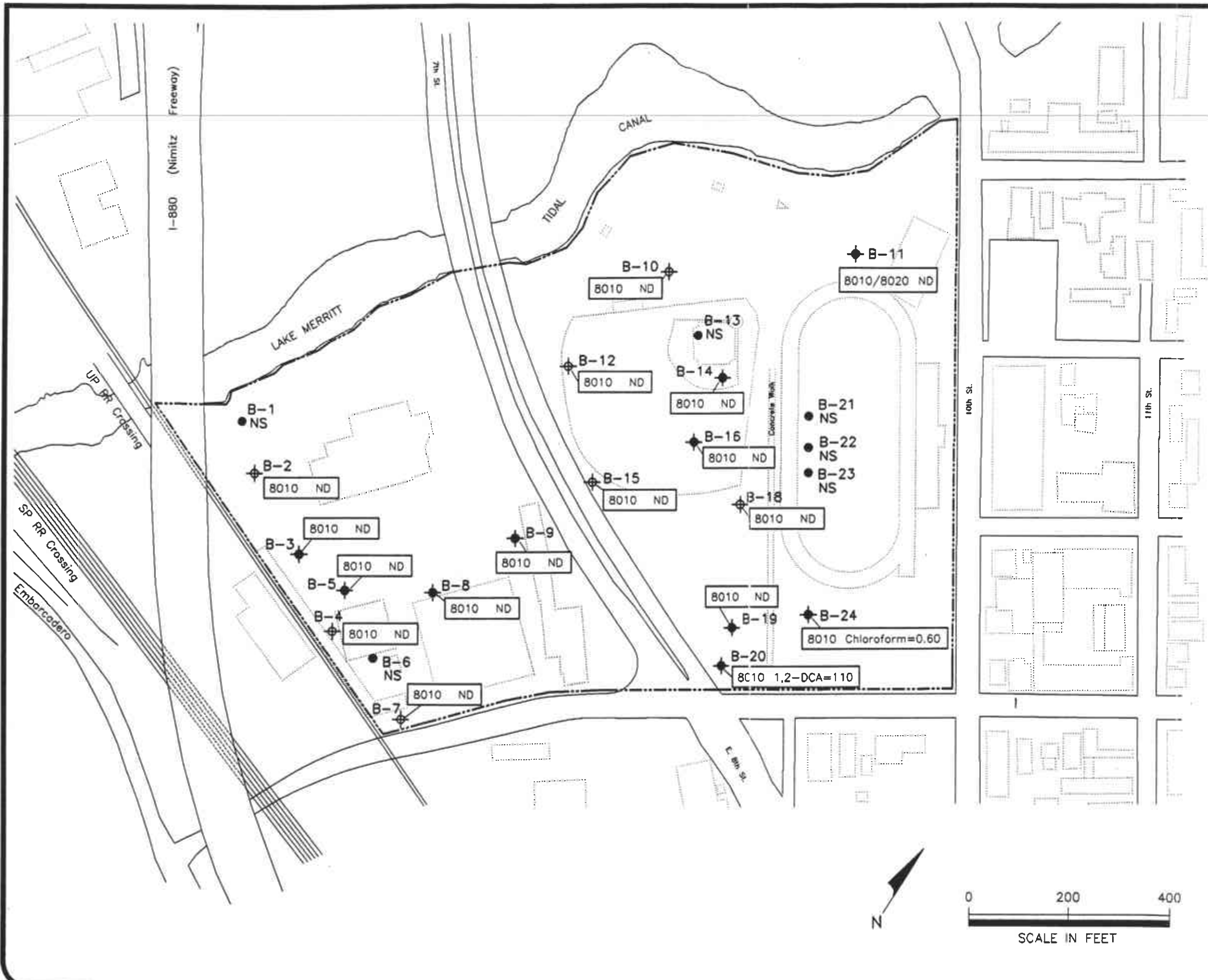
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Consultants in Health and Environmental Science
 5820 Shellmound Street, Suite 700, Emeryville, California 94608

**Ground Water Test Results
 Petroleum Hydrocarbons and BTEX
 Compounds
 Laney College
 Oakland, California**

DATE: 9/10/92	CONTRACT NUMBER: 03-2821B	FIGURE: 6
DRAFTER: DC	APPROVED:	REVISED:

Q:\032821B\GWGRAB



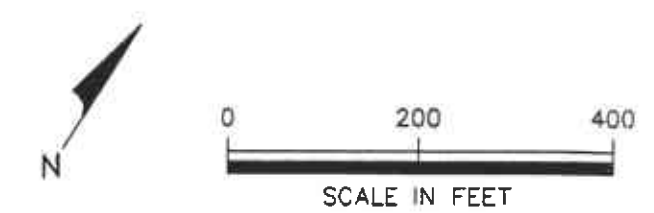


EXPLANATION

- Existing Buildings
- Site Boundary
- B-11 Ground Water Grab and Soil Sample Location
- B-21 NS Soil Sample Location, No Ground Water Sample Collected
- B-18 Ground Water Grab Sample Location
- ND Compound(s) Not Detected

NOTES:

1. 8010 = Volatile Organic Compounds by EPA Test Method 8010.
2. Sample Collected at B-11 was analysed by EPA Test Methods 8010/8020.
3. Test results are from ground water grab samples collected between August 25 and 28, 1992.
4. All results in $\mu\text{g/l}$.



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 5820 Shellmound Street, Suite 700, Emeryville, California 94608

Ground Water Test Results
Halogenated VOCs
 Laney College
 Oakland, California

DATE: 9/10/92	CONTRACT NUMBER: 03-2821B	FIGURE: 7
DRAFTER: DC	APPROVED:	REVISED:

g:\032821B\GWVOC5

APPENDIX A
FIELD PROGRAM

APPENDIX A
FIELD PROGRAM

Twenty-four soil borings were drilled between August 25 and August 28, 1992. All drilling and sampling operations were supervised by an ENVIRON geologist and boring logs were reviewed by David E. Harnish, California Registered Geologist Number 4671, and Jeffrey S. Edwards, California Registered Geologist Number 4567. The boring logs are presented in Figures A-2 through A-25.

ENVIRON followed the health and safety procedures described in the Site Safety Plan dated August 24, 1992 which is on file at ENVIRON. Air quality of the breathing zone was monitored during drilling to assure worker safety using a Thermo Environmental Instruments Model 580B organic vapor monitor (OVM) calibrated to isobutylene.

Drilling

Drilling was performed by Weeks Drilling and Pump Company, Inc. of Sebastopol, California under supervision of ENVIRON geologists. Two Mobile B-53 drilling rigs were used, equipped with 7- and 8½-inch outside diameter hollow-stem augers. The augers were steam cleaned prior to their arrival onsite and between boreholes. The OVM was also used to measure the concentration of VOCs at the top of the augers or the head space of a sealable plastic bag containing some sample. OVM measurements are recorded on the boring logs.

Boring B-17 was not completed because underground irrigation control wires were encountered at 2.5 feet depth and extensive underground utilities and aboveground structures made nearby relocation of this boring impractical. Five borings, B-3, B-8, B-9, B-16 and B-21, required more than one drilling attempt because of auger refusal or lack of ground water.

Following sampling, each boring was backfilled with Basalite Type I-II neat

cement grout. Soil cuttings from all borings were placed in labeled 55-gallon steel drums and stored at the site for future disposal pending analytical results from the soil and water samples.

Sample Collection

Of the twenty-three soil borings completed, eight were sampled for both soil and water, eight were sampled for soil only, and seven were sampled for water only. All non-dedicated sampling equipment was cleaned in an Alconox™ detergent solution prior to sample collection in order to minimize the potential for cross contamination of samples. Strict chain-of-custody procedures were maintained during sample collection, labeling, logging, and shipment.

Soil samples were collected from sixteen borings by driving an 18-inch long, 2½-inch (inside diameter) modified California split-spoon sampler into undisturbed soil ahead of the augers. When samples were collected for laboratory analysis, the sampler was lined with three clean 6-inch long brass tubes. The least disturbed sample-filled tube from each drive was selected for testing, covered at each end with Teflon™ film, secured with plastic caps, sealed with silicon tape, labeled, and placed in an iced cooler for transport to the analytical laboratory.

Ground water grab samples were collected with a HydroPunch II™ sampler except for four borings (B-3, B-11, B-15 and B-20) where samples were collected with a stainless steel or disposable polyethylene bailer. The HydroPunch sampler was driven into undisturbed soil ahead of the augers to screen the top of the first ground water zone. Once at the desired depth, the stainless steel body of the HydroPunch was retracted upward, exposing up to four-and-a-half feet of polypropylene screen to the formation. A small Teflon™ or stainless steel bailer was then lowered through the hollow push rod and sampler to collect the sample. Ground water samples were decanted from the bailer into clear glass 40 milliliter vials and 2.5 liter amber glass jugs, labeled, and placed in an iced cooler for transport to the analytical laboratory. If the borehole yielded insufficient water to the HydroPunch, it was lowered by pushing it deeper or drilling it down within the hollow-stem augers. Following sampling, the

HydroPunch sampler was removed from the boring, leaving the screen and carbon steel drive point in the borehole. The borehole was then grouted to the surface using neat cement.

MAJOR DIVISIONS		GRAPHIC SYMBOL	SOIL CODE	DESCRIPTIONS	
COARSE-GRAINED SOILS More than half is coarser than #200 sieve	GRAVELS more than half coarse fraction is larger than no. 4 sieve		GW	WELL GRADED GRAVELS, WITH OR WITHOUT SAND, LITTLE OR NO FINES	
			GP	POORLY GRADED GRAVELS, WITH OR WITHOUT SAND, LITTLE OR NO FINES	
		GRAVELS WITH OVER 12% FINES		GM	SILTY GRAVELS, SILTY GRAVELS WITH SAND
				GC	CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
	SANDS more than half coarse fraction is smaller than no. 4 sieve	CLEAN SANDS WITH LITTLE OR NO FINES		SW	WELL GRADED SANDS, WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
				SP	POORLY GRADED SANDS, WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES		SM	SILTY SANDS, WITH OR WITHOUT GRAVEL
				SC	CLAYEY SANDS, WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS	SILTS AND CLAYS liquid limit 50 or less		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, CLAYEY SILTS OF LOW PLASTICITY	
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
				OL	ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS liquid limit greater than 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS	
				CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
				OH	ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS			PT	PEAT AND OTHER HIGHLY ORGANIC SOILS	

SOIL SAMPLE RECOVERY KEY

- Soil Sample (relatively undisturbed) Complete Recovery

- Continuous Core Run Sample Recovery

Boring Number B-1

Drill Time-Date: Start 0825-8/27/92 Finish 0845-8/27/92

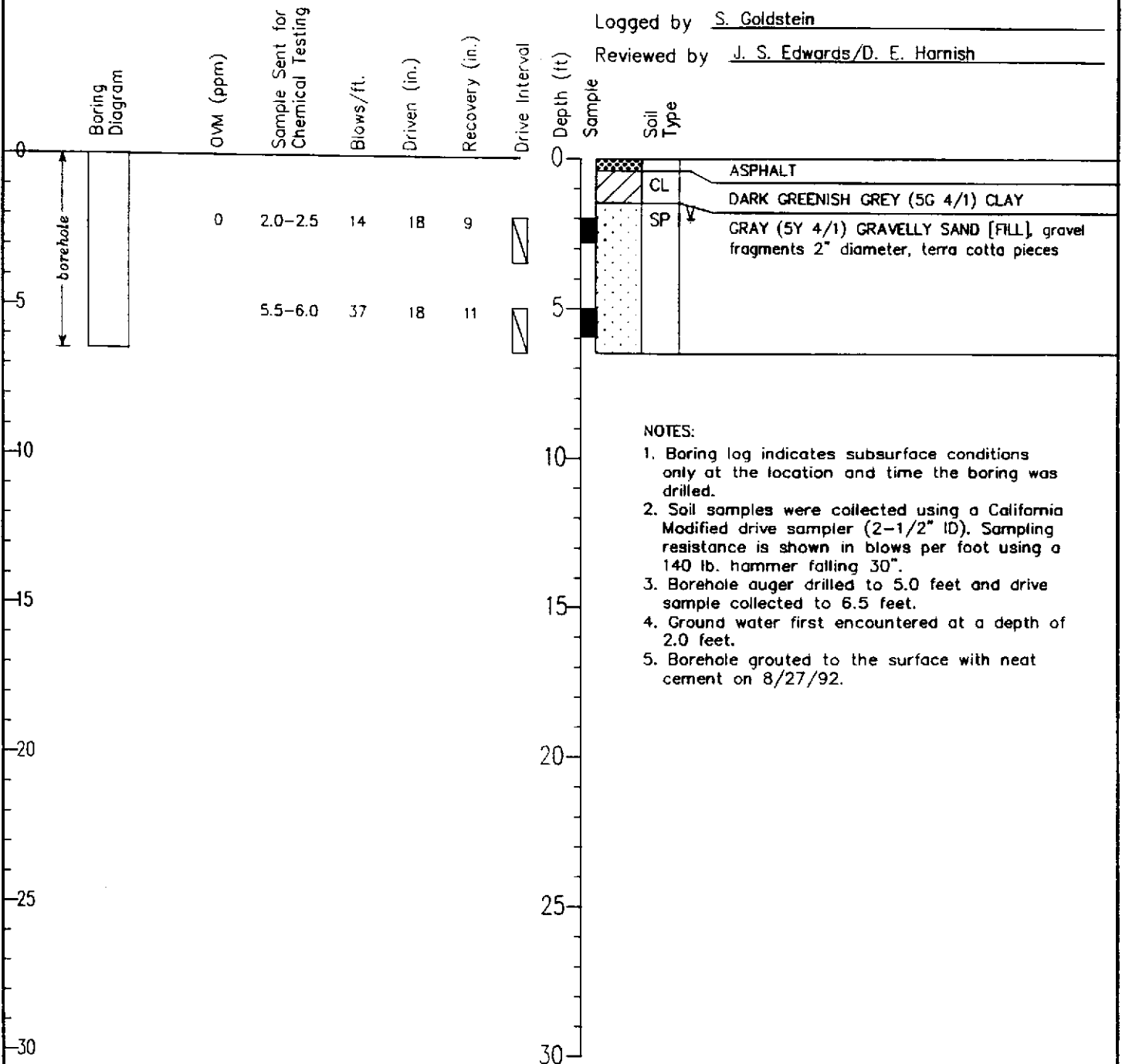
Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Dave Lowman

Logged by S. Goldstein

Reviewed by J. S. Edwards/D. E. Hornish



ENVIRON

Counsel in Health and Environmental Science

Job No.03-2821B

Approved:

09/92

LOG OF BORING B-1

Laney College Site Assessment

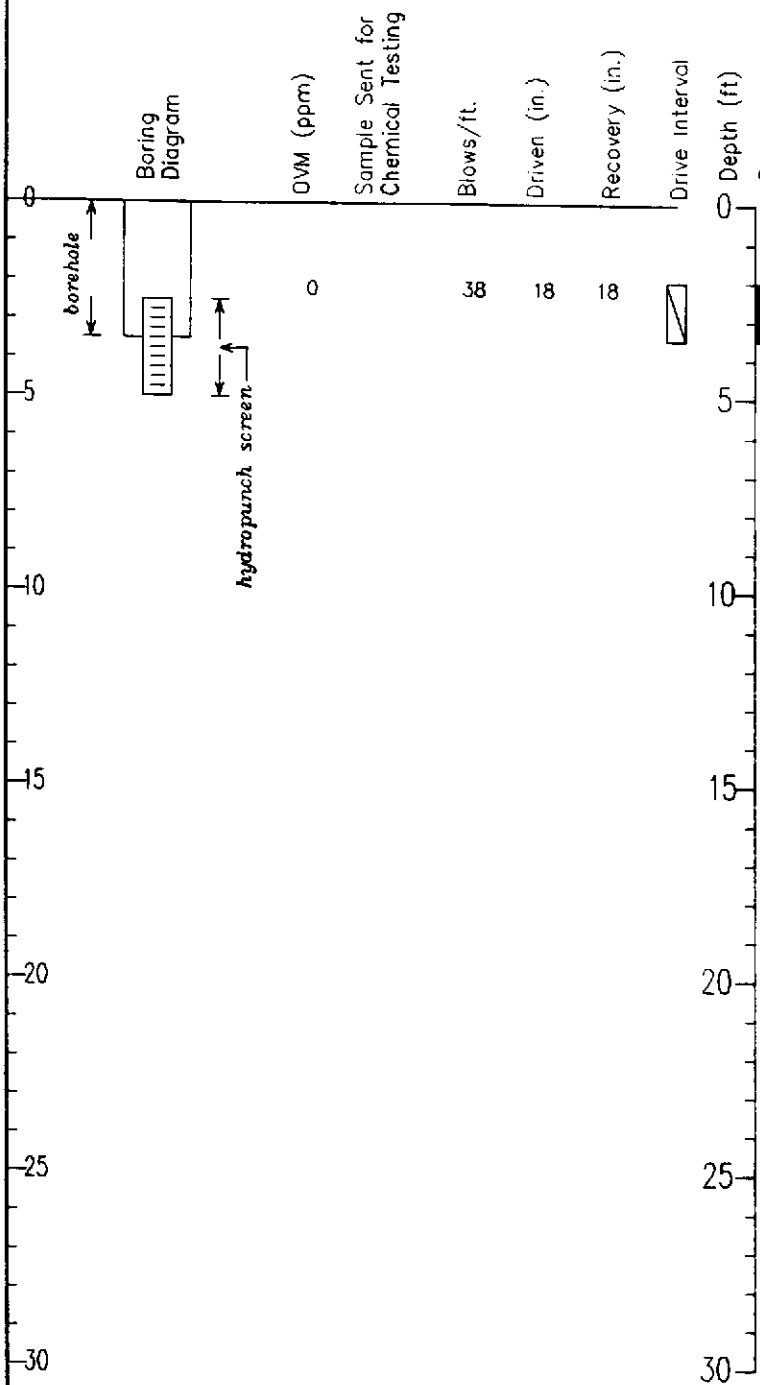
Oakland, California

pg 1 of 1

FIGURE

A-2

Boring Number B-2
 Drill Time-Date: Start 0910-8/27/92 Finish 0950-8/27/92
 Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., Inc./Dave Lowman
 Logged by S. Goldstein
 Reviewed by J. S. Edwards/D. E. Harnish



Sample	Soil Type
	ASPHALT
	BASEROCK - sand and gravel
	BLACK (5Y 2.5/1) GRAVELLY SAND [FILL]
	VERY DARK GRAY (5Y 3/1) CLAYEY GRAVEL [FILL]
	Hydropunch refusal at 5.0 ft

- NOTES:
1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
 3. Borehole auger drilled to 2.0 feet and drive sample collected to 3.5 feet.
 4. Ground water first encountered at a depth of 2.5 feet.
 5. Hydropunch screen (0.010") set at 2.5 to 5.0 feet and ground water grab sample collected.
 6. Borehole grouted to the surface with neat cement on 8/27/92.
 7. Organic Vapor Monitor (OVM) measurement is of sample head space.

Boring Number B-3

Drill Time-Date: Start 1245-8/27/92 Finish 1330-8/27/92

Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD

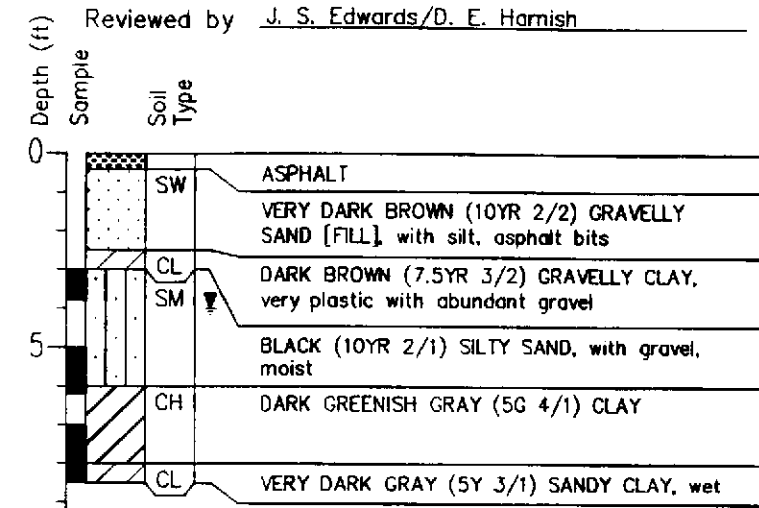
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Dave Lowman

Logged by S. Goldstein

Reviewed by J. S. Edwards/D. E. Harnish

Boring Diagram	OVM (ppm)	Sample Sent for Chemical Testing	Blows/ft.	Driven (in.)	Recovery (in.)	Drive Interval
	0	3.5-4.0	32	18	10	0 - 1.5
			4	18	14	1.5 - 5.5
			5	18	18	5.5 - 8.5



- NOTES:
1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
 3. Borehole auger drilled to 7.0 feet and drive sample collected to 8.5 feet.
 4. At 1530 on 8/27/92, depth to water = 4.0 feet.
 5. Hydropunch attempted twice at adjacent locations. At first location encountered refusal at 5.5 feet and tight soils from 4.0 to 7.5 feet at second location.
 6. Ground water grab sample collected from open borehole with stainless steel bailer.
 7. Boreholes grouted to the surface with neat cement and covered with asphalt on 8/27/92.
 8. Organic Vapor Monitor (OVM) measurement is of sample head space.

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LOG OF BORING B-3

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A-4

Boring Number B-4

Drill Time-Date: Start 0850-8/27/92 Finish 0910-8/27/92

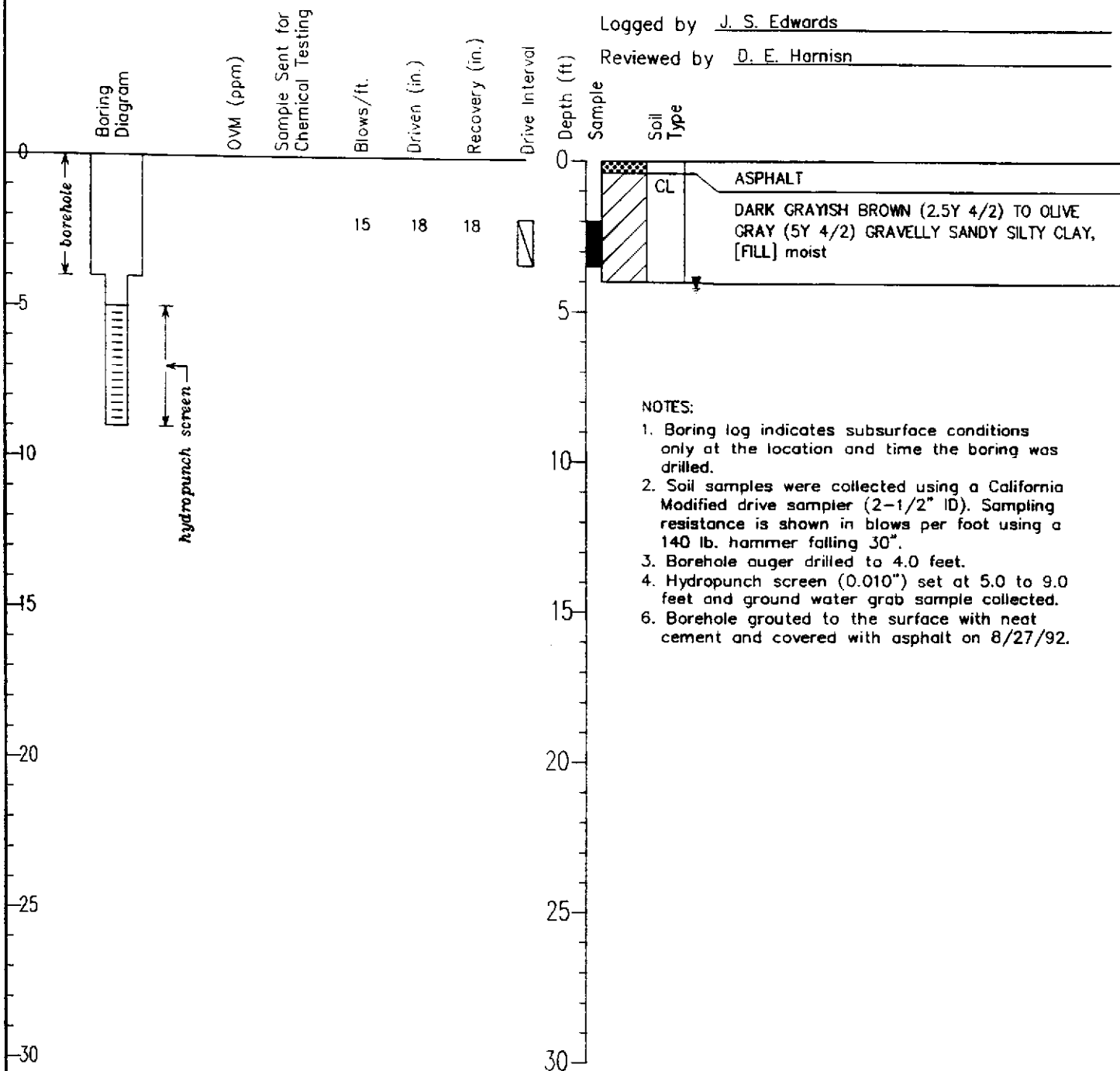
Drill Method Mobile B-53; Hollow Stem Auger; 7" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards

Reviewed by D. E. Harnish



NOTES:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
3. Borehole auger drilled to 4.0 feet.
4. Hydropunch screen (0.010") set at 5.0 to 9.0 feet and ground water grab sample collected.
6. Borehole grouted to the surface with neat cement and covered with asphalt on 8/27/92.

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LOG OF BORING B-4

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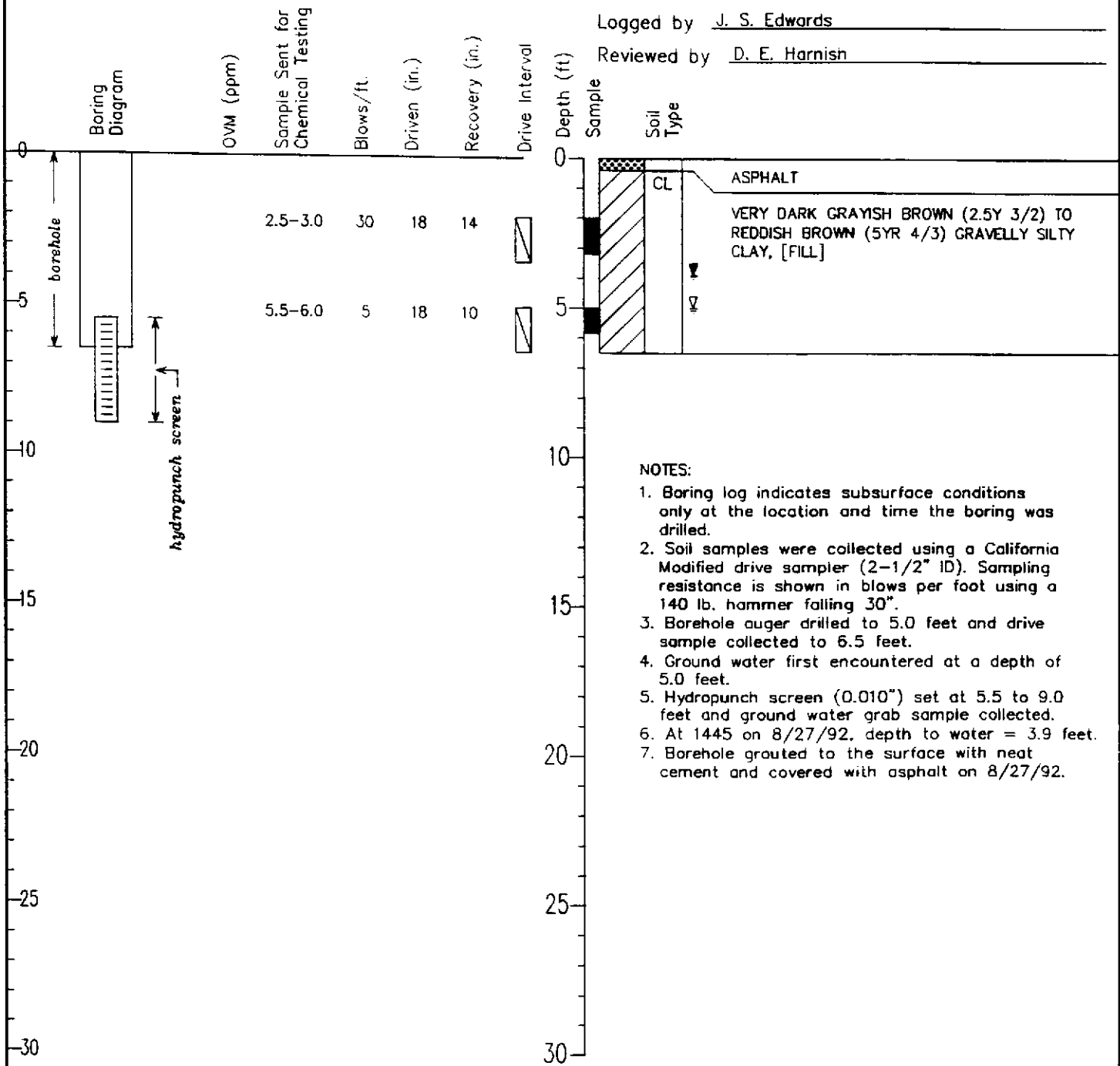
pg 1 of 1

FIGURE

A-5

Boring Number B-5
 Drill Time-Date: Start 0930-8/27/92 Finish 1020-8/27/92
 Drill Method Mobile B-53; Hollow Stem Auger; 7" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards
 Reviewed by D. E. Harnish



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LOG OF BORING B-5

Laney College Site Assessment

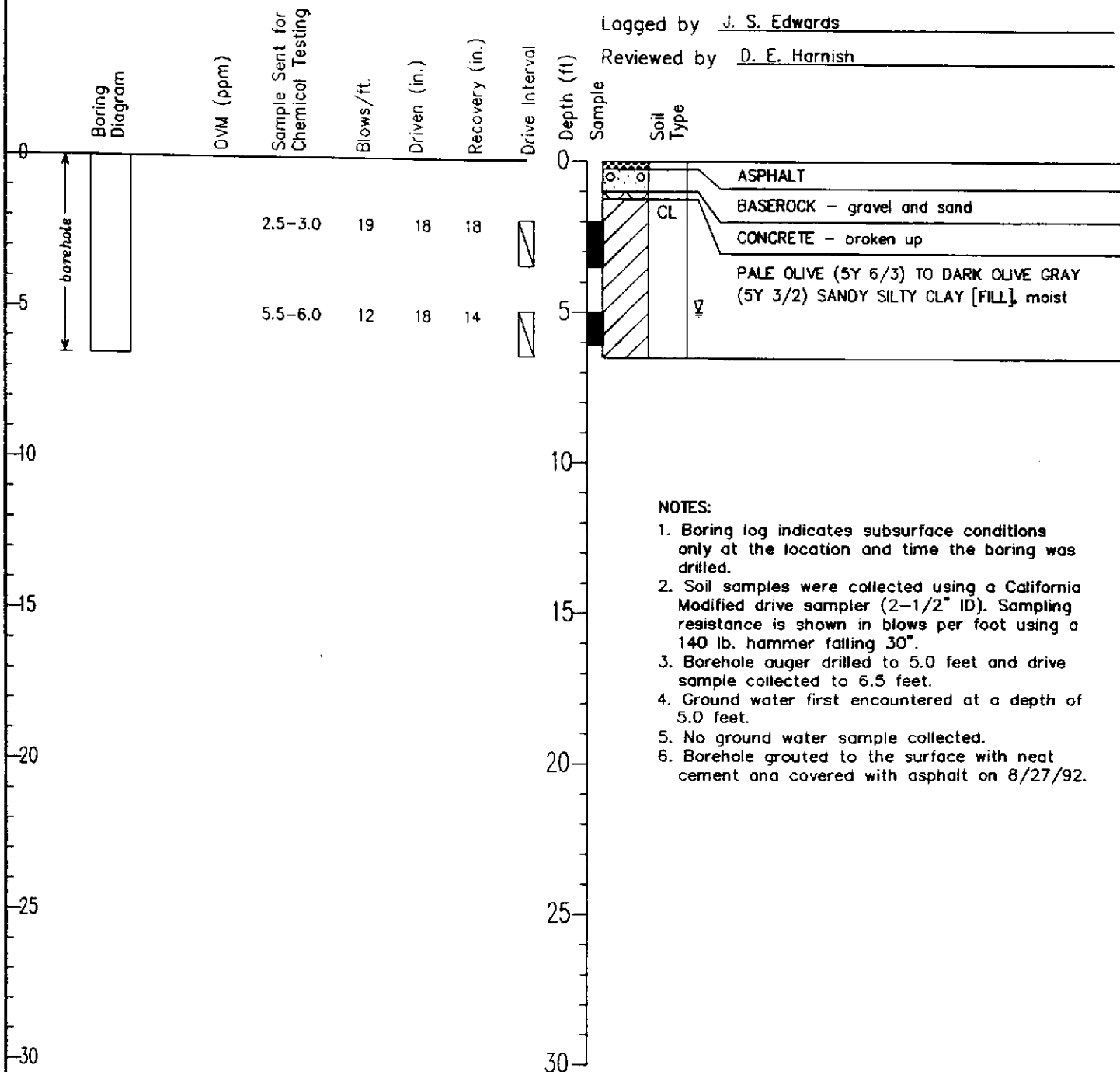
Oakland, California

pg 1 of 1

FIGURE

A-6

Boring Number B-6
 Drill Time-Date: Start 0820-8/27/92 Finish 0840-8/27/92
 Drill Method Mobile B-53; Hollow Stem Auger; 7" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., Inc./Gary Meyers
 Logged by J. S. Edwards
 Reviewed by D. E. Harnish



NOTES:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
3. Borehole auger drilled to 5.0 feet and drive sample collected to 6.5 feet.
4. Ground water first encountered at a depth of 5.0 feet.
5. No ground water sample collected.
6. Borehole grouted to the surface with neat cement and covered with asphalt on 8/27/92.

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LOG OF BORING B-6

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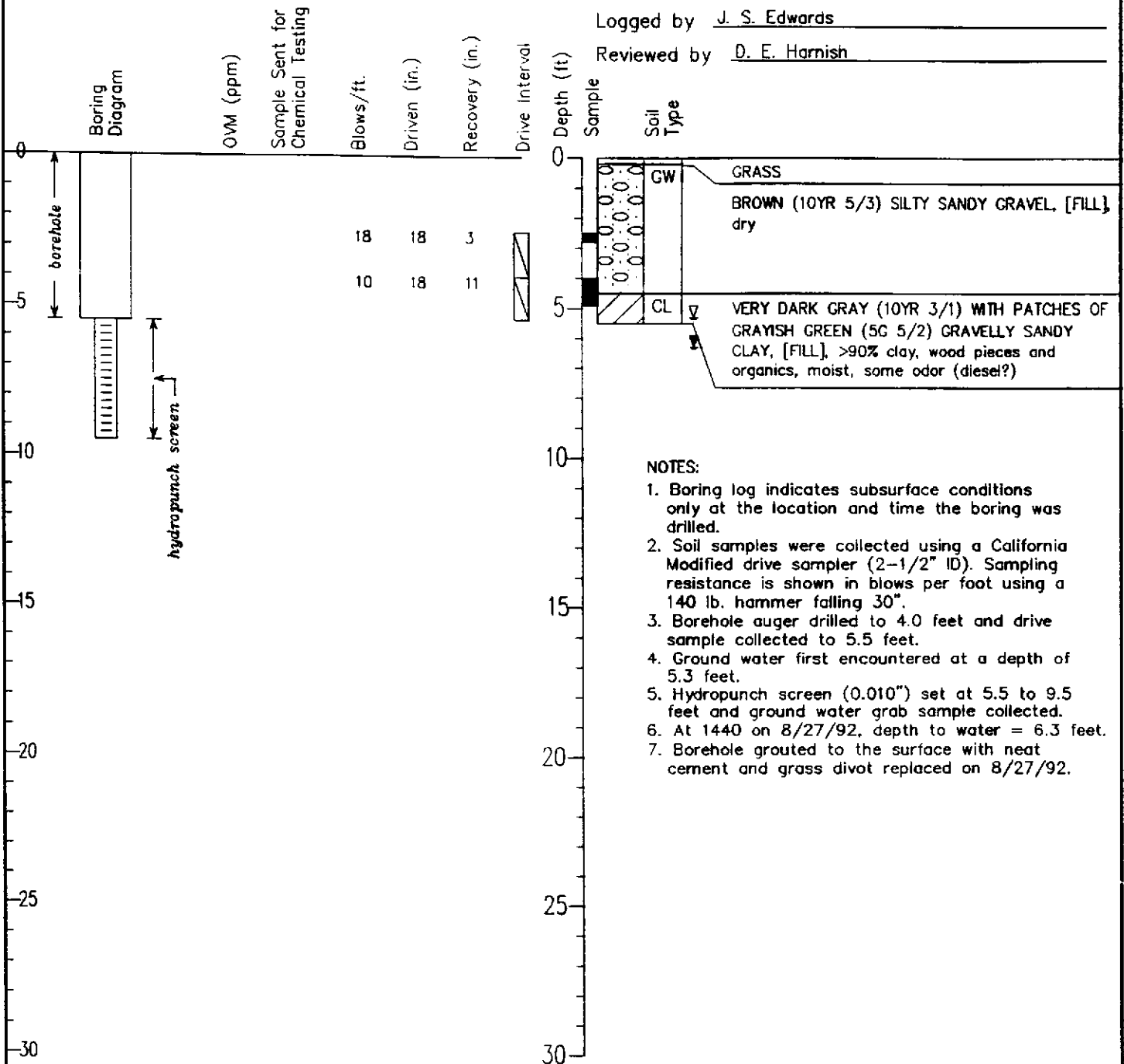
pg 1 of 1

FIGURE

A-7

Boring Number B-7
 Drill Time-Date: Start 1100-8/27/92 Finish 1120-8/27/92
 Drill Method Mobile B-53; Hollow Stem Auger; 7" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards
 Reviewed by D. E. Harnish



- NOTES:
1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
 3. Borehole auger drilled to 4.0 feet and drive sample collected to 5.5 feet.
 4. Ground water first encountered at a depth of 5.3 feet.
 5. Hydropunch screen (0.010") set at 5.5 to 9.5 feet and ground water grab sample collected.
 6. At 1440 on 8/27/92, depth to water = 6.3 feet.
 7. Borehole grouted to the surface with neat cement and grass divot replaced on 8/27/92.

Boring Number B-8

Drill Time-Date: Start 1220-8/27/92 Finish 1300-8/27/92

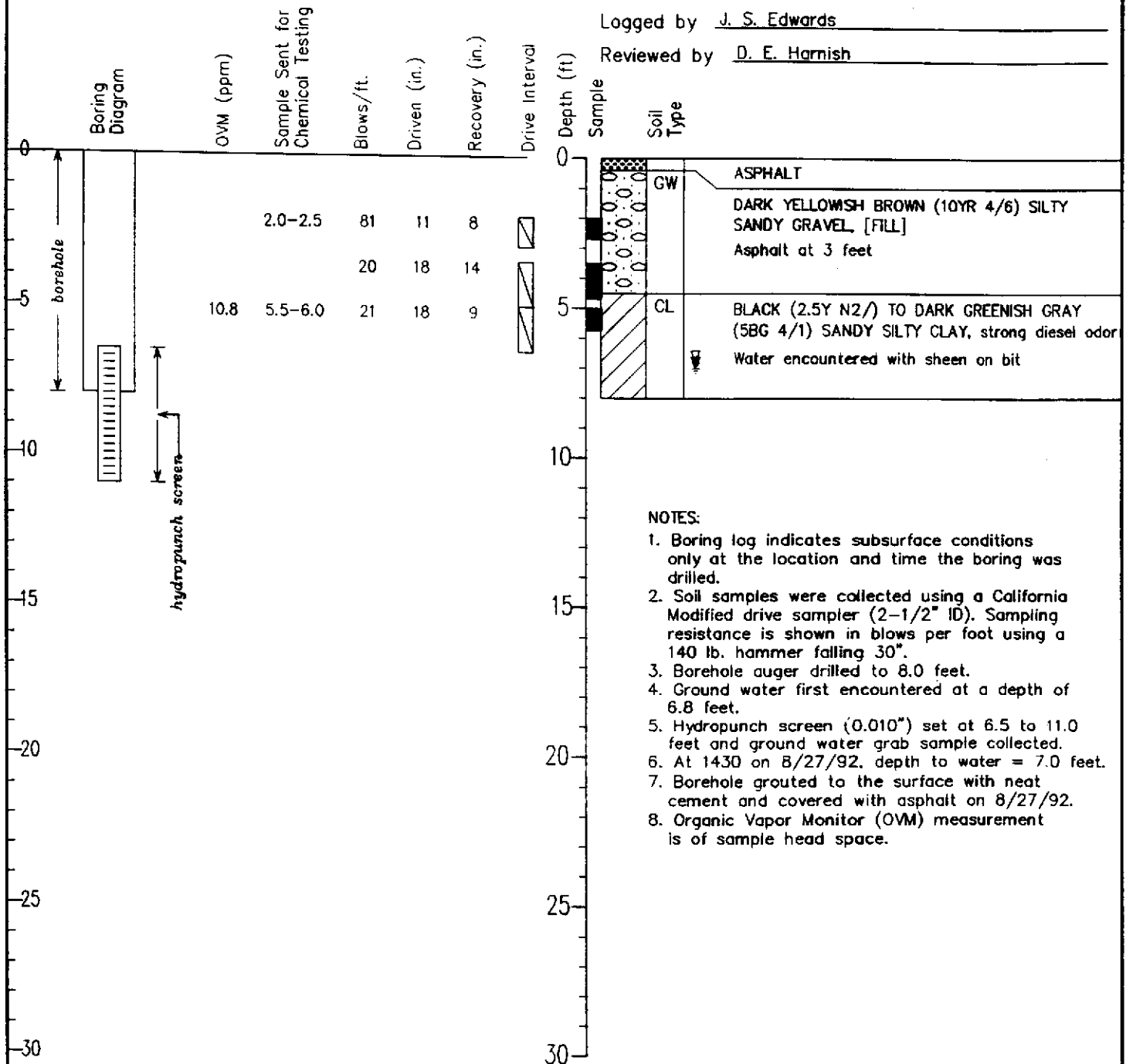
Drill Method Mobile B-53; Hollow Stem Auger; 7" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards

Reviewed by D. E. Harnish



NOTES:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
3. Borehole auger drilled to 8.0 feet.
4. Ground water first encountered at a depth of 6.8 feet.
5. Hydropunch screen (0.010") set at 6.5 to 11.0 feet and ground water grab sample collected.
6. At 1430 on 8/27/92, depth to water = 7.0 feet.
7. Borehole grouted to the surface with neat cement and covered with asphalt on 8/27/92.
8. Organic Vapor Monitor (OVM) measurement is of sample head space.

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LOG OF BORING B-8

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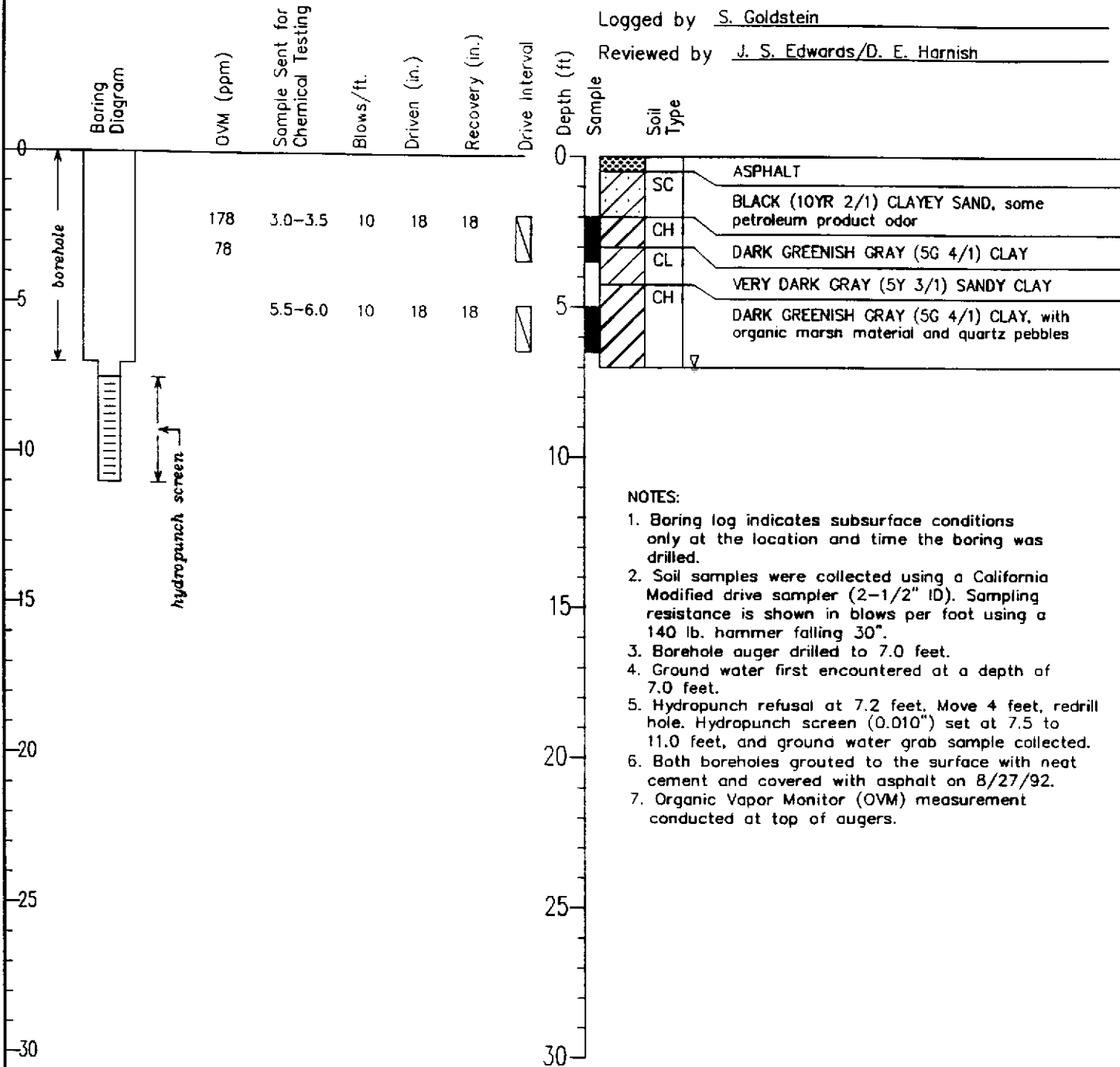
Oakland, California

pg 1 of 1

FIGURE

A-9

Boring Number B-9
 Drill Time-Date: Start 1335-8/27/92 Finish 1450-8/27/92
 Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., inc./Dave Lowman
 Logged by S. Goldstein
 Reviewed by J. S. Edwards/D. E. Harnish



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LOG OF BORING B-9

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FIGURE

A-10

Boring Number B-10

Drill Time-Date: Start 1540-8/25/92 Finish 1610-8/25/92

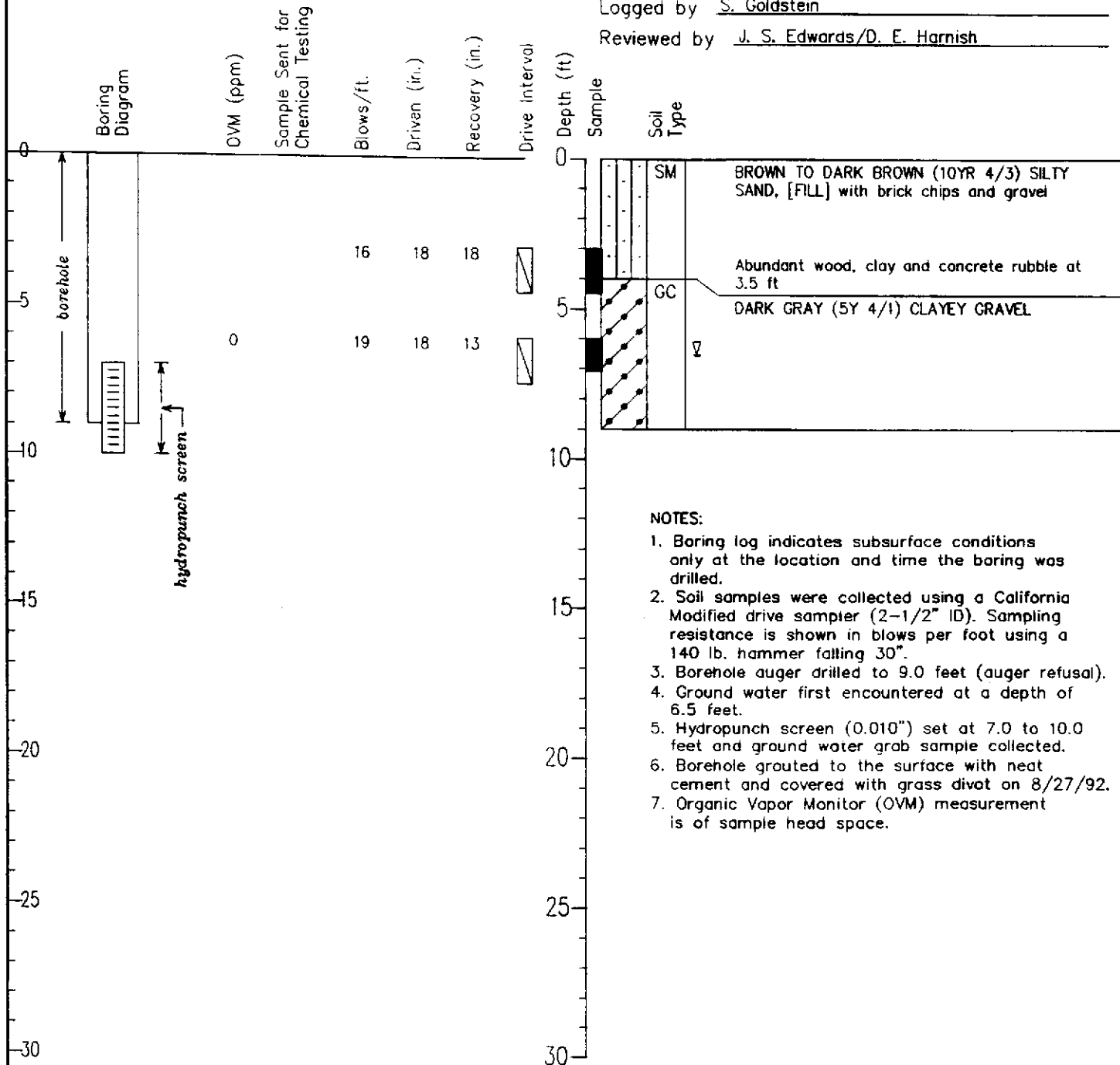
Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Dave Lowman

Logged by S. Goldstein

Reviewed by J. S. Edwards/D. E. Harnish



NOTES:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
3. Borehole auger drilled to 9.0 feet (auger refusal).
4. Ground water first encountered at a depth of 6.5 feet.
5. Hydropunch screen (0.010") set at 7.0 to 10.0 feet and ground water grab sample collected.
6. Borehole grouted to the surface with neat cement and covered with grass divot on 8/27/92.
7. Organic Vapor Monitor (OVM) measurement is of sample head space.

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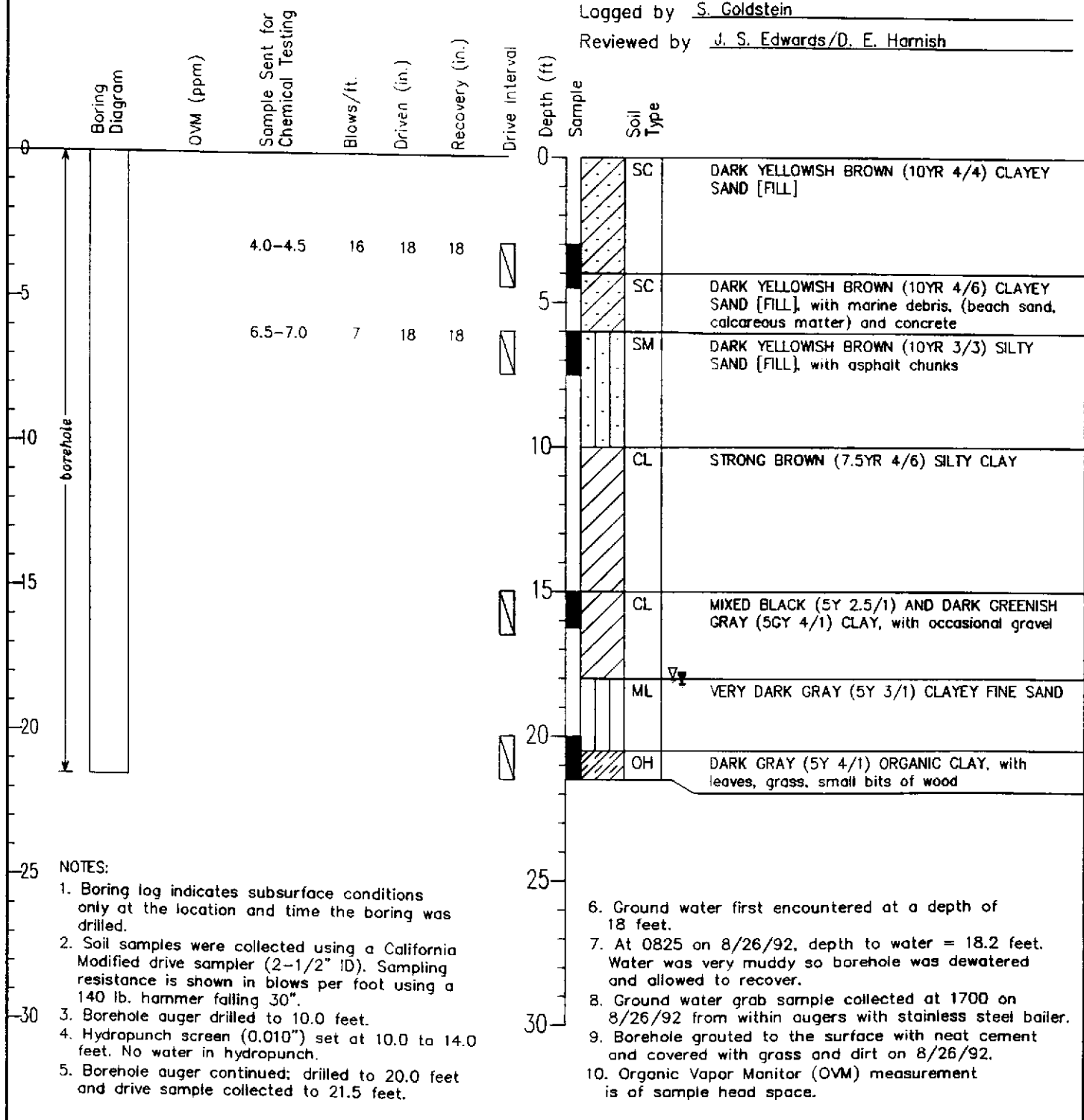
LOG OF BORING B-10

Laney College Site Assessment
Oakland, California

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A-11

Boring Number B-11
 Drill Time-Date: Start 1755-8/25/92 Finish 1905-8/25/92
 Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., Inc./Dave Lowman
 Logged by S. Goldstein
 Reviewed by J. S. Edwards/D. E. Harnish



NOTES:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
3. Borehole auger drilled to 10.0 feet.
4. Hydropunch screen (0.010") set at 10.0 to 14.0 feet. No water in hydropunch.
5. Borehole auger continued; drilled to 20.0 feet and drive sample collected to 21.5 feet.

6. Ground water first encountered at a depth of 18 feet.
7. At 0825 on 8/26/92, depth to water = 18.2 feet. Water was very muddy so borehole was dewatered and allowed to recover.
8. Ground water grab sample collected at 1700 on 8/26/92 from within augers with stainless steel bailer.
9. Borehole grouted to the surface with neat cement and covered with grass and dirt on 8/26/92.
10. Organic Vapor Monitor (OVM) measurement is of sample head space.

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LOG OF BORING B-11
 Laney College Site Assessment
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A-12

Boring Number B-12

Drill Time-Date: Start 0940-8/28/92 Finish 1000-8/28/92

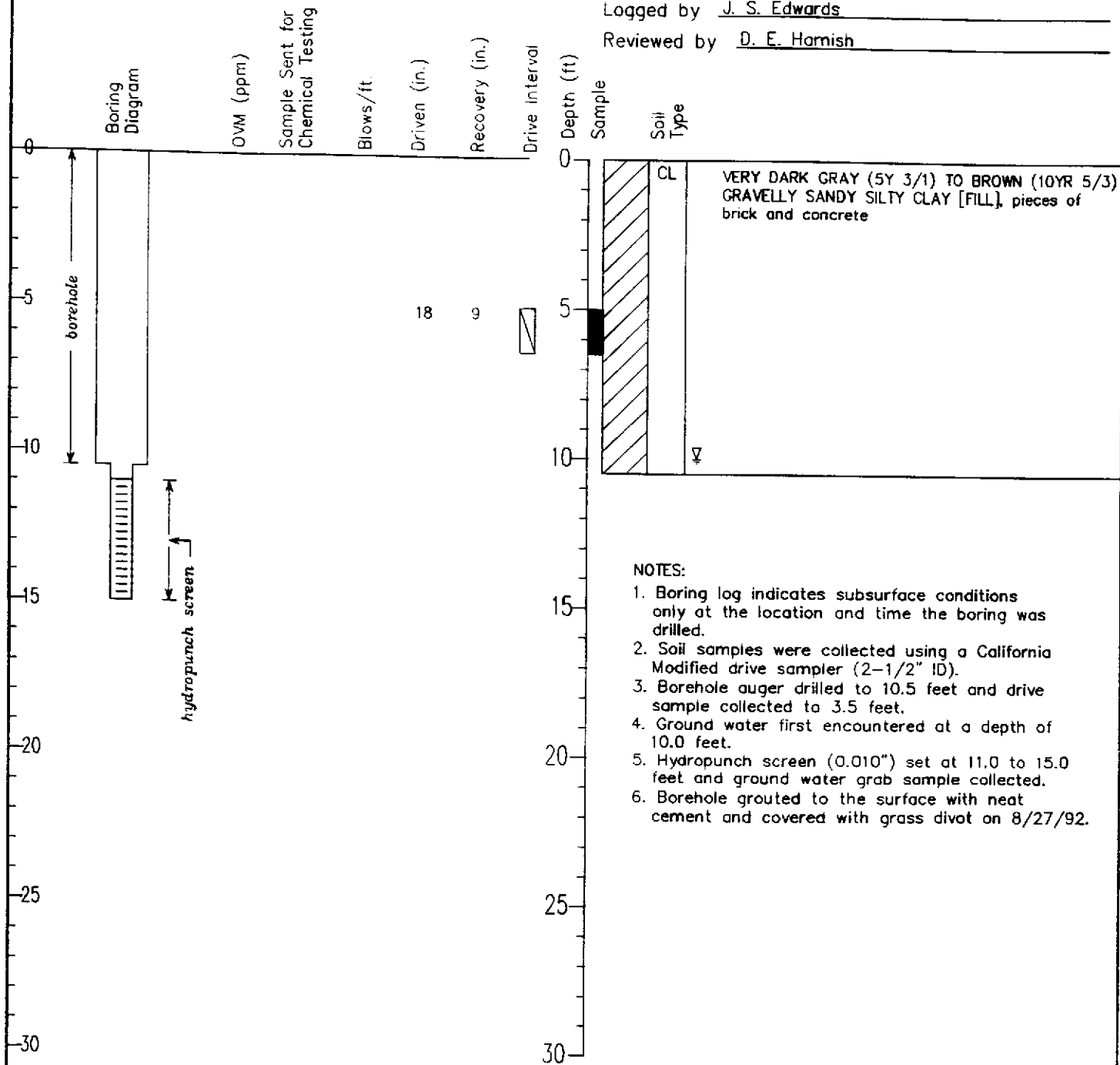
Drill Method Mobile B-53; Hollow Stem Auger; 7" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards

Reviewed by D. E. Hamish



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Oakland, California

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FIGURE

A-13

Boring Number B-13

Drill Time-Date: Start 0900-8/28/92 Finish 0930-8/28/92

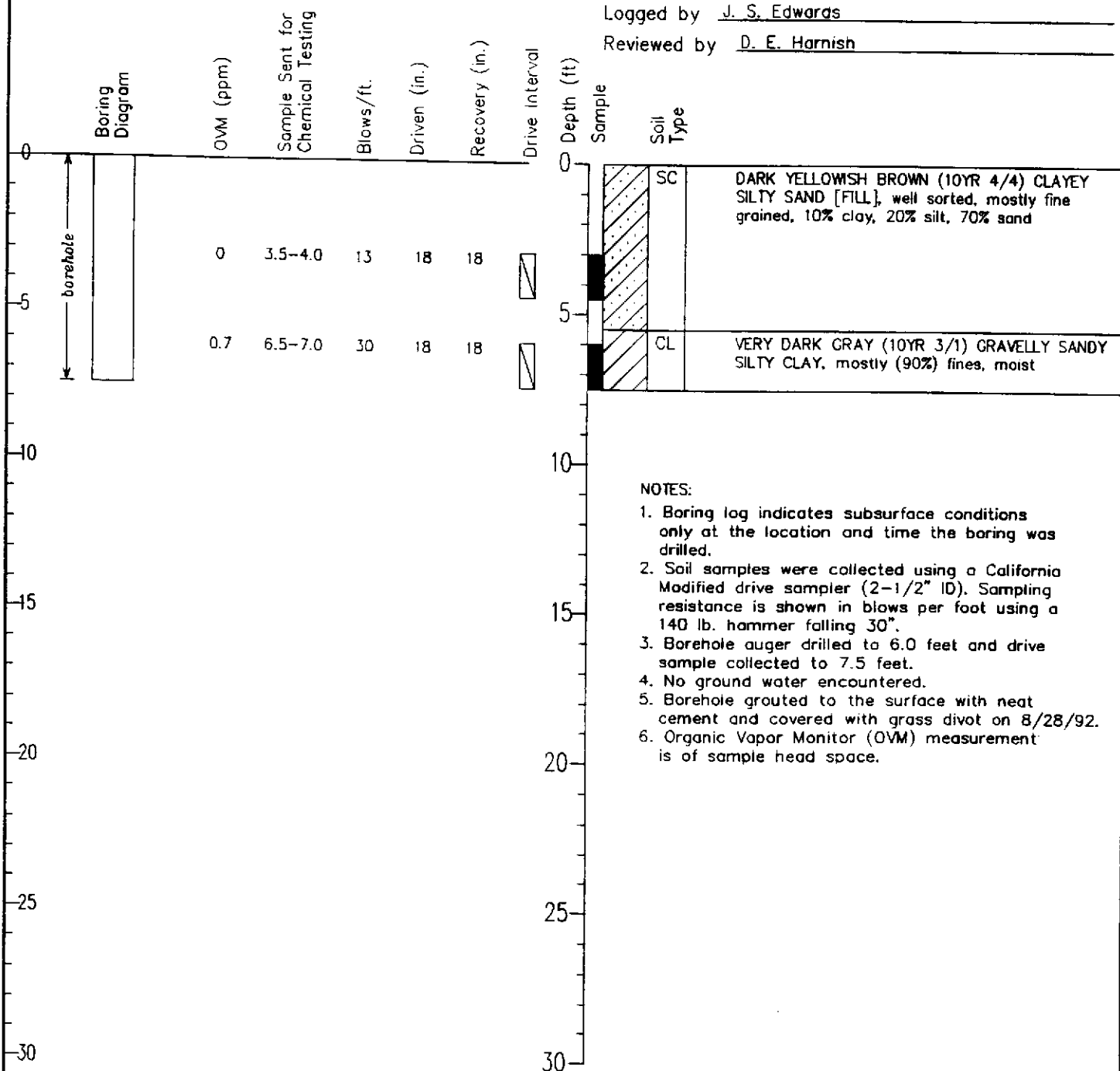
Drill Method Mobile B-53; Hollow Stem Auger; 7" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards

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FIGURE

A-14

Boring Number B-14

Drill Time-Date: Start 1100-8/25/92 Finish 1120-8/25/92

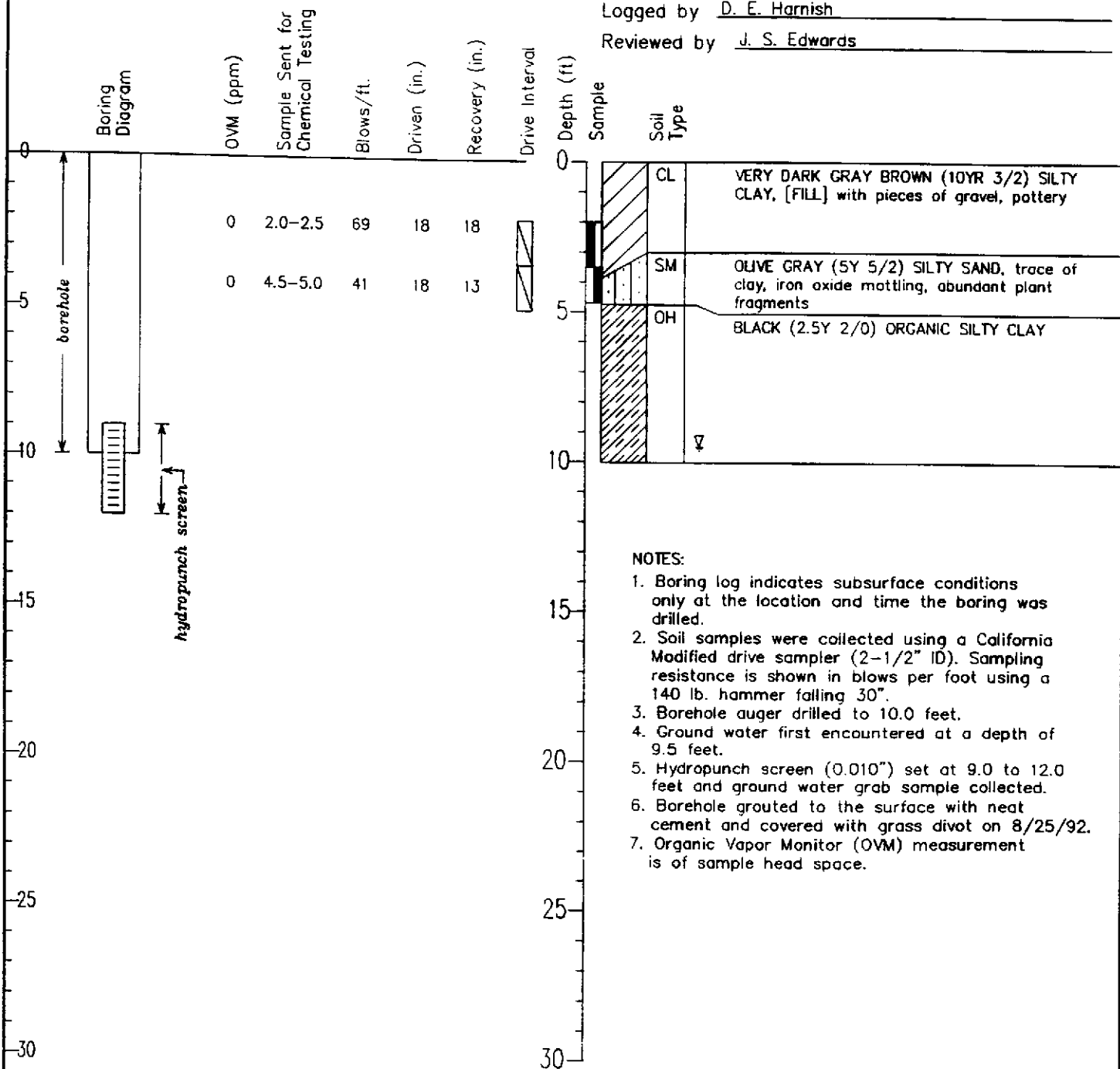
Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Dave Lowman

Logged by D. E. Harnish

Reviewed by J. S. Edwards



NOTES:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
3. Borehole auger drilled to 10.0 feet.
4. Ground water first encountered at a depth of 9.5 feet.
5. Hydropunch screen (0.010") set at 9.0 to 12.0 feet and ground water grab sample collected.
6. Borehole grouted to the surface with neat cement and covered with grass divot on 8/25/92.
7. Organic Vapor Monitor (OVM) measurement is of sample head space.

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FIGURE

A-15

Boring Number B-15

Drill Time-Date: Start 1500-8/26/92 Finish 1600-8/26/92

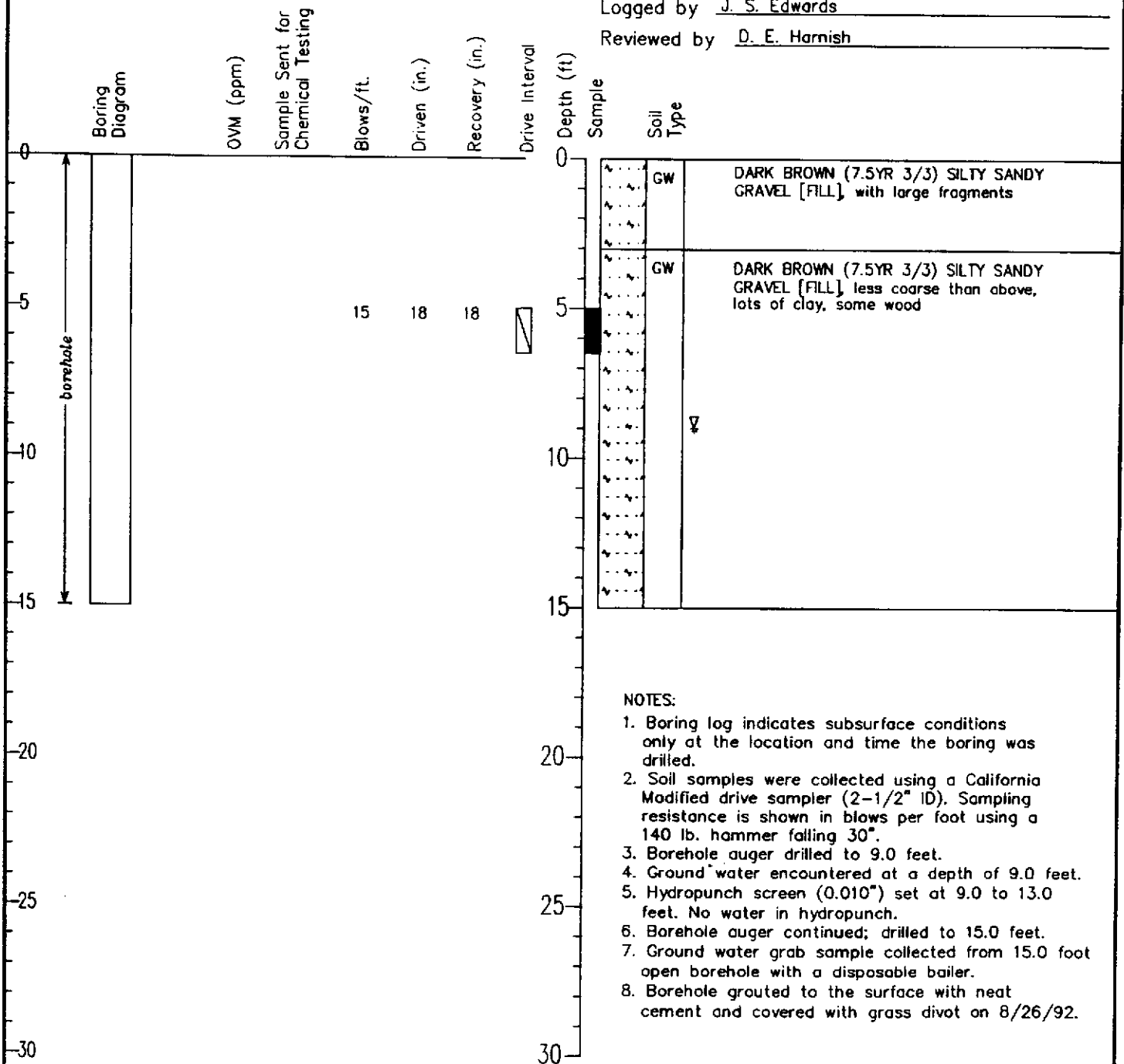
Drill Method Mobile B-53; Hollow Stem Auger; 7" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards

Reviewed by D. E. Harnish



NOTES:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
3. Borehole auger drilled to 9.0 feet.
4. Ground water encountered at a depth of 9.0 feet.
5. Hydropunch screen (0.010") set at 9.0 to 13.0 feet. No water in hydropunch.
6. Borehole auger continued; drilled to 15.0 feet.
7. Ground water grab sample collected from 15.0 foot open borehole with a disposable bailer.
8. Borehole grouted to the surface with neat cement and covered with grass divot on 8/26/92.

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LOG OF BORING B-15

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FIGURE

A-16

Boring Number B-16

Drill Time-Date: Start 1310-8/25/92 Finish 1130-8/28/92

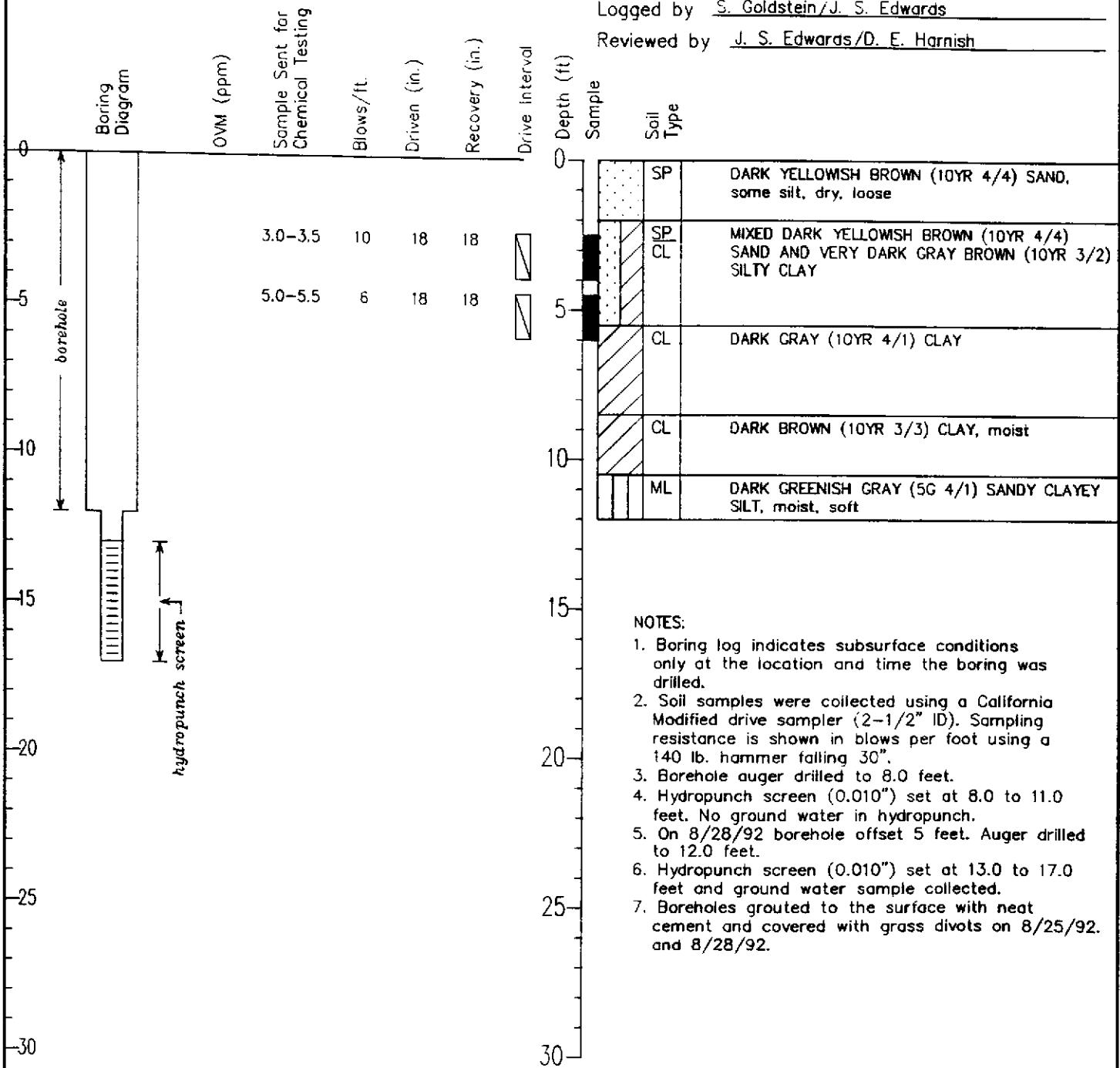
Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Dave Lowman

Logged by S. Goldstein/J. S. Edwards

Reviewed by J. S. Edwards/D. E. Harnish



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LOG OF BORING B-16

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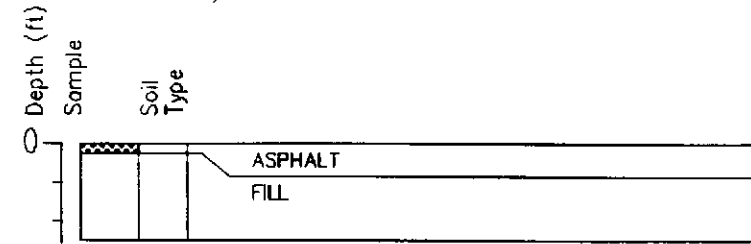
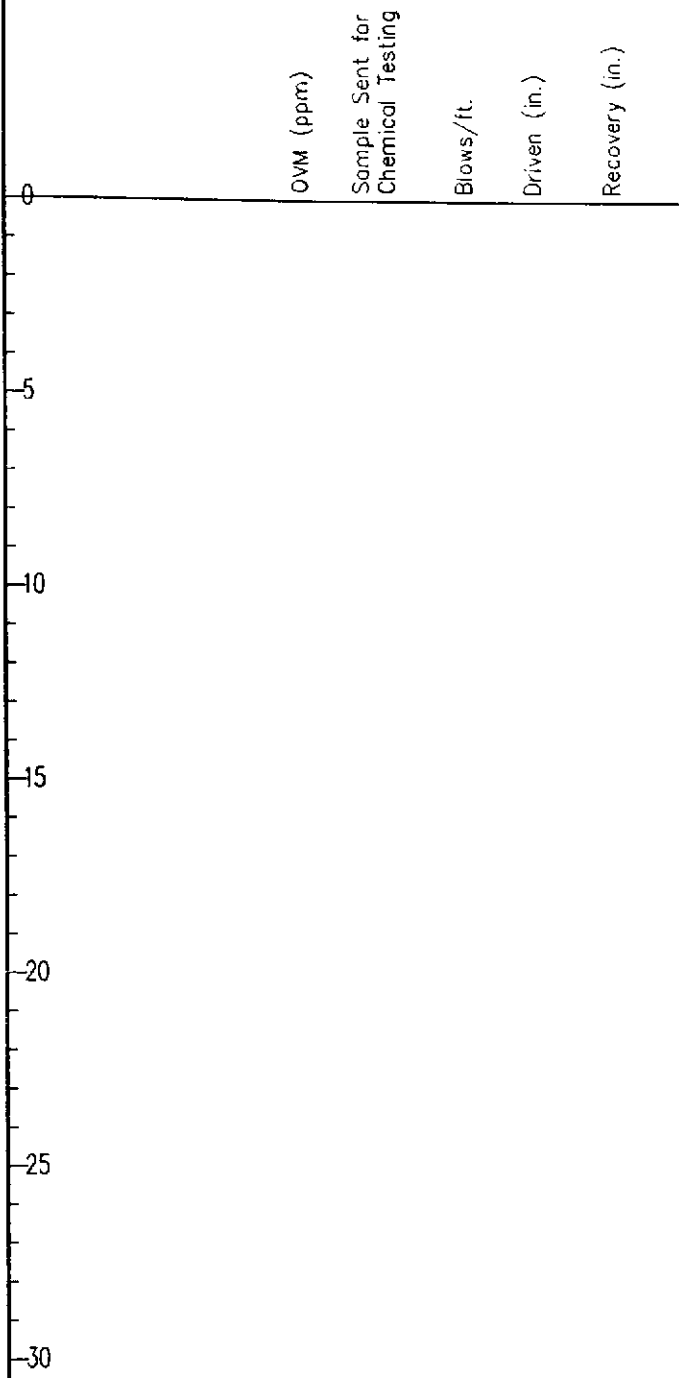
Oakland, California

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FIGURE

A-17

Boring Number B-17
 Drill Time-Date: Start 1330-8/26/92 Finish 1340-8/26/92
 Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., Inc./Dave Lowman
 Logged by J. S. Edwards
 Reviewed by D. E. Harnish



- NOTES:
1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 2. Borehole drilled to 2.5 feet. Encountered wires in PVC conduit (irrigation system controls). Location abandoned.
 3. No ground water encountered.

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LOG OF BORING **B-17**

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FIGURE

A-18

Boring Number B-18

Drill Time-Date: Start 1300-8/26/92 Finish 1340-8/26/92

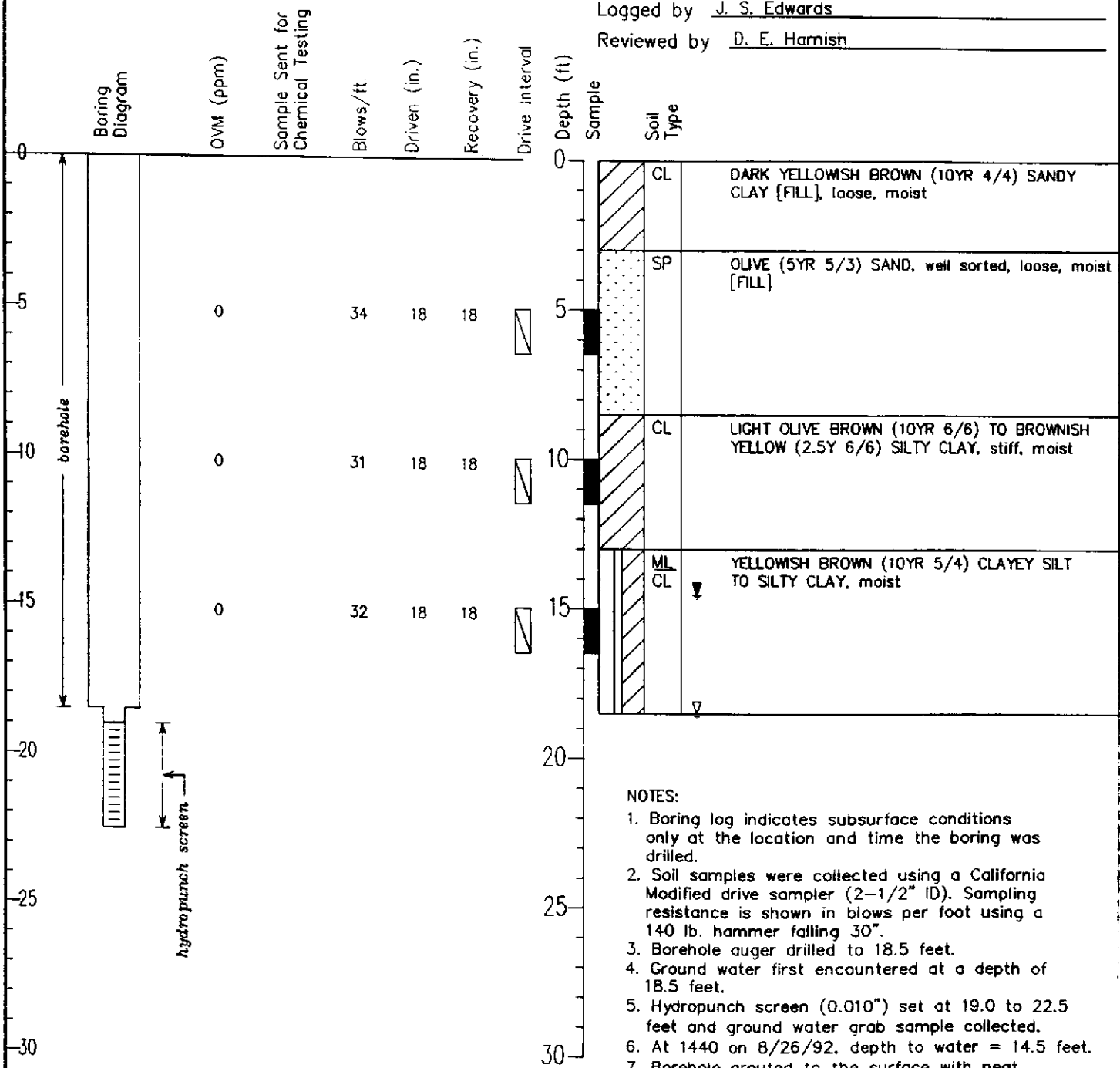
Drill Method Mobile B-53; Hollow Stem Auger; 7" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards

Reviewed by D. E. Hamish



NOTES:

- Boring log indicates subsurface conditions only at the location and time the boring was drilled.
- Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
- Borehole auger drilled to 18.5 feet.
- Ground water first encountered at a depth of 18.5 feet.
- Hydropunch screen (0.010") set at 19.0 to 22.5 feet and ground water grab sample collected.
- At 1440 on 8/26/92, depth to water = 14.5 feet.
- Borehole grouted to the surface with neat cement on 8/26/92.
- Organic Vapor Monitor (OVM) measurement is of sample head space.

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LOG OF BORING B-18

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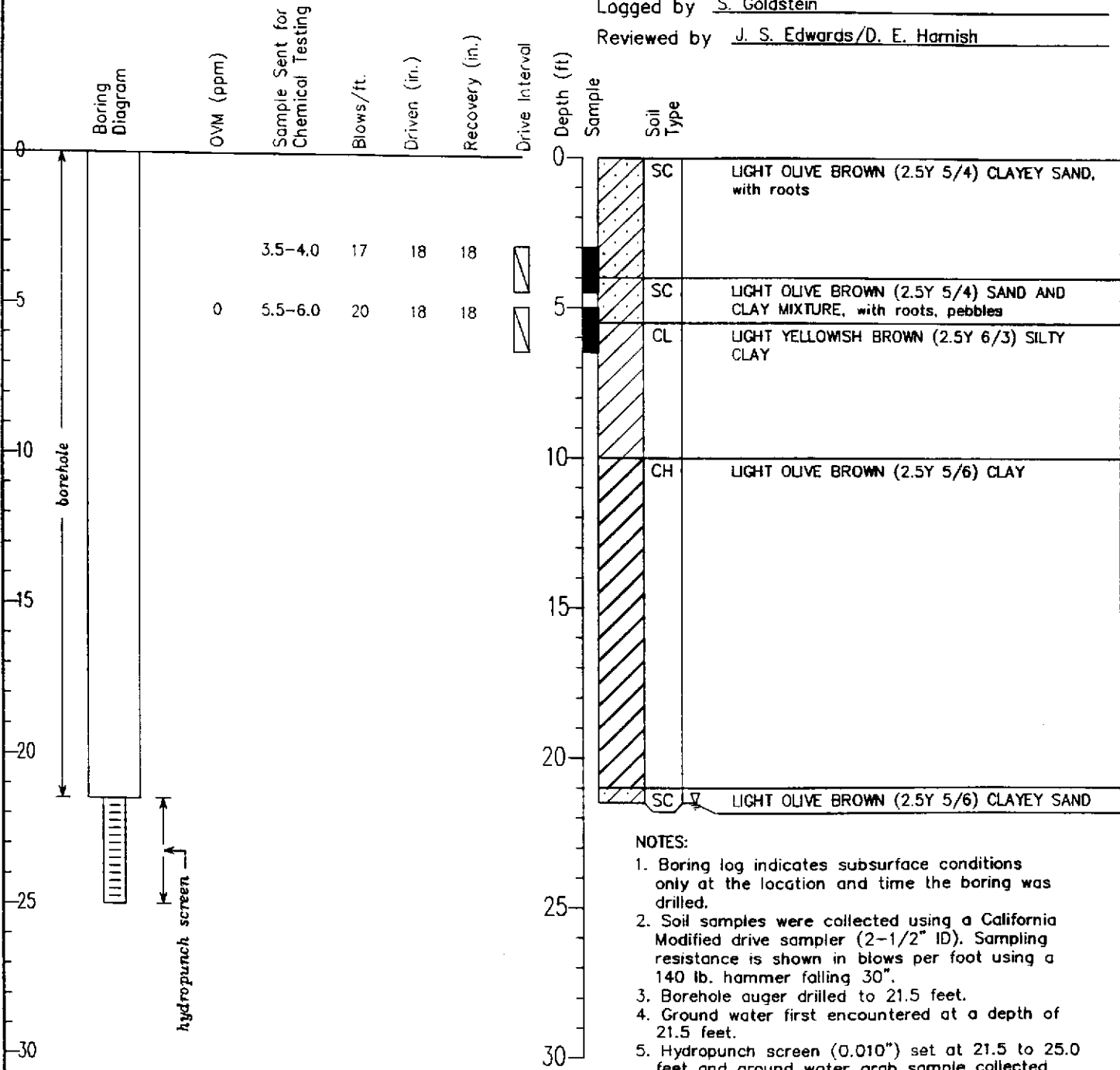
Oakland, California

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FIGURE

A-19

Boring Number B-19
 Drill Time-Date: Start 1310-8/27/92 Finish 1545-8/27/92
 Drill Method Mobile B-53; Hollow Stem Auger, 8-1/2" OD
CA Modified Split Spoon Sampler, 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., Inc./Dave Lowman
 Logged by S. Goldstein
 Reviewed by J. S. Edwards/D. E. Hamish



Boring Number B-20
 Drill Time-Date: Start 1720-8/27/92 Finish 1830-8/27/92
 Drill Method Mobile B-53; Hollow Stem Auger; 7" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., inc./Gary Meyers
 Logged by J. S. Edwards
 Reviewed by D. E. Harnish

Boring Diagram	OVM (ppm)	Sample Sent for Chemical Testing	Blows/ft.	Driven (in.)	Recovery (in.)	Drive Interval	Depth (ft)	Sample	Soil Type	Description
							0		SP	YELLOWISH BROWN (10YR 5/4) CLAYEY SILTY GRAVELLY SAND [FILL], well sorted, mostly fine grained sand, moist
	640	3.5-4.0	65	18	18		5		SP	OLIVE (5Y 5/3) SILTY GRAVELLY SAND [FILL], well sorted, mostly fine grained sand, moderate diesel odor
	155	6.5-7.0	33	18	18		10		SP	DARK GRAY (5Y 4/1) SILTY GRAVELLY SAND [FILL], well sorted, mostly fine grained, strong diesel odor
	343		30	18	12		15		CL	YELLOWISH BROWN (10YR 5/6) SANDY SILTY CLAY, 90% clay, moist
	8.9		25	18	14		20		SM	LIGHT OLIVE BROWN (2.5Y 4/3) SILTY SAND, mostly fine grained sand, moist
	36		37	18	18		25		CL	YELLOWISH BROWN (10YR 5/6) SILTY CLAY, 90% clay
							30			
							35			

- NOTES:
- Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 - Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
 - Borehole auger drilled to 31.0 feet.
 - Hydropunch screen (0.010") set at 31.5 to 35.0 feet. No water in hydropunch.
 - Augers removed from borehole on 8/27/92.

- At 0820 on 8/28/92, depth to water=21.0 feet. Depth to bottom of hole = 28.0 feet.
- Ground water grab sample collected at 0820 on 8/28/92 from open borehole with stainless steel bailer.
- Borehole grouted to the surface with neat cement and covered with grass divot on 8/28/92.
- Organic Vapor Monitor (OVM) measurement is of sample head space.

Boring Number B-21

Drill Time-Date: Start 1010-8/26/92 Finish 1020-8/26/92

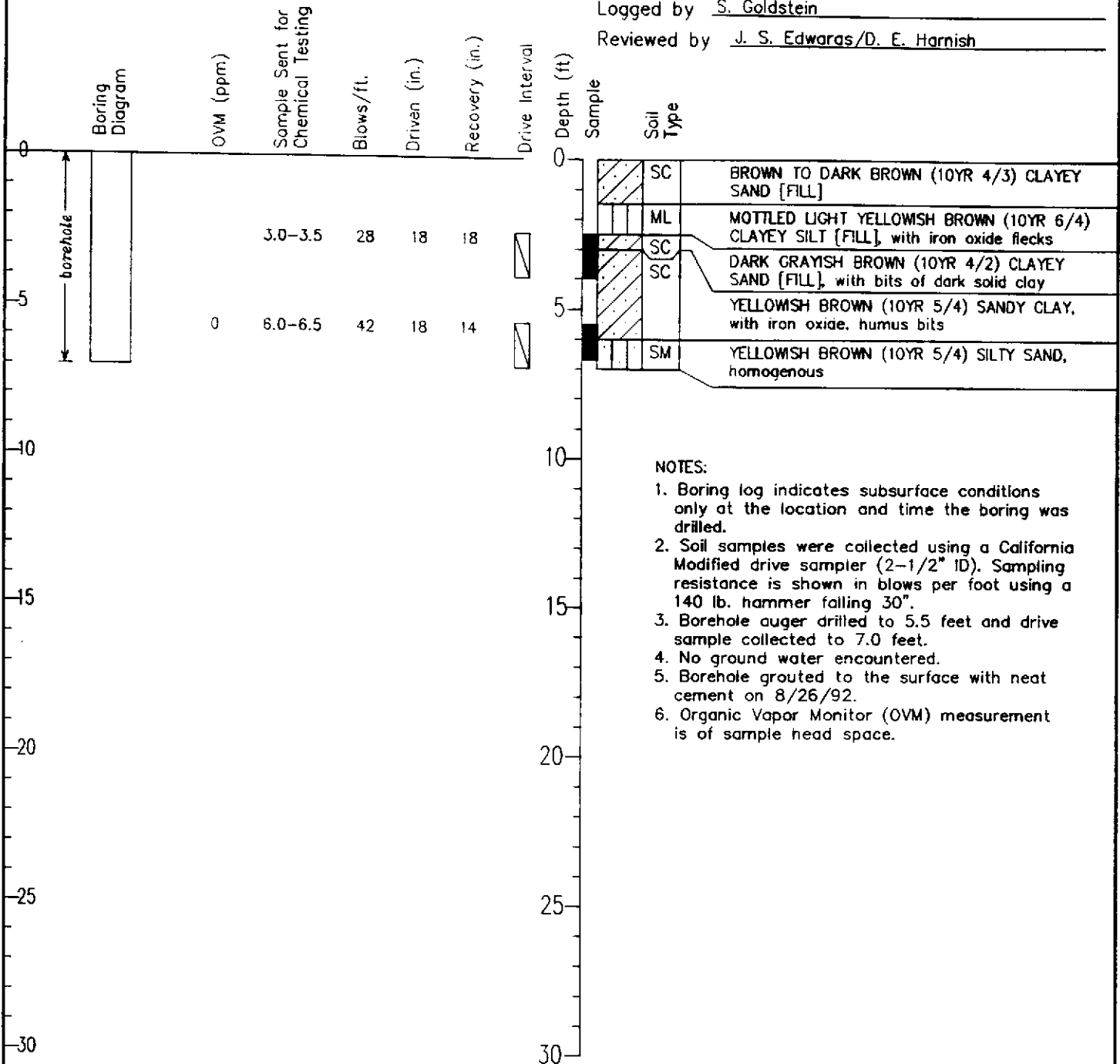
Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Dave Lowman

Logged by S. Goldstein

Reviewed by J. S. Edwards/D. E. Harnish



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FIGURE

A-22

Boring Number B-22

Drill Time-Date: Start 1050-8/26/92 Finish 1320-8/26/92

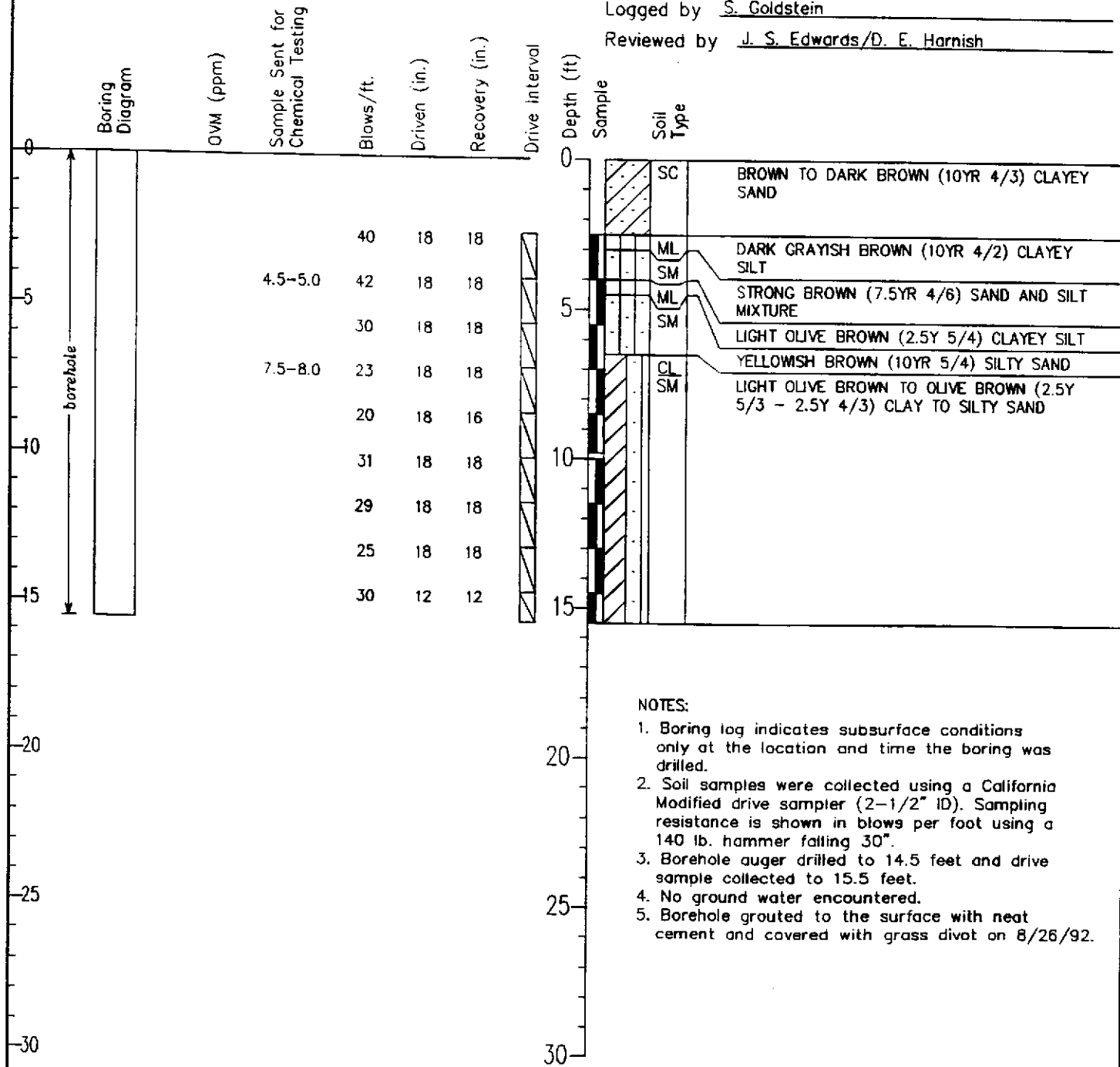
Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Dave Lowman

Logged by S. Goldstein

Reviewed by J. S. Edwards/D. E. Harnish



NOTES:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
3. Borehole auger drilled to 14.5 feet and drive sample collected to 15.5 feet.
4. No ground water encountered.
5. Borehole grouted to the surface with neat cement and covered with grass divot on 8/26/92.

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LOG OF BORING **B-22**

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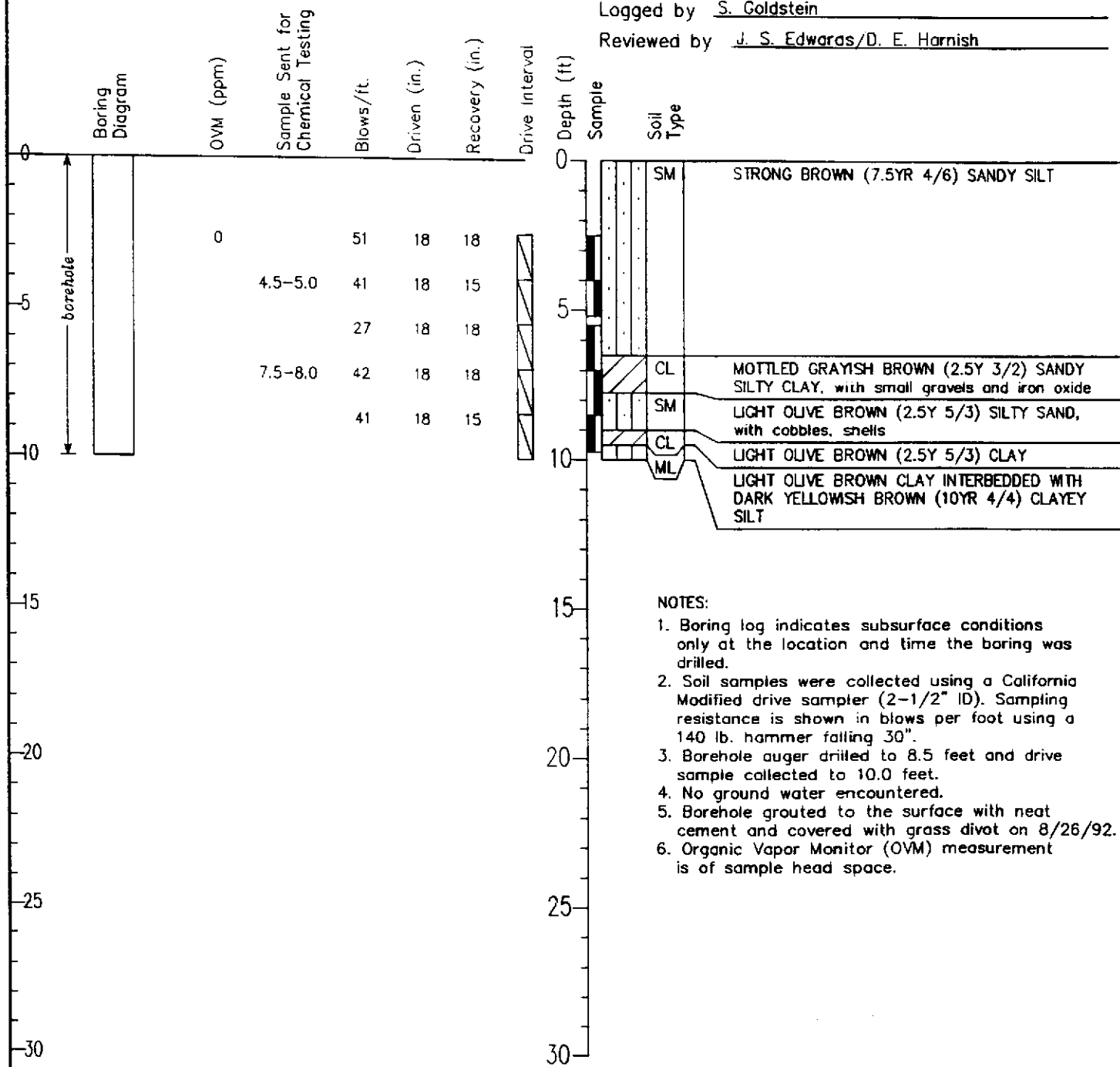
Oakland, California

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FIGURE

A-23

Boring Number B-23
 Drill Time-Date: Start 1100-8/26/92 Finish 1145-8/26/92
 Drill Method Mobile B-53; Hollow Stem Auger; 8-1/2" OD
CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID
 Driller Weeks Drilling and Pump Co., Inc./Dave Lowman
 Logged by S. Goldstein
 Reviewed by J. S. Edwards/D. E. Harnish



- NOTES:
1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 2. Soil samples were collected using a California Modified drive sampler (2-1/2" ID). Sampling resistance is shown in blows per foot using a 140 lb. hammer falling 30".
 3. Borehole auger drilled to 8.5 feet and drive sample collected to 10.0 feet.
 4. No ground water encountered.
 5. Borehole grouted to the surface with neat cement and covered with grass divot on 8/26/92.
 6. Organic Vapor Monitor (OVM) measurement is of sample head space.

Boring Number B-24

Drill Time-Date: Start 0920-8/26/92 Finish 1100-8/26/92

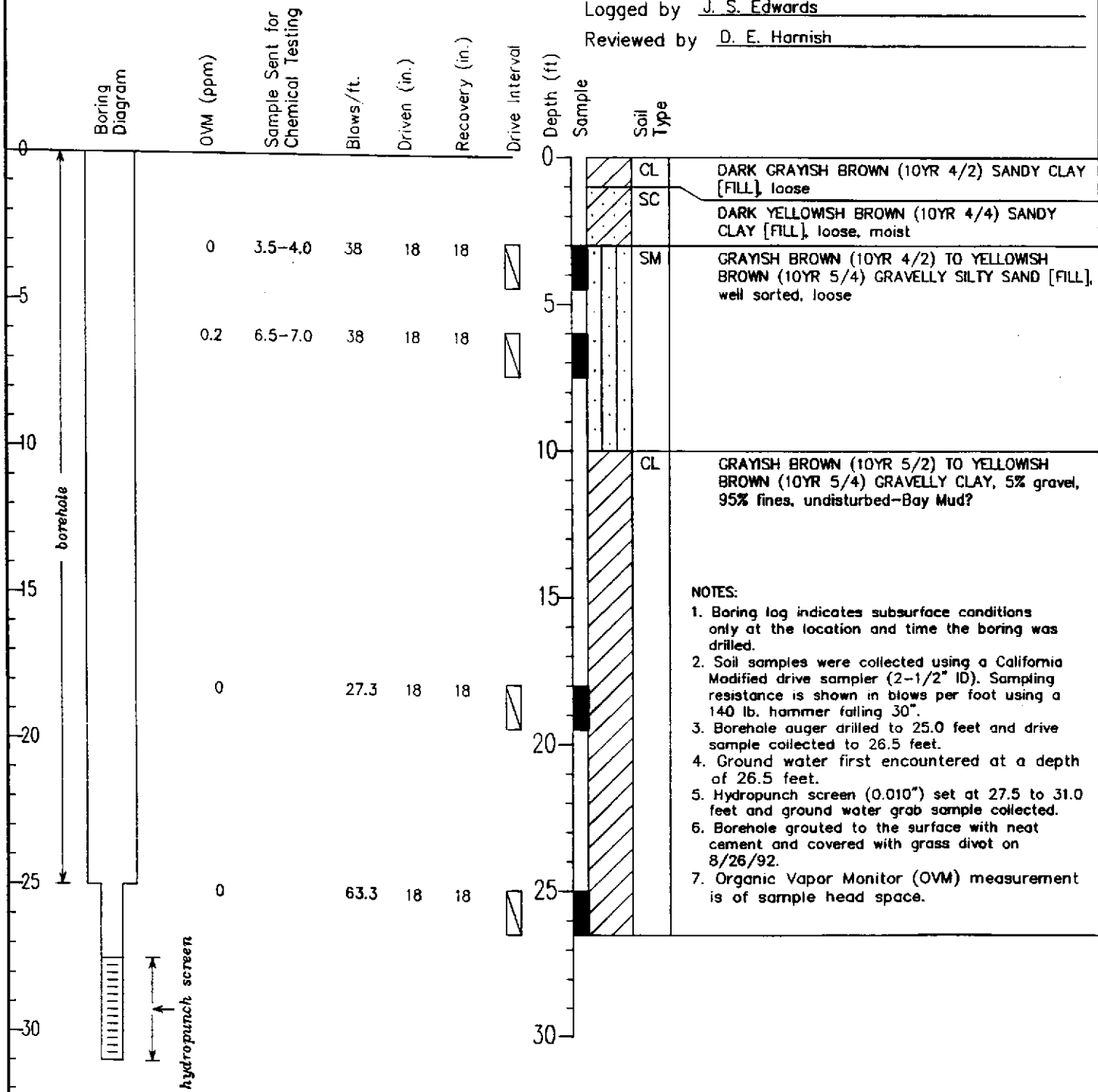
Drill Method Mobile B-53; Hollow Stem Auger; 7" OD

CA Modified Split Spoon Sampler; 18" L, 2-1/2" ID

Driller Weeks Drilling and Pump Co., Inc./Gary Meyers

Logged by J. S. Edwards

Reviewed by D. E. Harnish



ENVIRON

Counsel in Health and Environmental Science

Job No.03-2821B

Approved:

09/92

LOG OF BORING B-24

Laney College Site Assessment

Oakland, California

pg 1 of 1

FIGURE

A-25

APPENDIX B
LABORATORY REPORTS

APPENDIX B

Laboratory Reports

This Appendix includes copies of the laboratory reports, the chain of custody records which accompanied the samples, and a brief review of quality control data. All analyses were performed by NATEX/ETC, Inc., a California-certified laboratory in Mountain View, California.

The thirty-one soil samples and sixteen of the ground water samples were analyzed for halogenated VOCs by EPA Method 8010, TPHg and BTEX by EPA Method 8015-modified, and TRPH by EPA Method 418.1. Two soil samples, B-11-4.0 and B-11-6.5, were also analyzed for semivolatile organic compounds by EPA Method 8270. Due to low hydraulic conductivity of the saturated zone in the area of boring B-11, the ground water sample from this location was analyzed for halogenated and aromatic VOCs by EPA Method 8010/8020 combined.

Each sample is identified in the laboratory reports and chain of custody form using a unique identification number. This sample I.D. number is referred to as "client I.D." in the laboratory reports. Ground water samples are identified by the identification number of the borehole where they were collected, for instance "B-2". Soil samples are identified by the identification number of the borehole at which they were collected and a suffix indicating the depth of the top of the sample. For instance, "B-19-3.5" identifies the soil sample collected at boring number B-19 at a depth from 3.5 to 4.0 feet below-ground-surface. Some soil samples were numbered with the depth of both the top and bottom of the sample, as in "B-13-5.5-6.0".

Quality Control Review

This section contains the results of quality control samples analyzed along with ground water samples collected between August 25 and August 28, 1992 at Laney College in Oakland, California.

Trip blanks were prepared at the laboratory and transported with the sample

bottles at all times. They were submitted to the lab for analysis with the ground water samples on August 26, 27 and 28, 1992. Trip blanks are used to indicate potential positive bias to ground water sample results introduced in the field, in transit, or in the lab. No halogenated VOCs were detected in any of the trip blanks. The trip blank submitted for August 28 was also analyzed for TPHg and BTEX; none was detected, confirming that no positive bias was introduced in the field, in transit or in the lab.

The laboratory also tested quality control samples to characterize the precision and accuracy of laboratory results and potential matrix interference. The percent recoveries of surrogate spikes for each sample and lab batch quality control samples together indicate that the laboratory was performing all within acceptable limits. In our opinion, the analytical data are of sufficient quality to support the conclusions presented in this report. The following attachments complete this Appendix:

NATEX/ETC Laboratory Report order numbers

- 92-08-070,
- 92-08-078,
- 92-08-084,
- 92-08-085, and
- 92-08-090.

MATEX/ETC

Mid-Pacific Environmental Laboratory, Inc.
625B Clyde Avenue
Mountain View, CA 94043
(415) 964-0844
FAX (415) 961-7113

Environ
5820 Shellmound St. Suite 700
Emeryville, CA 94608

September 11, 1992
MPCLI Order#: 92-08-070
Date Received: 08/25/92

Attn: David Harnish

Subject: Analysis of 4 Soil, 1 Water Samples

Work ID: 03-2821B Laney College

P.O. #: 03-2821B

Pages in report: 22

Analysis of soil samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of water samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of soil samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of water samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Solid samples were analyzed for total petroleum hydrocarbons by SM 5520 (Standard Methods for the Examination of Water and Wastewater - 17th Ed. 1989).

Liquid samples were analyzed for total recoverable petroleum hydrocarbons by USEPA Method 418.1 (Methods for the Chemical Analysis of Water and Wastes-1983).

NOTES

The chain of custody indicated the parameters of TRPH, 8015-LUFT, and 8010 for sample B-14, while the sample container label indicated only TRPH. This sample was analyzed per instructions listed on the chain of custody.

Page 2 .. Mid-Pacific REPORT Work Order # 92-08-070

The water sample, B-14, contained a large amount of sediment upon receipt.

In the analysis of sample B-14 for Gas/BTEX, a pH of 7 was noted.

QC Batches 0038A and 0019A: In the analysis of TRPH, the QC limits for the percent recovery of the MS/MSD/LCS were 75-125%.

QC Batch S072A: In the analysis of TPH-Gasoline/BTEX, the percent recoveries of toluene, ethyl benzene, and total xylenes in the MS were outside of QC limits. The percent recoveries of these compounds in the LCS were within QC limits, demonstrating that the analytical system was in control.

All analyses have been conducted in batches of 20 samples or less. Each QC batch consists of a method blank, a Matrix Spike, a Matrix Spike Duplicate and a Laboratory Control Sample. The QC information is in a separate QC Report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC Report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations existed:

- 1) one or more analytes was present at a level above the linear calibration range of the instrument; or
- 2) compounds were present at levels that could damage the instrument.

The following flags and abbreviations are used in this report:

ND - Not detected above the detection limit stated.
** - See other dilution.
Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.
MS(D) - Matrix spike (Duplicate)
LCS(D) - Laboratory Control Sample (Duplicate)
RPD - Relative percent difference
N/A - Not applicable

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by:


Client Services

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-14-2.0MPELI ID: 9208070-01A

Matrix: SOIL

QC Batch: S016A

Collected: 08/25/92

Received: 08/25/92

Analyzed: 08/27/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71%	66-126

Environ

Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-14-2.0
 MPELI ID: 9208070-01B
 Matrix: SOIL
 QC Batch: S072A

Collected: 08/25/92
 Received: 08/25/92
 Analyzed: 08/26/92
 Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	114	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-14-4.5

Collected: 08/25/92

MPELI ID: 9208070-02A

Received: 08/25/92

Matrix: SOIL

Analyzed: 08/27/92

QC Batch: S016A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	68%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-14-4.5
MPELI ID: 9208070-02B
Matrix: SOIL
QC Batch: S072A

Collected: 08/25/92
Received: 08/25/92
Analyzed: 08/26/92
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	110	42-137

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-14MPELI ID: 9208070-03A

Matrix: WATER

QC Batch: B184A

Collected: 08/25/92

Received: 08/25/92

Analyzed: 08/28/92

Dilution factor: 1.00

<u>PARAMETER</u>	<u>Concentration, ug/L</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane		ND	0.50
Chloromethane		ND	0.50
Vinyl Chloride		ND	0.50
Bromomethane		ND	0.50
Chloroethane		ND	0.50
Trichlorofluoromethane		ND	0.50
1,1-Dichloroethene		ND	0.50
Methylene Chloride		ND	0.50
trans-1,2-Dichloroethene		ND	0.50
1,1-Dichloroethane		ND	0.50
cis-1,2-Dichloroethene		ND	0.50
Chloroform		ND	0.50
1,1,1-Trichloroethane		ND	0.50
Carbon Tetrachloride		ND	0.50
1,2-Dichloroethane		ND	0.50
Trichloroethene		ND	0.50
1,2-Dichloropropane		ND	0.50
Bromodichloromethane		ND	0.50
2-Chloroethylvinyl ether		ND	5.0
trans-1,3-Dichloropropene		ND	0.50
1,1,2-Trichloroethane		ND	0.50
Tetrachloroethene		ND	0.50
Dibromochloromethane		ND	0.50
Chlorobenzene		ND	0.50
Bromoform		ND	0.50
1,1,2,2-Tetrachloroethane		ND	0.50
1,3-Dichlorobenzene		ND	0.50
1,4-Dichlorobenzene		ND	0.50
1,2-Dichlorobenzene		ND	0.50
Freon 113		ND	0.50
<u>SURROGATE</u>		<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane		75%	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: B-14
MPELI ID: 9208070-03B
Matrix: WATER
QC Batch: I008ACollected: 08/25/92
Received: 08/25/92
Analyzed: 08/26/92
Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	87	58-127

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-16-3.0MPELI ID: 9208070-04A

Matrix: SOIL

QC Batch: S016A

Collected: 08/25/92

Received: 08/25/92

Analyzed: 08/28/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	6.2
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	70%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-16-3.0
MPELI ID: 9208070-04B
Matrix: SOIL
QC Batch: S072A

Collected: 08/25/92
Received: 08/25/92
Analyzed: 08/26/92
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	93	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-16-5.0MPELI ID: 9208070-05A

Matrix: SOIL

QC Batch: S016A

Collected: 08/25/92

Received: 08/25/92

Analyzed: 08/28/92

Dilution factor: 1.00

<u>Concentration, ug/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-16-5.0

Collected: 08/25/92

MPELI ID: 9208070-05B

Received: 08/25/92

Matrix: SOIL

Analyzed: 08/26/92

QC Batch: S072A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	87	42-137

Environ

Client ID: B-14-2.0

MPELI ID: 9208070 - 01C

Matrix: SOIL

Date collected: 08/25/92

Date received: 08/25/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	27 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-14-4.5
MPELI ID: 9208070 - 02C
Matrix: SOIL

Date collected: 08/25/92
Date received: 08/25/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	44	28 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-14
MPCLI ID: 9208070 - 03C
Matrix: WATER

Date collected: 08/25/92
Date received: 08/25/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	5.8	1.2 mg/L	08/28	08/28	0019A

Environ

Client ID: B-16-3.0
MPCLI ID: 9208070 - 04C
Matrix: SOIL

Date collected: 08/25/92
Date received: 08/25/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	29 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-16-5.0

MPELI ID: 9208070 - 05C

Matrix: SOIL

Date collected: 08/25/92

Date received: 08/25/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	30 mg/kg	08/27	08/28	0038A

8010 Volatiles in Soil

QC Batch#: S016A
Units: ug/kg
Prep Date: 08/26/92

Analysis Dates
Blank:
MS: 08/27/92
MSD: 08/27/92
LCS: 08/27/92

Analytes	Blank		Spike level	%Recovery		LCS	QC	
	Result	Limit		MS	MSD		LIMITS	RPD
Dichlorodifluoromethane	ND	6.2						
Chloromethane	ND	6.2						
Vinyl Chloride	ND	6.2						
Bromomethane	ND	6.2						
Chloroethane	ND	6.2						
Trichlorofluoromethane	ND	6.2						
1,1-Dichloroethene	ND	6.2	250	73	70	70	28-167	4.2
Methylene Chloride	ND	6.2						
trans-1,2-Dichloroethene	ND	6.2						
1,1-Dichloroethane	ND	6.2						
cis-1,2-Dichloroethene	ND	6.2						
Chloroform	ND	6.2	250	89	86	86	49-133	3.4
1,1,1-Trichloroethane	ND	6.2						
Carbon Tetrachloride	ND	6.2	250	92	90	90	43-143	2.2
1,2-Dichloroethane	ND	6.2	250	107	103	104	51-147	3.8
Trichloroethene	ND	6.2	250	100	98	98	35-146	2.0
1,2-Dichloropropane	ND	6.2						
Bromodichloromethane	ND	6.2						
2-Chloroethylvinyl ether	ND	6.2						
trans-1,3-Dichloropropene	ND	6.2						
1,1,2-Trichloroethane	ND	6.2						
Tetrachloroethene	ND	6.2	250	98	95	96	26-162	3.1
Dibromochloromethane	ND	6.2						
Chlorobenzene	ND	6.2	250	84	84	88	38-150	0
Bromoform	ND	6.2						
1,1,2,2-Tetrachloroethane	ND	6.2						
1,3-Dichlorobenzene	ND	6.2						
1,4-Dichlorobenzene	ND	6.2	250	77	76	77	42-143	1.3
1,2-Dichlorobenzene	ND	6.2						
Freon 113	ND	6.2						
Bromochloromethane (surr)	78%			92	100	99	66-126	

8010 Volatiles in H2O

QC Batch#: B184A

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 08/28/92

MS: 08/28/92

MSD: 08/28/92

LCS: 08/28/92

Analytes	Blank		Spike level	%Recovery		LCS	QC	
	Result	Limit		MS	MSD		LIMITS	RPD
Dichlorodifluoromethane	ND	0.50						
Chloromethane	ND	0.50						
Vinyl Chloride	ND	0.50						
Bromomethane	ND	0.50						
Chloroethane	ND	0.50						
Trichlorofluoromethane	ND	0.50						
1,1-Dichloroethene	ND	0.50	10	75	68	76	28-167	9.8
Methylene Chloride	ND	0.50						
trans-1,2-Dichloroethene	ND	0.50						
1,1-Dichloroethane	ND	0.50						
cis-1,2-Dichloroethene	ND	0.50						
Chloroform	ND	0.50	10	80	79	85	49-133	1.3
1,1,1-Trichloroethane	ND	0.50						
Carbon Tetrachloride	ND	0.50	10	83	86	93	43-143	3.6
1,2-Dichloroethane	ND	0.50	10	95	100	106	51-177	5.1
Trichloroethene	ND	0.50	10	90	92	97	35-146	2.2
1,2-Dichloropropane	ND	0.50						
Bromodichloromethane	ND	0.50						
2-Chloroethylvinyl ether	ND	5.0						
trans-1,3-Dichloropropene	ND	0.50						
1,1,2-Trichloroethane	ND	0.50						
Tetrachloroethene	ND	0.50	10	76	83	90	26-162	8.8
Dibromochloromethane	ND	0.50						
Chlorobenzene	ND	0.50	10	78	75	81	38-150	3.9
Bromoform	ND	0.50						
1,1,2,2-Tetrachloroethane	ND	0.50						
1,3-Dichlorobenzene	ND	0.50						
1,4-Dichlorobenzene	ND	0.50	10	83	73	77	42-143	13
1,2-Dichlorobenzene	ND	0.50						
Freon 113	ND	0.50						
Bromochloromethane (surr)	67%		10	96	99	88	66-126	

Gas BTEX in soil

QC Batch#: S072A
 Units: ug/kg
 Prep Date: 08/26/92

Analysis Dates
 Blank: 08/26/92
 MS: 08/26/92
 MSD: 08/26/92
 LCS: 08/26/92

<u>Analytes</u>	Blank		Spike	%Recovery			QC	
	<u>Result</u>	<u>Limit</u>	<u>level</u>	<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	5	125	129	100	99	74-136	25
Toluene	ND	5	125	137	104	103	77-131	27
Ethylbenzene	ND	5	125	132	102	100	76-130	26
Total Xylenes	ND	5	125	136	104	103	79-124	27
Gasoline	ND	1000						
Bromofluorobenzene (surr)	112%		1250	128	99	102	42-137	

Gas BTEX in Water

QC Batch#: I008A
Units: ug/L
Prep Date: N/A

Analysis Dates
Blank: 08/26/92
MS: 08/26/92
MSD: 08/26/92
LCS: 08/26/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery			QC	
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	.5	10	91	94	91	74-136	3.2
Toluene	ND	.5	10	93	100	97	77-131	7.3
Ethylbenzene	ND	.5	10	90	97	95	76-130	7.5
Total Xylenes	ND	.5	20	93	100	98	79-124	7.3
Gasoline	ND	50						
Bromofluorobenzene (surr)	80%			96	96	98	58-127	

Environ

Batch #: 0038A Units: mg/kg

Test Description	Method	Blank		Spike Level	%Recovery			QC		Date Run
		Result	Lmt		MS	MSD	LCS	Limits	RPD	
TRPH by IR	EPA 418.1	ND	25	2.0	100	100	94	75-125	0	08/28

Batch #: 0019A Units: mg/L

Test Description	Method	Blank		Spike Level	%Recovery		QC		Date Run
		Result	Lmt		LCS	LCSD	Limits	RPD	
TRPH by IR	EPA 418.1	ND	0.5	2.0	100	95	75-125	5.1	08/28

ENVIRON

Counsel in Health and Environmental Science

CHAIN-of-CUSTODY FORM

Sheet 1 of 1
5820 Shellmound St, Suite 700
Emeryville, California 94608
(415) 655-7400

92-08-070

PROJECT NAME:
LANEY COLLEGE
SITE ASSESSMENT
CASE NO.: 03-2821B

ENVIRON SAMPLE ID.

ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (Initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES:				COMMENTS
					Pb	Cr	V	As	
1 B-14-2.0	8/25	DEH	soil	1	✓	✓	✗	✓	RUSH
2 B-14-4.5		"	soil	1	✓	✓	✗	✓	5 DAY
3 B-14		"	H ₂ O	7	✓	✓	✓	✓	Turnaround
4 B-16-3.0		SG	soil	1	✓	✓	✗	✓	
5 B-16-5.0		"	soil	1	✓	✓	✗	✓	
							NONE		Pls send results attn: DAVE HARNISH
TOTAL	✗	✗	✗	11					

Relinquished by: [Signature] Date: 8-25-92 Time: 1635 Received by: [Signature] Company: Aero Date: 8/25 Time: 4:35
[Signature] 695 B-2592 557 [Signature] MPCL9 8/25/92 1757

MATEX/ETC

Mid-Pacific Environmental Laboratory, Inc.
6258 Clyde Avenue
Mountain View, CA 94043
(415) 964-0844
FAX (415) 961-7113

Environ
5820 Shellmound St. Suite 700
Emeryville, CA 94608

September 11, 1992
MPELI Order#: 92-08-078
Date Received: 08/26/92

Attn: David Harnish

Subject: Analysis of 10 Soils , 3 Water Samples

Work ID: 03-2821B Laney College

P.O. #: 03-2821B

Pages in report: 57

Analysis of soil samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed.,1986).

Analysis of water samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed.,1986).

Analysis soil samples for semivolatile organic compounds by GCMS was performed according to the 3/90 Protocol for the USEPA Contract Laboratory Program.

Analysis of soil samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed.,1986).

Analysis of water samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed.,1986).

Solid samples were analyzed for total petroleum hydrocarbons by SM 5520 (Standard Methods for the Examination of Water and Wastewater - 17th Ed. 1989).

Liquid samples were analyzed for total recoverable petroleum hydrocarbons by USEPA Method 418.1 (Methods for the Chemical Analysis of Water and Wastes-1983).

NOTES

Sample TB-B-18 was not listed on the chain of custody document, but was analyzed ^{on a separate}

Page 2 Mid-Pacific REPORT Work Order # 92-08-078

for volatiles by 8010 per Jeff Edwards (08/27/92).

All water samples were received containing large amounts of sediment.

In the analysis of samples B-10 and B-24 for TPH-Gasoline/BTXE, each had a pH of 7.

In the analysis of Semivolatiles by B270, sample B-11-6.5 required GPC cleanup. Visual inspection of the extract indicated the gel permeation chromatography cleanup, due to dark color and viscosity. This procedure separates compounds by size, with oils and other large molecules coming off first. This portion of the extract is discarded. The result is a cleaner extract, containing smaller molecules, such as semivolatiles and pesticides.

QC Batches 0038A, 0039A, and 0019A: In the analysis of TRPH, the QC limits for percent recovery are 75-125%.

All analyses have been conducted in batches of 20 samples or less. Each QC batch consists of a method blank, a Matrix Spike, a Matrix Spike Duplicate and a Laboratory Control Sample. The QC information is in a separate QC Report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC Report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations existed:

- 1) one or more analytes was present at a level above the linear calibration range of the instrument; or
- 2) compounds were present at levels that could damage the instrument.

The following flags and abbreviations are used in this report:

ND - Not detected above the detection limit stated.
** - See other dilution.
Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.
Acetone - Not an 8020 compound.
MS(D) - Matrix Spike (Duplicate)
LCS(D) - Laboratory Control Sample (Duplicate)
RPD - Relative percent difference
N/A - Not applicable

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by:


Client Services

Page 3

Mid-Pacific

REPORT

Work Order # 92-08-078

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-10

Collected: 08/25/92

MPELI ID: 9208078-01A

Received: 08/26/92

Matrix: WATER

Analyzed: 09/02/92

QC Batch: B184C

Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	68%	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: B-10
MPELI ID: 9208078-01B
Matrix: WATER
QC Batch: I009ACollected: 08/25/92
Received: 08/26/92
Analyzed: 08/27/92
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	80	58-127

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-11-4.0
 MPELI ID: 9208078-02A
 Matrix: SOIL
 QC Batch: S017A

Collected: 08/25/92
 Received: 08/26/92
 Analyzed: 08/28/92
 Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	68%	66-126

Environ
Analytical Results - CLP SVOAs by GCMS/soil

Client ID: B-11-4.0MPELI ID: 9208078-02D

Collected: 08/25/92

Received: 08/26/92

Extracted: 08/29/92

Analyzed: 08/31/92

Matrix: SOIL

QC Batch: G001A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Phenol	ND	330
Bis(2-chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
Benzyl alcohol	ND	660
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
Bis(2-chloroisopropyl) ether	ND	330
4-Methylphenol	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1600
Bis(2-chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	660
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1600
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1600
Dimethyl phthalate	ND	330
Acenaphthylene	ND	330
3-Nitroaniline	ND	1600
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	1600
4-Nitrophenol	ND	1600
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
2,6-Dinitrotoluene	ND	330
Diethyl phthalate	ND	330
4-Chlorophenyl phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1600
4,6-Dinitro-2-methylphenol	ND	1600
N-Nitrosodiphenylamine	ND	330
4-Bromophenyl phenylether	ND	330

Environ
Analytical Results - CLP SVOAs by GCMS/soil

Client ID: B-11-4.0

Collected: 08/25/92

MPELI ID: 9208078-02D

Received: 08/26/92

Matrix: SOIL

Extracted: 08/29/92

QC Batch: G001A

Analyzed: 08/31/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	1600
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butyl phthalate	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butyl benzyl phthalate	ND	330
3,3'-Dichlorobenzidine	ND	660
Benzo(a) anthracene	ND	330
Bis(2-ethylhexyl)phthalate	ND	330
Chrysene	ND	330
Di-n-octyl phthalate	ND	330
Benzo (b) fluoranthene	ND	330
Benzo (k) fluoranthene	ND	330
Benzo (a) pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenzo(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
2-Fluorophenol	73	25-121
Phenol-d5	69	24-113
Nitrobenzene-d5	65	23-120
2-Fluorobiphenyl	74	30-115
2,4,6-Tribromophenol	68	19-122
p-Terphenyl-d14	90	18-137

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-11-4.0

Collected: 08/25/92

MPELI ID: 9208078-02B

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/28/92

QC Batch: S072B

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	77	42-137

Environ

Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-11-6.5

Collected: 08/25/92

MPELI ID: 9208078-03A

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/28/92

QC Batch: S017A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71%	66-126

Environ
Analytical Results - CLP SVOAs by GCMS/soil

Client ID: B-11-6.5MPELI ID: 9208078-03D

Collected: 08/25/92

Received: 08/26/92

Extracted: 08/29/92

Analyzed: 08/31/92

Matrix: SOIL

QC Batch: G001A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Phenol	ND	660
Bis(2-chloroethyl)ether	ND	660
2-Chlorophenol	ND	660
1,3-Dichlorobenzene	ND	660
1,4-Dichlorobenzene	ND	660
Benzyl alcohol	ND	1300
1,2-Dichlorobenzene	ND	660
2-Methylphenol	ND	660
Bis(2-chloroisopropyl) ether	ND	660
4-Methylphenol	ND	660
N-Nitroso-di-n-propylamine	ND	660
Hexachloroethane	ND	660
Nitrobenzene	ND	660
Isophorone	ND	660
2-Nitrophenol	ND	660
2,4-Dimethylphenol	ND	660
Benzoic acid	ND	3300
Bis(2-chloroethoxy)methane	ND	660
2,4-Dichlorophenol	ND	660
1,2,4-Trichlorobenzene	ND	660
Naphthalene	ND	660
4-Chloroaniline	ND	1300
Hexachlorobutadiene	ND	660
4-Chloro-3-methylphenol	ND	660
2-Methylnaphthalene	ND	660
Hexachlorocyclopentadiene	ND	660
2,4,6-Trichlorophenol	ND	660
2,4,5-Trichlorophenol	ND	3300
2-Chloronaphthalene	ND	660
2-Nitroaniline	ND	3300
Dimethyl phthalate	ND	660
Acenaphthylene	ND	660
3-Nitroaniline	ND	3300
Acenaphthene	ND	660
2,4-Dinitrophenol	ND	3300
4-Nitrophenol	ND	3300
Dibenzofuran	ND	660
2,4-Dinitrotoluene	ND	660
2,6-Dinitrotoluene	ND	660
Diethyl phthalate	ND	660
4-Chlorophenyl phenylether	ND	660
Fluorene	ND	660
4-Nitroaniline	ND	3300
4,6-Dinitro-2-methylphenol	ND	3300
N-Nitrosodiphenylamine	ND	660
4-Bromophenyl phenylether	ND	660

Environ
Analytical Results - CLP SVOAs by GCMS/soil

Client ID: B-11-6.5
MPELI ID: 9208078-03D

Collected: 08/25/92
Received: 08/26/92
Extracted: 08/29/92
Analyzed: 08/31/92

Matrix: SOIL
QC Batch: G001A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Hexachlorobenzene	ND	660
Pentachlorophenol	ND	3300
Phenanthrene	ND	660
Anthracene	ND	660
Di-n-butyl phthalate	ND	660
Fluoranthene	ND	660
Pyrene	ND	660
Butyl benzyl phthalate	ND	660
3,3'-Dichlorobenzidine	ND	1300
Benzo(a) anthracene	ND	660
Bis(2-ethylhexyl)phthalate	ND	660
Chrysene	ND	660
Di-n-octyl phthalate	ND	660
Benzo (b) fluoranthene	ND	660
Benzo (k) fluoranthene	ND	660
Benzo (a) pyrene	ND	660
Indeno(1,2,3-cd)pyrene	ND	660
Dibenzo(a,h)anthracene	ND	660
Benzo(g,h,i)perylene	ND	660

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
2-Fluorophenol	63	25-121
Phenol-d5	62	24-113
Nitrobenzene-d5	55	23-120
2-Fluorobiphenyl	75	30-115
2,4,6-Tribromophenol	55	19-122
p-Terphenyl-d14	79	18-137

Environ

Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-11-6.5MPELI ID: 9208078-03B

Matrix: SOIL

QC Batch: S072B

Collected: 08/25/92

Received: 08/26/92

Analyzed: 08/28/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	70	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: E-21-3.0

Collected: 08/26/92

MPELI ID: 9208078-04A

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/28/92

QC Batch: S017A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-21-3.0
MPELI ID: 9208078-04B
Matrix: SOIL
QC Batch: S072BCollected: 08/26/92
Received: 08/26/92
Analyzed: 08/28/92
Dilution factor: 1.00Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	74	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-21-6.0

Collected: 08/26/92

MPELI ID: 9208078-05A

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/28/92

QC Batch: S017A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	6.2
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	68%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-21-6.0
MPELI ID: 9208078-05B
Matrix: SOIL
QC Batch: S072BCollected: 08/26/92
Received: 08/26/92
Analyzed: 08/28/92
Dilution factor: 1.00Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	70	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-22-4.5MPELI ID: 9208078-06A

Matrix: SOIL

QC Batch: S017A

Collected: 08/26/92

Received: 08/26/92

Analyzed: 08/28/92

Dilution factor: 1.00

<u>Concentration, ug/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	6.2
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	66%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-22-4.5MPELI ID: 9208078-06B

Matrix: SOIL

QC Batch: S072B

Collected: 08/26/92

Received: 08/26/92

Analyzed: 08/28/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	71	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-22-7.5

Collected: 08/26/92

MPELI ID: 9208078-07A

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/29/92

QC Batch: S017A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	70%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-22-7.5MPELI ID: 9208078-07B

Matrix: SOIL

QC Batch: S072B

Collected: 08/26/92

Received: 08/26/92

Analyzed: 08/28/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	63	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-23-4.5MPELI ID: 9208078-08A

Matrix: SOIL

QC Batch: S017A

Collected: 08/26/92

Received: 08/26/92

Analyzed: 08/29/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	69%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-23-4.5
MPELI ID: 9208078-08B
Matrix: SOIL
QC Batch: S072BCollected: 08/26/92
Received: 08/26/92
Analyzed: 08/28/92
Dilution factor: 1.00

	<u>Concentration, ug/kg</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	65	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-23-7.5

Collected: 08/26/92

MPELI ID: 9208078-09A

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/29/92

QC Batch: S017A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	6.2
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-23-7.5
MPELI ID: 9208078-09B
Matrix: SOIL
QC Batch: S072BCollected: 08/26/92
Received: 08/26/92
Analyzed: 08/28/92
Dilution factor: 1.00

	<u>Concentration, ug/kg</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	69	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-24-3.5-4.0

Collected: 08/26/92

MPALI ID: 9208078-10A

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/29/92

QC Batch: S017A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	6.2
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	68%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-24-3.5-4.0

Collected: 08/26/92

MPELI ID: 9208078-10B

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/28/92

QC Batch: S072B

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	74	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-24-6.5-7.0

Collected: 08/26/92

MPELI ID: 9208078-11A

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/31/92

QC Batch: S017A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	140	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	6.2
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71%	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-24-6.5-7.0

Collected: 08/26/92

MPELI ID: 9208078-11B

Received: 08/26/92

Matrix: SOIL

Analyzed: 08/28/92

QC Batch: S072B

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	76	42-137

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-24

Collected: 08/26/92

MPELI ID: 9208078-12A

Received: 08/26/92

Matrix: WATER

Analyzed: 08/31/92

QC Batch: B184B

Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	0.60	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	76%	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B-24
MPCLI ID: 9208078-12B
Matrix: WATER
QC Batch: I009A

Collected: 08/26/92
Received: 08/26/92
Analyzed: 08/27/92
Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	78	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-18

Collected: 08/26/92

MPELI ID: 9208078-13A

Received: 08/26/92

Matrix: WATER

Analyzed: 08/28/92

QC Batch: B184A

Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	66%	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B-18
MPELI ID: 9208078-13B
Matrix: WATER
QC Batch: I009A

Collected: 08/26/92
Received: 08/26/92
Analyzed: 08/27/92
Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>		
	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	77	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: TB-B-18
 MPELI ID: 9208078-14A
 Matrix: WATER
 QC Batch: B184A

Collected:
 Received: 08/26/92
 Analyzed: 08/28/92
 Dilution factor: 1.00

<u>PARAMETER</u>	<u>CONCENTRATION,</u>	<u>ug/L</u>
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	73%	66-126

Environ

Client ID: B-10

MPCLI ID: 9208078 - 01C

Matrix: WATER

Date collected: 08/25/92

Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	23	5.0 mg/L	08/28	08/28	0019A

Environ

Client ID: B-11-4.0
MPELI ID: 9208078 - 02C
Matrix: SOIL

Date collected: 08/25/92
Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	29 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-11-6.5
MPELI ID: 9208078 - 03C
Matrix: SOIL

Date collected: 08/25/92
Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	450	54 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-21-3.0
MPELI ID: 9208078 - 04C
Matrix: SOIL

Date collected: 08/26/92
Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	80	28 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-21-6.0

MPCLI ID: 9208078 - 05C

Matrix: SOIL

Date collected: 08/26/92

Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	29 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-22-4.5
MPCLI ID: 9208078 - 06C
Matrix: SOIL

Date collected: 08/26/92
Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	28 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-22-7.5

MPELI ID: 9208078 - 07C

Matrix: SOIL

Date collected: 08/26/92

Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	29 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-23-4.5
MPELI ID: 9208078 - 08C
Matrix: SOIL

Date collected: 08/26/92
Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	27 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-23-7.5

MPCLI ID: 9208078 - 09C

Matrix: SOIL

Date collected: 08/26/92

Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	31 mg/kg	08/27	08/28	0038A

Environ

Client ID: B-24-3.5-4.0
MPELI ID: 9208078 - 10C
Matrix: SOIL

Date collected: 08/26/92
Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	28 mg/kg	08/31	09/01	0039A

Environ

Client ID: B-24-6.5-7.0
MPELI ID: 9208078 - 11C
Matrix: SOIL

Date collected: 08/26/92
Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	27 mg/kg	08/31	09/01	0039A

Environ

Client ID: B-24
MPELI ID: 9208078 - 12C
Matrix: WATER

Date collected: 08/26/92
Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/28	08/28	0019A

Environ

Client ID: E-18

MPCLI ID: 9208078 - 13C

Matrix: WATER

Date collected: 08/26/92

Date received: 08/26/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/28	08/28	0019A

8010 Volatiles in Soil

QC Batch#: S017A
Units: ug/kg
Prep Date: 08/27/92

Analysis Dates
Blank: 08/27/92
MS: 08/27/92
MSD: 08/27/92
LCS: 08/27/92

Analytes	Blank		Spike level	%Recovery		LCS	QC	RPD
	Result	Limit		MS	MSD		LIMITS	
Dichlorodifluoromethane	ND	6.2						
Chloromethane	ND	6.2						
Vinyl Chloride	ND	6.2						
Bromomethane	ND	6.2						
Chloroethane	ND	6.2						
Trichlorofluoromethane	ND	6.2						
1,1-Dichloroethene	ND	6.2	250	38	40	66	28-167	5.1
Methylene Chloride	ND	6.2						
trans-1,2-Dichloroethene	ND	6.2						
1,1-Dichloroethane	ND	6.2						
cis-1,2-Dichloroethene	ND	6.2						
Chloroform	ND	6.2	250	60	59	80	49-133	1.7
1,1,1-Trichloroethane	ND	6.2						
Carbon Tetrachloride	ND	6.2	250	62	61	83	43-143	1.6
1,2-Dichloroethane	ND	6.2	250	76	74	96	51-147	2.7
Trichloroethene	ND	6.2	250	70	70	90	35-146	0
1,2-Dichloropropane	ND	6.2						
Bromodichloromethane	ND	6.2						
2-Chloroethylvinyl ether	ND	6.2						
trans-1,3-Dichloropropene	ND	6.2						
1,1,2-Trichloroethane	ND	6.2						
Tetrachloroethene	ND	6.2	250	62	62	86	26-162	0
Dibromochloromethane	ND	6.2						
Chlorobenzene	ND	6.2	250	58	59	82	38-150	1.7
Bromoform	ND	6.2						
1,1,2,2-Tetrachloroethane	ND	6.2						
1,3-Dichlorobenzene	ND	6.2						
1,4-Dichlorobenzene	ND	6.2	250	52	50	72	42-143	3.9
1,2-Dichlorobenzene	ND	6.2						
Freon 113	ND	6.2						
Bromochloromethane (surr)	103%			89	93	93	66-126	

8010 Volatiles in H2O

QC Batch#: B184A
Units: ug/L
Prep Date: N/A

Analysis Dates
Blank: 08/28/92
MS: 08/28/92
MSD: 08/28/92
LCS: 08/28/92

Analytes	Blank		Spike level	%Recovery		LCS	QC LIMITS	RPD
	Result	Limit		MS	MSD			
Dichlorodifluoromethane	ND	0.50						
Chloromethane	ND	0.50						
Vinyl Chloride	ND	0.50						
Bromomethane	ND	0.50						
Chloroethane	ND	0.50						
Trichlorofluoromethane	ND	0.50						
1,1-Dichloroethene	ND	0.50	10	75	68	76	28-167	9.8
Methylene Chloride	ND	0.50						
trans-1,2-Dichloroethene	ND	0.50						
1,1-Dichloroethane	ND	0.50						
cis-1,2-Dichloroethene	ND	0.50						
Chloroform	ND	0.50	10	80	79	85	49-133	1.3
1,1,1-Trichloroethane	ND	0.50						
Carbon Tetrachloride	ND	0.50	10	83	86	93	43-143	3.6
1,2-Dichloroethane	ND	0.50	10	95	100	106	51-177	5.1
Trichloroethene	ND	0.50	10	90	92	97	35-146	2.2
1,2-Dichloropropane	ND	0.50						
Bromodichloromethane	ND	0.50						
2-Chloroethylvinyl ether	ND	5.0						
trans-1,3-Dichloropropene	ND	0.50						
1,1,2-Trichloroethane	ND	0.50						
Tetrachloroethene	ND	0.50	10	76	83	90	26-162	8.8
Dibromochloromethane	ND	0.50						
Chlorobenzene	ND	0.50	10	78	75	81	38-150	3.9
Bromoform	ND	0.50						
1,1,2,2-Tetrachloroethane	ND	0.50						
1,3-Dichlorobenzene	ND	0.50						
1,4-Dichlorobenzene	ND	0.50	10	83	73	77	42-143	13
1,2-Dichlorobenzene	ND	0.50						
Freon 113	ND	0.50						
Bromochloromethane (surr)	67%		10	96	99	88	66-126	

8010 Volatiles in H2O

QC Batch#: B184B

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 08/31/92

LCS: 08/31/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery <u>LCS</u>	QC <u>LIMITS</u>
	<u>Result</u>	<u>Limit</u>			
Dichlorodifluoromethane	ND	0.50			
Chloromethane	ND	0.50			
Vinyl Chloride	ND	0.50			
Bromomethane	ND	0.50			
Chloroethane	ND	0.50			
Trichlorofluoromethane	ND	0.50			
1,1-Dichloroethene	ND	0.50	10	71	28-167
Methylene Chloride	ND	0.50			
trans-1,2-Dichloroethene	ND	0.50			
1,1-Dichloroethane	ND	0.50			
cis-1,2-Dichloroethene	ND	0.50			
Chloroform	ND	0.50	10	77	49-133
1,1,1-Trichloroethane	ND	0.50			
Carbon Tetrachloride	ND	0.50	10	81	43-143
1,2-Dichloroethane	ND	0.50	10	93	51-177
Trichloroethene	ND	0.50	10	91	35-146
1,2-Dichloropropane	ND	0.50			
Bromodichloromethane	ND	0.50			
2-Chloroethylvinyl ether	ND	5.0			
trans-1,3-Dichloropropene	ND	0.50			
1,1,2-Trichloroethane	ND	0.50			
Tetrachloroethene	ND	0.50	10	88	26-162
Dibromochloromethane	ND	0.50			
Chlorobenzene	ND	0.50	10	84	38-150
Bromoform	ND	0.50			
1,1,2,2-Tetrachloroethane	ND	0.50			
1,3-Dichlorobenzene	ND	0.50			
1,4-Dichlorobenzene	ND	0.50	10	80	42-143
1,2-Dichlorobenzene	ND	0.50			
Freon 113	ND	0.50			
Bromochloromethane (surr)	74%		10	82	66-126

8010 Volatiles in H2O

QC Batch#: **B184C**

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 09/01/92

LCS: 09/01/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery <u>LCS</u>	QC <u>LIMITS</u>
	<u>Result</u>	<u>Limit</u>			
Dichlorodifluoromethane	ND	0.50			
Chloromethane	ND	0.50			
Vinyl Chloride	ND	0.50			
Bromomethane	ND	0.50			
Chloroethane	ND	0.50			
Trichlorofluoromethane	ND	0.50			
1,1-Dichloroethene	ND	0.50	10	59	28-167
Methylene Chloride	ND	0.50			
trans-1,2-Dichloroethene	ND	0.50			
1,1-Dichloroethane	ND	0.50			
cis-1,2-Dichloroethene	ND	0.50			
Chloroform	ND	0.50	10	73	49-133
1,1,1-Trichloroethane	ND	0.50			
Carbon Tetrachloride	ND	0.50	10	81	43-143
1,2-Dichloroethane	ND	0.50	10	83	51-177
Trichloroethene	ND	0.50	10	88	35-146
1,2-Dichloropropane	ND	0.50			
Bromodichloromethane	ND	0.50			
2-Chloroethylvinyl ether	ND	5.0			
trans-1,3-Dichloropropene	ND	0.50			
1,1,2-Trichloroethane	ND	0.50			
Tetrachloroethene	ND	0.50	10	81	26-162
Dibromochloromethane	ND	0.50			
Chlorobenzene	ND	0.50	10	77	38-150
Bromoform	ND	0.50			
1,1,2,2-Tetrachloroethane	ND	0.50			
1,3-Dichlorobenzene	ND	0.50			
1,4-Dichlorobenzene	ND	0.50	10	71	42-143
1,2-Dichlorobenzene	ND	0.50			
Freon 113	ND	0.50			
Bromochloromethane (surr)	68%		10	77	66-126

8270 SVOA by GCMS /soil

QC Batch#: G001A

Units: ug/kg

Prep Date: 08/29/92

Analysis Dates

Blank: 08/31/92

MS: 08/31/92

MSD: 08/31/92

LCS:

Analytes	Blank		Spike level	%Recovery		QC		
	Result	Limit		MS	MSD	LCS	LIMITS	RPD
Phenol	ND	330	150	68	69	68	26-90	1.5
Bis(2-chloroethyl)ether	ND	330						
2-Chlorophenol	ND	330	150	75	76	73	25-102	1.3
1,3-Dichlorobenzene	ND	330						
1,4-Dichlorobenzene	ND	330	100	72	70	71	28-104	2.8
Benzyl alcohol	ND	670						
1,2-Dichlorobenzene	ND	330						
2-Methylphenol	ND	330						
Bis(2-chloroisopropyl)ether	ND	330						
4-Methylphenol	ND	330						
N-nitroso-di-n-propylamine	ND	330	100	87	85	78	41-126	2.3
Hexachloroethane	ND	330						
Nitrobenzene	ND	330						
Isophorone	ND	330						
2-Nitrophenol	ND	330						
2,4-Dimethylphenol	ND	330						
Benzoic acid	ND	330						
Bis(2-chloroethoxy)methane	ND	330						
2,4-Dichlorophenol	ND	330						
1,2,4-Trichlorobenzene	ND	330	100	73	73	74	38-107	0
Naphthalene	ND	330						
4-Chloroaniline	ND	670						
Hexachlorobutadiene	ND	330						
4-Chloro-3-methylphenol	ND	330	150	64	66	68	26-103	3.1
2-Methylnaphthalene	ND	330						
Hexachlorocyclopentadiene	ND	330						
2,4,6-Trichlorophenol	ND	330						
2,4,5-Trichlorophenol	ND	330						
2-Chloronaphthalene	ND	330						
2-Nitroaniline	ND	1700						
Dimethyl phthalate	ND	330						
Acenaphthylene	ND	330						
3-Nitroaniline	ND	1700						
Acenaphthene	ND	330	100	75	77	73	31-137	2.6
2,4-Dinitrophenol	ND	1700						
4-Nitrophenol	ND	1700	150	49	65	91	11-114	28
Dibenzofuran	ND	330						
2,4-Dinitrotoluene	ND	330	100	62	54	69	28-89	14
2,6-Dinitrotoluene	ND	330						
Diethyl phthalate	ND	330						
4-Chlorophenyl phenylether	ND	330						
Fluorene	ND	330						
4-Nitroaniline	ND	1700						
4,6-Dinitro-2-methylphenol	ND	1700						

8270 SVOA by GCMS /soil

QC Batch#: G001A
 Units: ug/kg
 Prep Date: 08/29/92

Analysis Dates
 Blank: 08/31/92
 MS: 08/31/92
 MSD: 08/31/92
 LCS:

Analytes	Blank		Spike level	%Recovery		LCS	QC	
	Result	Limit		MS	MSD		LIMITS	RPD
N-Nitrosodiphenylamine	ND	330						
4-Bromophenyl phenylether	ND	330						
Hexachlorobenzene	ND	330						
Pentachlorophenol	ND	1700	150	83	81	68	17-109	2.4
Phenanthrene	ND	330						
Anthracene	ND	330						
Di-n-butyl phthalate	ND	330						
Fluoranthene	ND	330						
Pyrene	ND	330	100	52	53	67	35-142	1.9
Butyl benzyl phthalate	ND	330						
3,3'-Dichlorobenzidine	ND	670						
Benzo(a)anthracene	ND	330						
Bis(2-ethylhexyl) phthalate	ND	330						
Chrysene	ND	330						
Di-n-octyl phthalate	ND	330						
Benzo(b)fluoranthene	ND	330						
Benzo(k)fluoranthene	ND	330						
Benzo(a)pyrene	ND	330						
Indeno(1,2,3-c,d)pyrene	ND	330						
Dibenzo(a,h)anthracene	ND	330						
Benzo(g,h,i)perylene	ND	330						
2-Fluorophenol (surr)	84		150	82	82		25-121	
Phenol-d5 (surr)	76		150	82	81		24-113	
Nitrobenzene-d5 (surr)	71		100	82	81		23-120	
2-Fluorobiphenyl (surr)	78		100	82	84		30-115	
2,4,6-Tribromophenol (surr)	72		150	72	75		19-122	
Terphenyl-d14 (surr)	82		100	56	59		18-137	

Gas BTEX in soil

QC Batch#: S072A
Units: ug/kg
Prep Date: 08/26/92

Analysis Dates
Blank: 08/26/92
MS: 08/26/92
MSD: 08/26/92
LCS: 08/26/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery		QC		
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	5	125	129	100	99	74-136	25
Toluene	ND	5	125	137	104	103	77-131	27
Ethylbenzene	ND	5	125	132	102	100	76-130	26
Total Xylenes	ND	5	125	136	104	103	79-124	27
Gasoline	ND	1000						
Bromofluorobenzene (surr)	112%		1250	128	99	102	42-137	

Gas BTEX in soil

QC Batch#: S072B
Units: ug/kg
Prep Date: 08/27/92

Analysis Dates
Blank: 08/28/92
LCS: 08/28/92

<u>Analytes</u>	Blank		Spike	%Recovery	QC
	<u>Result</u>	<u>Limit</u>	<u>level</u>	<u>LCS</u>	<u>LIMITS</u>
Benzene	ND	5	125	77	74-136
Toluene	ND	5	125	79	77-131
Ethylbenzene	ND	5	125	77	76-130
Total Xylenes	ND	5	125	80	79-124
Gasoline	ND	1000			
Bromofluorobenzene (surr)	90%		1250	88	42-137

Gas BTEX in Water

QC Batch#: I009A

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 08/27/92

MS: 08/27/92

MSD: 08/27/92

LCS: 08/27/92

Analytes	Blank		Spike level	%Recovery		QC		
	Result	Limit		MS	MSD	LCS	LIMITS	RPD
Benzene	ND	.5	10	80	79	82	74-136	1.3
Toluene	ND	.5	10	83	82	86	77-131	1.2
Ethylbenzene	ND	.5	10	81	80	83	76-130	1.2
Total Xylenes	ND	.5	20	84	83	86	79-124	1.2
Gasoline	ND	50						
Bromofluorobenzene (surr)	84%			81	80	80	58-127	

Environ

Batch #: 0038A Units: mg/kg

Test Description	Method	Blank Result	Lmt	Spike Level	%Recovery			QC		Date Run
					MS	MSD	LCS	Limits	RPD	
TRPH by IR	EPA 418.1	ND	25	2.0	100	100	94	75-125	0	08/28

Batch #: 0039A Units: mg/kg

Test Description	Method	Blank Result	Lmt	Spike Level	%Recovery			QC		Date Run
					MS	MSD	LCS	Limits	RPD	
TRPH by IR	EPA 418.1	ND	25	2.0	120	120	110	75-125	0	09/01

Batch #: 0019A Units: mg/L

Test Description	Method	Blank Result	Lmt	Spike Level	%Recovery		QC		Date Run
					LCS	LCSD	Limits	RPD	
TRPH by IR	EPA 418.1	ND	0.5	2.0	100	95	75-125	5.1	08/28

12-08-078

PROJECT NAME:
 LANEY COLLEGE
 SITE ASSESSMENT
CASE NO.: 03-28216

ENVIRON SAMPLE ID.

COLLECTION DATE	COLLECTED BY (Initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES: PAHs - From 113 SOILS / LUFT TRPH 418.1 8270									
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MPEL
 COOL TP bubbles 1
COMMENTS

1	B-10	8/25	SG	H ₂ O	7	✓	✓	✓												
2	B-11-4.0			SOIL	1	✓	✓	✓	✓											
3	B-11-6.5				1	✓	✓	✓	✓											
4	B-21-3.0	8/26			1	✓	✓	✓												
5	B-21-6.0				1	✓	✓	✓												
6	B-22-4.5				1	✓	✓	✓												
7	B-22-7.5				1	✓	✓	✓												P/S Sand
8	B-23-4.5				1	✓	✓	✓												Results Attn.
9	B-23-7.5				1	✓	✓	✓												Dave Harnish
TOTAL					15															

Relinquished by: [Signature] Date: 8-26-92 Time: 1645
 Received by: [Signature] Company: AERO Date: 8-26 Time: 1645
[Signature] 8-26-92 1800 [Signature] MPEL9 8/26/92 1800



92-08-078

PROJECT NAME: <u>Laney College</u>		COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES:										COMMENTS	
CASE NO.: <u>03-2821B</u>						EPA 8010 + FRON 113	EPA 8015 + FRON 113 + EPA 8016	EPA 418.1	EPA 800 + FRON 113	EPA 8015 + FRON 113	EPA 8010 + FRON 113	EPA 8015 + FRON 113					
ENVIRON SAMPLE ID.																	
10 B-24 -3.5-4.0		8/26	JSG	SOIL	1	1											
1 B-24 6.5-7.0				SOIL	1	1											
2 B-24				WATER	7	1	6										
3 B-18				WATER	7	1	3	3									
TOTAL																	

COOL MP bubbles
COMMENTS

Relinquished by: [Signature] Date: 8/26/92 Time: 1615 Received by: [Signature] Company: AEP Date: 8/26/92 Time: 1615
[Signature] 8-26-92 1800hr [Signature] MPEL 8/26/92 1800

MATEX/ETC

Mid-Pacific Environmental Laboratory, Inc.

6258 Clyde Avenue
Mountain View, CA 94043
(415) 964-0844
FAX (415) 961-7113

Environ
5820 Shellmound St. Suite 700
Emeryville, CA 94608

September 14, 1992
MPELI Order#: 92-08-084
Date Received: 08/27/92

Attn: David Harnish

Subject: Analysis of 15 Soil Samples

Work ID: 03-2821B Laney College

P.O. #: 03-2821B

Pages in report: 50

Analysis of soil samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of soil samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Solid samples were analyzed for total petroleum hydrocarbons by SM 5520 (Standard Methods for the Examination of Water and Wastewater - 17th Ed. 1989).

NOTES

QC Batches 0038A and 0039A: In the analysis of TRPH, the QC limits for percent recovery are 75-125%.

Volatiles, Method 8010/8020: In the analysis of sample B-1-3.0, only 11 g of sample remained for extraction. This quantity was used, resulting in elevated detection limits for all analytes by a factor of two. The procedure was approved verbally by Jeff Edwards (09/01/92).

Method 8015/8020, TPH as Gasoline/BTEX: In the analysis of samples B-9-5.5 and B-5-5.5-6.0, a chromatographic pattern was observed that did not match the pattern of any of our in-house standards for this method. This component was semi-quantitated by comparison with the gasoline standard, and is reported as "unknown hydrocarbon."

QC Batch S074A: In the analysis of TPH-Gasoline/BTEX, the percent recoveries of all spikes in the MS/MSD were outside of QC limits. The percent recoveries of these compounds in the LCS were within QC limits, demonstrating that the analytical system was in control. Therefore, the out-of-limits recoveries *assumed paper*

Page 2

Mid-Pacific REPORT

Work Order # 92-08-084

be attributed to matrix interference.

All analyses have been conducted in batches of 20 samples or less. Each QC batch consists of a method blank, a Matrix Spike, a Matrix Spike Duplicate and a Laboratory Control Sample. The QC information is in a separate QC Report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC Report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations existed:

- 1) one or more analytes was present at a level above the linear calibration range of the instrument; or
- 2) compounds were present at levels that could damage the instrument.

The following flags and abbreviations are used in this report:

ND - Not detected above the detection limit stated.

** - See other dilution.

Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.

MS(D) - Matrix spike (Duplicate)

LCS(D) - Laboratory Control Sample (Duplicate)

RPD - Relative percent difference

N/A - Not applicable

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by:

Elizabeth M. Hayes
client services

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-19-3.5

Collected: 08/27/92

MPELI ID: 9208084-01A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	6.2	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	78	66-126

Environ

Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-19-3.5

Collected: 08/27/92

MPELI ID: 9208084-01B

Received: 08/27/92

Matrix: SOIL

Analyzed: 08/31/92

QC Batch: S074A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	72	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-19-5.5

Collected: 08/27/92

MPALI ID: 9208084-02A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	76	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-19-5.5

Collected: 08/27/92

MPELI ID: 9208084-02B

Received: 08/27/92

Matrix: SOIL

Analyzed: 08/31/92

QC Batch: S074A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	66	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-1-3.0MPELI ID: 9208084-03A

Matrix: SOIL

QC Batch: S018A

Collected: 08/27/92

Received: 08/27/92

Analyzed: 09/01/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	11
Chloromethane	ND	11
Vinyl Chloride	ND	11
Bromomethane	ND	11
Chloroethane	ND	11
Trichlorofluoromethane	ND	11
1,1-Dichloroethene	ND	11
Methylene Chloride	ND	11
trans-1,2-Dichloroethene	ND	11
1,1-Dichloroethane	ND	11
cis-1,2-Dichloroethene	ND	11
Chloroform	ND	11
1,1,1-Trichloroethane	ND	11
Carbon Tetrachloride	ND	11
1,2-Dichloroethane	ND	11
Trichloroethene	ND	11
1,2-Dichloropropane	ND	11
Bromodichloromethane	ND	11
2-Chloroethylvinyl ether	ND	110
trans-1,3-Dichloropropene	ND	11
1,1,2-Trichloroethane	ND	11
Tetrachloroethene	ND	11
Dibromochloromethane	ND	11
Chlorobenzene	ND	11
Bromoform	ND	11
1,1,2,2-Tetrachloroethane	ND	11
1,3-Dichlorobenzene	ND	11
1,4-Dichlorobenzene	ND	11
1,2-Dichlorobenzene	ND	11
Freon 113	20	11
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	77	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-1-3.0
MPELI ID: 9208084-03B
Matrix: SOIL
QC Batch: S074ACollected: 08/27/92
Received: 08/27/92
Analyzed: 08/31/92
Dilution factor: 1.00Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	66	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-1-6.0

Collected: 08/27/92

MPELI ID: 9208084-04A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	74	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-1-6.0MPELI ID: 9208084-04B

Matrix: SOIL

QC Batch: S074A

Collected: 08/27/92

Received: 08/27/92

Analyzed: 08/31/92

Dilution factor: 1.00

	<u>Concentration, ug/kg</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	70	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-3-4.5MPELI ID: 9208084-05A

Matrix: SOIL

QC Batch: S018A

Collected: 08/27/92

Received: 08/27/92

Analyzed: 09/02/92

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	72	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-3-4.5
MPELI ID: 9208084-05B
Matrix: SOIL
QC Batch: S074ACollected: 08/27/92
Received: 08/27/92
Analyzed: 09/01/92
Dilution factor: 1.00Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	88	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-9-3.0

Collected: 08/27/92

MPELI ID: 9208084-06A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71	66-126

Environ

Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-9-5.5

Collected: 08/27/92

MPELI ID: 9208084-07B

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	61	5.0
Ethylbenzene	18	5.0
Total Xylenes	240	5.0
Gasoline	ND	1000
Unknown hydrocarbons*	18000	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	86	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-6-2.5-3.0

Collected: 08/27/92

MPELI ID: 9208084-08A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	72	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-6-2.5-3.0
MPELI ID: 9208084-08B
Matrix: SOIL
QC Batch: S074A

Collected: 08/27/92
Received: 08/27/92
Analyzed: 09/01/92
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	78	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-6-5.5-6.0

Collected: 08/27/92

MPELI ID: 9208084-09A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	79	66-126

Environ

Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-6-5.5-6.0

Collected: 08/27/92

MPELI ID: 9208084-09B

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	80	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-5-2.5-3.0

Collected: 08/27/92

MPALI ID: 9208084-10A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropane	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-5-2.5-3.0

Collected: 08/27/92

MPELI ID: 9208084-10B

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	72	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-5-5.5-6.0

Collected: 08/27/92

MPALI ID: 9208084-11A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	72	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-5-5.5-6.0

Collected: 08/27/92

MPELI ID: 9208084-11B

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074A

Dilution factor: 1.00

	<u>Concentration, ug/kg</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
Unknown hydrocarbons*	1400	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	73	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-8-2.5-3.0

Collected: 08/27/92

MPALI ID: 9208084-12A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	75	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-8-2.5-3.0

Collected: 08/27/92

MPELI ID: 9208084-12B

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	73	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-8-5.5-6.0

Collected: 08/27/92

MPELI ID: 9208084-13A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	73	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-8-5.5-6.0

Collected: 08/27/92

MPELI ID: 9208084-13B

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	64	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-20-3.5-4.0

Collected: 08/27/92

MPELI ID: 9208084-14A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	81	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-20-3.5-4.0

Collected: 08/27/92

MPELI ID: 9208084-14B

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	60	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-20-6.5-7.0

Collected: 08/27/92

MPELI ID: 9208084-15A

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	6.2
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	76	66-126

Environ

Analytical Results - TPH as Gas, BTX by GC /soil

Client ID: B-20-6.5-7.0

Collected: 08/27/92

MPELI ID: 9208084-15B

Received: 08/27/92

Matrix: SOIL

Analyzed: 09/02/92

QC Batch: S074A

Dilution factor: 10.0

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	90	5.0
Ethylbenzene	140	5.0
Total Xylenes	590	5.0
Gasoline	20000	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	73	42-137

Environ

Client ID: B-19-3.5
MPELI ID: 9208084 - 01C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	27 mg/kg	08/29	08/31	0038B

Environ

Client ID: B-19-5.5
MPELI ID: 9208084 - 02C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	29 mg/kg	08/29	08/31	0038B

Environ

Client ID: B-1-3.0
MPCLI ID: 9208084 - 03C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	310	81 mg/kg	08/29	08/31	0038B

Environ

Client ID: B-1-6.0
MPELI ID: 9208084 - 04C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	3900	760 mg/kg	08/29	08/31	0038B

Environ

Client ID: B-3-4.5
MPELI ID: 9208084 - 05C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	9200	1400 mg/kg	08/29	08/31	0038B

Environ

Client ID: B-9-3.0
MPELI ID: 9208084 - 06C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	30 mg/kg	08/29	08/31	0038B

Environ

Client ID: B-9-5.5
MPELI ID: 9208084 - 07C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	33 mg/kg	08/29	08/31	0038B

Environ

Client ID: B-6-2.5-3.0
MPCLI ID: 9208084 - 08C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	29 mg/kg	08/31	09/01	0039A

Environ

Client ID: B-6-5.5-6.0

MPELI ID: 9208084 - 09C

Matrix: SOIL

Date collected: 08/27/92

Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	180	31 mg/kg	08/31	09/01	0039A

Environ

Client ID: B-5-2.5-3.0MPCLI ID: 9208084 - 10C

Matrix: SOIL

Date collected: 08/27/92

Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	290	32 mg/kg	09/01	09/02	0039B

Environ

Client ID: B-5-5.5-6.0

MPCLI ID: 9208084 - 11C

Matrix: SOIL

Date collected: 08/27/92

Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	130	31 mg/kg	09/01	09/02	00398

Environ

Client ID: B-8-2.5-3.0
MPELI ID: 9208084 - 12C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	20000	2700 mg/kg	09/01	09/01	0039B

Environ

Client ID: B-8-5.5-6.0
MPELI ID: 9208084 - 13C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	32 mg/kg	09/01	09/02	0039B

Environ

Client ID: B-20-3.5-4.0MPELI ID: 9208084 - 14C

Matrix: SOIL

Date collected: 08/27/92

Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	29 mg/kg	09/01	09/02	0039B

Environ

Client ID: B-20-6.5-7.0
MPELI ID: 9208084 - 15C
Matrix: SOIL

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	30 mg/kg	09/01	09/02	0039B

8010 Volatiles in Soil

QC Batch#: S018A
 Units: ug/kg
 Prep Date: 08/31/92

Analysis Dates
 Blank: 09/02/92
 MS: 09/01/92
 MSD: 09/01/92
 LCS: 09/01/92

Analytes	Blank		Spike level	%Recovery			QC	
	Result	Limit		MS	MSD	LCS	LIMITS	RPD
Dichlorodifluoromethane	ND	6.2						
Chloromethane	ND	6.2						
Vinyl Chloride	ND	6.2						
Bromomethane	ND	6.2						
Chloroethane	ND	6.2						
Trichlorofluoromethane	ND	6.2						
1,1-Dichloroethene	ND	6.2	250	51	46	64	28-167	10
Methylene Chloride	ND	6.2						
trans-1,2-Dichloroethene	ND	6.2						
1,1-Dichloroethane	ND	6.2						
cis-1,2-Dichloroethene	ND	6.2						
Chloroform	ND	6.2	250	62	60	72	49-133	3.3
1,1,1-Trichloroethane	ND	6.2						
Carbon Tetrachloride	ND	6.2	250	66	62	78	43-143	6.2
1,2-Dichloroethane	ND	6.2	250	68	68	80	51-147	0
Trichloroethene	ND	6.2	250	72	72	86	35-146	0
1,2-Dichloropropane	ND	6.2						
Bromodichloromethane	ND	6.2						
2-Chloroethylvinyl ether	ND	6.2						
trans-1,3-Dichloropropene	ND	6.2						
1,1,2-Trichloroethane	ND	6.2						
Tetrachloroethene	ND	6.2	250	70	68	82	26-162	2.9
Dibromochloromethane	ND	6.2						
Chlorobenzene	ND	6.2	250	64	64	75	38-150	0
Bromoform	ND	6.2						
1,1,2,2-Tetrachloroethane	ND	6.2						
1,3-Dichlorobenzene	ND	6.2						
1,4-Dichlorobenzene	ND	6.2	250	58	58	68	42-143	0
1,2-Dichlorobenzene	ND	6.2						
Freon 113	ND	6.2						
Bromochloromethane (surr)	72%			80	78	76	66-126	

Gas BTEX in soil

QC Batch#: **S074A**
 Units: ug/kg
 Prep Date: 08/31/92

Analysis Dates
 Blank: 08/31/92
 MS: 08/31/92
 MSD: 08/31/92
 LCS: 08/31/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery		QC		
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	5	125	73	72	87	74-136	1.4
Toluene	ND	5	125	75	73	89	77-131	2.7
Ethylbenzene	ND	5	125	70	69	86	76-130	1.4
Total Xylenes	ND	5	125	73	72	90	79-124	1.4
Gasoline	ND	1000						
Bromofluorobenzene (surr)	89%		1250	68	68	85	42-137	

Environ

Batch #: 0038A Units: mg/kg

Test Description	Method	Blank		Spike Level	%Recovery			QC		Date Run
		Result	Lmt		MS	MSD	LCS	Limits	RPD	
TRPH by IR	EPA 418.1	ND	25	2.0	100	100	94	75-125	0	08/28

Batch #: 0038B Units: mg/kg

Test Description	Method	Blank		Spike Level	%Recovery			QC		Date Run
		Result	Lmt		MS	MSD	LCS	Limits	RPD	
TRPH by IR	EPA 418.1	ND	25	2.0			115	75-125		08/31

Batch #: 0039A Units: mg/kg

Test Description	Method	Blank		Spike Level	%Recovery			QC		Date Run
		Result	Lmt		MS	MSD	LCS	Limits	RPD	
TRPH by IR	EPA 418.1	ND	25	2.0	120	120	110	75-125	0	09/01

Batch #: 0039B Units: mg/kg

Test Description	Method	Blank		Spike Level	%Recovery			QC		Date Run
		Result	Lmt		MS	MSD	LCS	Limits	RPD	
TRPH by IR	EPA 418.1	ND	25	2.0			110	75-125		09/02

PROJECT NAME: <u>Laney College</u>		COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES:										COMMENTS
CASE NO.: <u>03-2821B</u>						EPA 718.1	EPA 8010 + Fe ²⁺ /113	EPA 8015M	EPA 8010 + Pb ²⁺ /113	EPA 8015M, EPA 418.1						
ENVIRON SAMPLE ID.																
B-15-A, B-15B		8/26/92	JSG	WATER	5	1	2	2								Analyse A before B (use B only if necessary)
⑧	B-6-2.5-3.0	8/27/92	JSG	SOIL	1	1		1								
⑨	B-6-5.5-6.0			SOIL	1			1								RUSH
	B-6			WATER	7	1	3	3								5 Day
	B-4			WATER	7	1	3	3								TURN AROUND.
⑩	B-5-2.5-3.0			SOIL	1			1								
⑪	B-5-5.5-6.0			SOIL	1			1								Send Results Attn.
	B-5			WATER	7	1	3	3								DAVE HARNISH
TOTAL		×	×	×												

Relinquished by:

[Signature]

Date:

8/27/92

Time:

1730

Received by:

[Signature] Jones

Company:

ASRO

Date:

8/27

Time:

5:30p

[Signature] Peter M. Lee

MAELI

08/27/92

1030

PROJECT NAME: <u>Laney College</u>		COLLECTION DATE	COLLECTED BY (Initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES:								COMMENTS	
CASE NO.: <u>03-2821B</u>						EPA 718.1	EPA 8010-F	EPA 8015M	EPA 8017A-F-13	EPA 8018-F-1	EPA 8019-F-1	EPA 8020-F-1	EPA 8021-F-1		
ENVIRON SAMPLE ID.															
B-7		8/27	JSE	WATER	7	1	3	3							RUSH
12	B-8-2.5-3.0	92		SOIL	1				1						5 Day
13	B-8-5.5-6.0			SOIL	1				1						TURNDOWN
B-8				WATER	7	1	3	3							
B-8 B-3 @				WATER	7	1	3	3							
14	B-20-3.5-4.0			SOIL	1				1						Send Results
15	B-20-6.5-7.0			SOIL	1				1						Att'n: Dave Harnish
TOTAL		X	X	X	25	3	9	9	4						

Relinquished by: [Signature] Date: 8/27/92 Time: 1730

Received by: [Signature] Company: AERO Date: 8/27 Time: 533p

[Signature] [Signature] [Signature] [Signature]

[Signature] [Signature] [Signature] [Signature]

[Signature] [Signature] [Signature] [Signature]

[Signature] [Signature] [Signature] [Signature]

MATEX/ETC

Mid-Pacific Environmental Laboratory, Inc.
625B Clyde Avenue
Mountain View, CA 94043
(415) 964-0844
FAX (415) 961-7713

Environ
5820 Shellmound St. Suite 700
Emeryville, CA 94608

September 11, 1992
MPELI Order#: 92-08-085
Date Received: 08/27/92

Attn: David Harnish

Subject: Analysis of 12 Water Samples

Work ID: 03-2821B Laney College

P.O. #: 03-2821B

Pages in report: 39

Analysis of water samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of water samples for purgeable halogenated and aromatic organic compounds was performed according to USEPA Methods 8010 and 8020 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of water samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Liquid samples were analyzed for total recoverable petroleum hydrocarbons by USEPA Method 418.1 (Methods for the Chemical Analysis of Water and Wastes-1983).

ANOMALIES

The chain of custody received with the samples did not match the actual samples received. The following samples were not received, but were listed on the chain of custody: B-6, B-8, and B-9. The following samples were received, but were not listed on the chain of custody: B-3B and TB-B-3. Two samples of B-7 were received, one sampled at 11:30 and one sampled at 13:20. Per Jeff Edwards (08/28/92), the following explanations were made for these samples. Sample B-6 was not sampled and should not have been listed on the chain of custody. Sample B-3B collected at 14:20 was actually sample B-9. TB-B-3 was to be analyzed for 8010. Sample B-7 collected at 11:30 was sample B-7, while sample B-7 collected at 13:20 was actually sample B-8. Additionally, Jeff Edwards requested that sample B-11 be analyzed for 8010/8020 (08/31/92). Bubbles of greater than one-quarter inch diameter were observed in one or more vials of the following samples: B-7, B-8, B-3, B-19 and TB-B-3. Jeff Edwards was notified of this observation (08/28/92) and the samples were analyzed "as is."

recycled paper

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Mid-Pacific

REPORT

Work Order # 92-08-085

QC Batch I011A: In the analysis of TPH-Gasoline/BTEX, the percent recovery of toluene in the MSD was outside of QC limits. The percent recovery of toluene in the LCS was within QC limits, demonstrating that the analytical system was in control.

NOTES

QC Batches 0019A/B: In the analysis of TRPH, the QC limits for the percent recovery are 75-125%.

Method 8015/8020, TPH as Gasoline/BTEX: In the analysis of sample B-8, a chromatographic pattern was observed that did not match the pattern of any of our in-house standards for this method. This component was semi-quantitated by comparison with the gasoline standard, and is reported as "unknown hydrocarbon." The following samples had a pH of 7 upon analysis: B-2, B-3, B-7 and B-8.

Volatiles, Method 8010: In the analysis of sample B-8, a greater concentration was not achievable, due to compounds present in this sample at high levels, that were not 8010 analytes.

All analyses have been conducted in batches of 20 samples or less. Each QC batch consists of a method blank, a Matrix Spike, a Matrix Spike Duplicate and a Laboratory Control Sample. The QC information is in a separate QC Report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC Report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations existed:

- 1) one or more analytes was present at a level above the linear calibration range of the instrument; or
- 2) compounds were present at levels that could damage the instrument.

The following flags and abbreviations are used in this report:

- ND - Not detected above the detection limit stated.
- ** - See other dilution.
- Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.
- Acetone - Not an 8020 compound.
- MS(D) - Matrix Spike (Duplicate)
- LCS(D) - Laboratory Control Sample (Duplicate)
- RPD - Relative percent difference
- N/A - Not applicable

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Mid-Pacific

REPORT

Work Order # 92-08-085

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by:

Elizabeth M. Lopez
Client Services

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-9

MPELI ID: 9208085-01A

Matrix: WATER

QC Batch: B184D

Collected: 08/27/92

Received: 08/27/92

Analyzed: 09/03/92

Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	70	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: B-9
MPOLI ID: 9208085-01B
Matrix: WATER
QC Batch: I011ACollected: 08/27/92
Received: 08/27/92
Analyzed: 08/31/92
Dilution factor: 1.00

<u>PARAMETER</u>	<u>Concentration.</u>	<u>ug/L</u>
<u>Benzene</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	4.6	0.50
Ethylbenzene	ND	0.50
Total Xylenes	5.0	0.50
Gasoline	470	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	83	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: <u>B-2</u>	Collected: 08/27/92
MPELI ID: <u>9208085-02A</u>	Received: 08/27/92
Matrix: WATER	Analyzed: 09/03/92
QC Batch: B184D	Dilution factor: 1.00

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	69	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B-2

Collected: 08/27/92

MPELI ID: 9208085-02B

Received: 08/27/92

Matrix: WATER

Analyzed: 08/31/92

QC Batch: I011A

Dilution factor: 1.00

Concentration, ug/L

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	81	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-15A, B-15B

Collected: 08/26/92

MPELI ID: 9208085-03A

Received: 08/27/92

Matrix: WATER

Analyzed: 08/31/92

QC Batch: B184B

Dilution factor: 1.00

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	68	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: B-15A, B-15B

Collected: 08/26/92

MPELI ID: 9208085-03B

Received: 08/27/92

Matrix: WATER

Analyzed: 08/31/92

QC Batch: I011A

Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	75	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-4MPELI ID: 9208085-05A

Matrix: WATER

QC Batch: B184D

Collected: 08/27/92

Received: 08/27/92

Analyzed: 09/03/92

Dilution factor: 1.00

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	66	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: B-4
MPELI ID: 9208085-05B
Matrix: WATER
QC Batch: I011ACollected: 08/27/92
Received: 08/27/92
Analyzed: 08/31/92
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	75	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-5

Collected: 08/27/92

MPELI ID: 9208085-06A

Received: 08/27/92

Matrix: WATER

Analyzed: 09/03/92

QC Batch: B184D

Dilution factor: 1.00

<u>PARAMETER</u>	<u>CONCENTRATION, ug/L</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane		ND	0.50
Chloromethane		ND	0.50
Vinyl Chloride		ND	0.50
Bromomethane		ND	0.50
Chloroethane		ND	0.50
Trichlorofluoromethane		ND	0.50
1,1-Dichloroethene		ND	0.50
Methylene Chloride		ND	0.50
trans-1,2-Dichloroethene		ND	0.50
1,1-Dichloroethane		ND	0.50
cis-1,2-Dichloroethene		ND	0.50
Chloroform		ND	0.50
1,1,1-Trichloroethane		ND	0.50
Carbon Tetrachloride		ND	0.50
1,2-Dichloroethane		ND	0.50
Trichloroethene		ND	0.50
1,2-Dichloropropane		ND	0.50
Bromodichloromethane		ND	0.50
2-Chloroethylvinyl ether		ND	5.0
trans-1,3-Dichloropropene		ND	0.50
1,1,2-Trichloroethane		ND	0.50
Tetrachloroethene		ND	0.50
Dibromochloromethane		ND	0.50
Chlorobenzene		ND	0.50
Bromoform		ND	0.50
1,1,2,2-Tetrachloroethane		ND	0.50
1,3-Dichlorobenzene		ND	0.50
1,4-Dichlorobenzene		ND	0.50
1,2-Dichlorobenzene		ND	0.50
Freon 113		ND	0.50
<u>SURROGATE</u>		<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane		74	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B-5
 MPOLI ID: 9208085-06B
 Matrix: WATER
 QC Batch: I011A

Collected: 08/27/92
 Received: 08/27/92
 Analyzed: 08/31/92
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	41	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	1.9	0.50
Gasoline	390	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	78	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-7
 MPELI ID: 9208085-07A
 Matrix: WATER
 QC Batch: B184D

Collected: 08/27/92
 Received: 08/27/92
 Analyzed: 09/03/92
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	72	66-126

Environ

Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B-7

Collected: 08/27/92

MPELI ID: 9208085-07B

Received: 08/27/92

Matrix: WATER

Analyzed: 08/31/92

QC Batch: I011A

Dilution factor: 1.00

Concentration, ug/L

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	75	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-8

Collected: 08/27/92

MPELI ID: 9208085-08A

Received: 08/27/92

Matrix: WATER

Analyzed: 09/03/92

QC Batch: B184D

Dilution factor: 10.0

Concentration, ug/L

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethane	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	76	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B-8
MPELI ID: 9208085-08B
Matrix: WATER
QC Batch: I011A

Collected: 08/27/92
Received: 08/27/92
Analyzed: 08/31/92
Dilution factor: 1000

Concentration, ug/L

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	500
Toluene	ND	500
Ethylbenzene	ND	500
Total Xylenes	ND	500
Gasoline	ND	50000
Unknown hydrocarbons*	730000	50000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	77	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-3
 MPOLI ID: 9208085-09A
 Matrix: WATER
 QC Batch: B184D

Collected: 08/27/92
 Received: 08/27/92
 Analyzed: 09/03/92
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	77	66-126

Environ

Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B-3MPELI ID: 9208085-09B

Matrix: WATER

QC Batch: I011A

Collected: 08/27/92

Received: 08/27/92

Analyzed: 08/31/92

Dilution factor: 1.00

Concentration, ug/L

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	77	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-19

Collected: 08/27/92

MPELI ID: 9208085-10A

Received: 08/27/92

Matrix: WATER

Analyzed: 09/03/92

QC Batch: B184D

Dilution factor: 1.00

Concentration, ug/L

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	74	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: B-19MPELI ID: 9208085-10E

Matrix: WATER

QC Batch: I011A

Collected: 08/27/92

Received: 08/27/92

Analyzed: 08/31/92

Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	78	58-127

Environ
Analytical Results - 8010/8020 Vol. by GC /H2O

Client ID: B-11

Collected: 08/26/92

MPELI ID: 9208085-11A

Received: 08/27/92

Matrix: WATER

Analyzed: 09/03/92

QC Batch: B184D

Dilution factor: 1.00

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene (8010)	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene (8010)	ND	0.50
1,4-Dichlorobenzene (8010)	ND	0.50
1,2-Dichlorobenzene (8010)	ND	0.50
Freon 113	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Chlorobenzene (8020)	ND	0.50
Ethylbenzene	ND	0.50
Total xylenes	ND	0.50
1,3-Dichlorobenzene (8020)	ND	0.50
1,4-Dichlorobenzene (8020)	ND	0.50
1,2-Dichlorobenzene (8020)	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	72	66-126
Bromofluorobenzene	93	58-136

Environ
Analytical Results - 8010/8020 Vol. by GC /H2O

Client ID: TR-B-3
 MPOLI ID: 9208085-12A
 Matrix: WATER
 QC Batch: B184D

Collected:
 Received: 08/27/92
 Analyzed: 09/03/92
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethane	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethane	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethane	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethane	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropane	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethane	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene (8010)	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene (8010)	ND	0.50
1,4-Dichlorobenzene (8010)	ND	0.50
1,2-Dichlorobenzene (8010)	ND	0.50
Freon 113	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Chlorobenzene (8020)	ND	0.50
Ethylbenzene	ND	0.50
Total xylenes	ND	0.50
1,3-Dichlorobenzene (8020)	ND	0.50
1,4-Dichlorobenzene (8020)	ND	0.50
1,2-Dichlorobenzene (8020)	ND	0.50
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	76	66-126
Bromofluorobenzene	91	58-136

Environ

Client ID: B-9
MPELI ID: 9208085 - 01C
Matrix: WATER

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-2
MPELI ID: 9208085 - 02C
Matrix: WATER

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	1.0	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-15A, B-15B
MPCLI ID: 9208085 - 03C
Matrix: WATER

Date collected: 08/26/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-4
MPELI ID: 9208085 - 05C
Matrix: WATER

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-5
MPELI ID: 9208085 - 06C
Matrix: WATER

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-7
MPELI ID: 9208085 - 07C
Matrix: WATER

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-8
MPCLI ID: 9208085 - 08C
Matrix: WATER

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	110	12 mg/L	08/29	08/31	0019B

Environ

Client ID: B-3

MPELI ID: 9208085 - 09C

Matrix: WATER

Date collected: 08/27/92

Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-19
MPELI ID: 9208085 - 10C
Matrix: WATER

Date collected: 08/27/92
Date received: 08/27/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

8010 Volatiles in H2O

QC Batch#: B184A
Units: ug/L
Prep Date: N/A

Analysis Dates
Blank: 08/28/92
MS: 08/28/92
MSD: 08/28/92
LCS: 08/28/92

Analytes	Blank		Spike level	%Recovery		LCS	QC	RPD
	Result	Limit		MS	MSD		LIMITS	
Dichlorodifluoromethane	ND	0.50						
Chloromethane	ND	0.50						
Vinyl Chloride	ND	0.50						
Bromomethane	ND	0.50						
Chloroethane	ND	0.50						
Trichlorofluoromethane	ND	0.50						
1,1-Dichloroethene	ND	0.50	10	75	68	76	28-167	9.8
Methylene Chloride	ND	0.50						
trans-1,2-Dichloroethene	ND	0.50						
1,1-Dichloroethane	ND	0.50						
cis-1,2-Dichloroethene	ND	0.50						
Chloroform	ND	0.50	10	80	79	85	49-133	1.3
1,1,1-Trichloroethane	ND	0.50						
Carbon Tetrachloride	ND	0.50	10	83	86	93	43-143	3.6
1,2-Dichloroethane	ND	0.50	10	95	100	106	51-177	5.1
Trichloroethene	ND	0.50	10	90	92	97	35-146	2.2
1,2-Dichloropropane	ND	0.50						
Bromodichloromethane	ND	0.50						
2-Chloroethylvinyl ether	ND	5.0						
trans-1,3-Dichloropropene	ND	0.50						
1,1,2-Trichloroethane	ND	0.50						
Tetrachloroethene	ND	0.50	10	76	83	90	26-162	8.8
Dibromochloromethane	ND	0.50						
Chlorobenzene	ND	0.50	10	78	75	81	38-150	3.9
Bromoform	ND	0.50						
1,1,2,2-Tetrachloroethane	ND	0.50						
1,3-Dichlorobenzene	ND	0.50						
1,4-Dichlorobenzene	ND	0.50	10	83	73	77	42-143	13
1,2-Dichlorobenzene	ND	0.50						
Freon 113	ND	0.50						
Bromochloromethane (surr)	67%		10	96	99	88	66-126	

8010 Volatiles in H2O

QC Batch#: B184B

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 08/31/92

LCS: 08/31/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery <u>LCS</u>	QC <u>LIMITS</u>
	<u>Result</u>	<u>Limit</u>			
Dichlorodifluoromethane	ND	0.50			
Chloromethane	ND	0.50			
Vinyl Chloride	ND	0.50			
Bromomethane	ND	0.50			
Chloroethane	ND	0.50			
Trichlorofluoromethane	ND	0.50			
1,1-Dichloroethene	ND	0.50	10	71	28-167
Methylene Chloride	ND	0.50			
trans-1,2-Dichloroethene	ND	0.50			
1,1-Dichloroethane	ND	0.50			
cis-1,2-Dichloroethene	ND	0.50			
Chloroform	ND	0.50	10	77	49-133
1,1,1-Trichloroethane	ND	0.50			
Carbon Tetrachloride	ND	0.50	10	81	43-143
1,2-Dichloroethane	ND	0.50	10	93	51-177
Trichloroethene	ND	0.50	10	91	35-146
1,2-Dichloropropane	ND	0.50			
Bromodichloromethane	ND	0.50			
2-Chloroethylvinyl ether	ND	5.0			
trans-1,3-Dichloropropene	ND	0.50			
1,1,2-Trichloroethane	ND	0.50			
Tetrachloroethene	ND	0.50	10	88	26-162
Dibromochloromethane	ND	0.50			
Chlorobenzene	ND	0.50	10	84	38-150
Bromoform	ND	0.50			
1,1,2,2-Tetrachloroethane	ND	0.50			
1,3-Dichlorobenzene	ND	0.50			
1,4-Dichlorobenzene	ND	0.50	10	80	42-143
1,2-Dichlorobenzene	ND	0.50			
Freon 113	ND	0.50			
Bromochloromethane (surr)	74%		10	82	66-126

8010 Volatiles in H2O

QC Batch#: B184D
Units: ug/L
Prep Date: N/A

Analysis Dates
Blank: 09/02/92
LCS: 09/02/92

Analytes	Blank		Spike level	%Recovery LCS	QC LIMITS
	Result	Limit			
Dichlorodifluoromethane	ND	0.50			
Chloromethane	ND	0.50			
Vinyl Chloride	ND	0.50			
Bromomethane	ND	0.50			
Chloroethane	ND	0.50			
Trichlorofluoromethane	ND	0.50			
1,1-Dichloroethene	ND	0.50	10	58	28-167
Methylene Chloride	ND	0.50			
trans-1,2-Dichloroethene	ND	0.50			
1,1-Dichloroethane	ND	0.50			
cis-1,2-Dichloroethene	ND	0.50			
Chloroform	ND	0.50	10	74	49-133
1,1,1-Trichloroethane	ND	0.50			
Carbon Tetrachloride	ND	0.50	10	80	43-143
1,2-Dichloroethane	ND	0.50	10	86	51-177
Trichloroethene	ND	0.50	10	86	35-146
1,2-Dichloropropane	ND	0.50			
Bromodichloromethane	ND	0.50			
2-Chloroethylvinyl ether	ND	5.0			
trans-1,3-Dichloropropene	ND	0.50			
1,1,2-Trichloroethane	ND	0.50			
Tetrachloroethene	ND	0.50	10	79	26-162
Dibromochloromethane	ND	0.50			
Chlorobenzene	ND	0.50	10	77	38-150
Bromoform	ND	0.50			
1,1,2,2-Tetrachloroethane	ND	0.50			
1,3-Dichlorobenzene	ND	0.50			
1,4-Dichlorobenzene	ND	0.50	10	71	42-143
1,2-Dichlorobenzene	ND	0.50			
Freon 113	ND	0.50			
Bromochloromethane (surr)	82%		10	96	66-126

8010/8020 Volatiles in H2O

QC Batch#: B184A

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 08/28/92

MS: 08/28/92

MSD: 08/28/92

LCS: 08/28/92

Analytes	Blank		Spike level	%Recovery		LCS	QC	
	Result	Limit		MS	MSD		LIMITS	RPD
Dichlorodifluoromethane	ND	0.50						
Chloromethane	ND	0.50						
Vinyl Chloride	ND	0.50						
Bromomethane	ND	0.50						
Chloroethane	ND	0.50						
Trichlorofluoromethane	ND	0.50						
1,1-Dichloroethene	ND	0.50	10	75	68	76	28-167	9.8
Methylene Chloride	ND	0.50						
trans-1,2-Dichloroethene	ND	0.50						
1,1-Dichloroethane	ND	0.50						
cis-1,2-Dichloroethene	ND	0.50						
Chloroform	ND	0.50	10	80	79	85	49-133	1.3
1,1,1-Trichloroethane	ND	0.50						
Carbon Tetrachloride	ND	0.50	10	83	86	93	43-143	3.6
1,2-Dichloroethane	ND	0.50	10	95	100	106	51-177	5.1
Trichloroethene	ND	0.50	10	90	92	97	35-146	2.2
1,2-Dichloropropane	ND	0.50						
Bromodichloromethane	ND	0.50						
2-Chloroethylvinyl ether	ND	5.0						
trans-1,3-Dichloropropene	ND	0.50						
1,1,2-Trichloroethane	ND	0.50						
Tetrachloroethene	ND	0.50	10	76	83	90	26-162	8.8
Dibromochloromethane	ND	0.50						
Chlorobenzene (8010)	ND	0.50	10	78	75	81	38-150	3.9
Bromoform	ND	0.50						
1,1,2,2-Tetrachloroethane	ND	0.50						
1,3-Dichlorobenzene (8010)	ND	0.50						
1,4-Dichlorobenzene (8010)	ND	0.50	10	83	73	77	42-133	13
1,2-Dichlorobenzene (8010)	ND	0.50						
Freon 113	ND	0.50						
Benzene	ND	0.50	10	105	105	110	39-150	0
Toluene	ND	0.50						
Chlorobenzene (8020)	ND	0.50	10	103	105	107	55-135	1.9
Ethylbenzene	ND	0.50						
Total xylenes	ND	0.50						
1,3-Dichlorobenzene (8020)	ND	0.50						
1,4-Dichlorobenzene (8020)	ND	0.50	10	107	94	102	42-143	13
1,2-Dichlorobenzene (8020)	ND	0.50						
Acetone	ND	30						
Bromochloromethane (surr)	66%		10	96	99	88	66-126	
Bromofluorobenzene (surr)	102%		10	106	107	105	58-136	

8010/8020 Volatiles in H2O

QC Batch#: B184D
Units: ug/L
Prep Date: N/A

Analysis Dates
Blank: 09/03/92
LCS: 09/03/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery <u>LCS</u>	QC <u>LIMITS</u>
	<u>Result</u>	<u>Limit</u>			
Dichlorodifluoromethane	ND	0.50			
Chloromethane	ND	0.50			
Vinyl Chloride	ND	0.50			
Bromomethane	ND	0.50			
Chloroethane	ND	0.50			
Trichlorofluoromethane	ND	0.50			
1,1-Dichloroethene	ND	0.50	10	58	28-167
Methylene Chloride	ND	0.50			
trans-1,2-Dichloroethene	ND	0.50			
1,1-Dichloroethane	ND	0.50			
cis-1,2-Dichloroethene	ND	0.50			
Chloroform	ND	0.50	10	74	49-133
1,1,1-Trichloroethane	ND	0.50			
Carbon Tetrachloride	ND	0.50	10	80	43-143
1,2-Dichloroethane	ND	0.50	10	86	51-177
Trichloroethene	ND	0.50	10	86	35-146
1,2-Dichloropropane	ND	0.50			
Bromodichloromethane	ND	0.50			
2-Chloroethylvinyl ether	ND	5.0			
trans-1,3-Dichloropropene	ND	0.50			
1,1,2-Trichloroethane	ND	0.50			
Tetrachloroethene	ND	0.50	10	79	26-162
Dibromochloromethane	ND	0.50			
Chlorobenzene (8010)	ND	0.50	10	77	38-150
Bromoform	ND	0.50			
1,1,2,2-Tetrachloroethane	ND	0.50			
1,3-Dichlorobenzene (8010)	ND	0.50			
1,4-Dichlorobenzene (8010)	ND	0.50	10	71	42-133
1,2-Dichlorobenzene (8010)	ND	0.50			
Freon 113	ND	0.50			
Benzene	ND	0.50	10	86	39-150
Toluene	ND	0.50			
Chlorobenzene (8020)	ND	0.50	10	86	55-135
Ethylbenzene	ND	0.50			
Total xylenes	ND	0.50			
1,3-Dichlorobenzene (8020)	ND	0.50			
1,4-Dichlorobenzene (8020)	ND	0.50	10	83	42-143
1,2-Dichlorobenzene (8020)	ND	0.50			
Acetone	ND	30			
Bromochloromethane (surr)	82%		10	96	66-126
Bromofluorobenzene (surr)	94%		10	99	58-136

Gas BTEX in Water

QC Batch#: I011A

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 08/31/92

MS: 08/31/92

MSD: 08/31/92

LCS: 08/31/92

<u>Analytes</u>	Blank		Spike	%Recovery		QC		
	<u>Result</u>	<u>Limit</u>	<u>level</u>	<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	.5	10	103	86	84	74-136	18
Toluene	ND	.5	10	83	68	87	77-131	20
Ethylbenzene	ND	.5	10	108	92	86	76-130	16
Total Xylenes	ND	.5	20	106	90	91	79-124	16
Gasoline	ND	50						
Bromofluorobenzene (surr)	83%			80	87	85	58-127	

Environ

Batch #: 0019A Units: mg/L

Test Description	Method	Blank Result	Lmt	Spike Level	%Recovery LCS	QC Limits	RPD	Date Run
TRPH by IR	EPA 418.1	ND	0.5	2.0	100	95	75-125 5.1	08/28

Batch #: 0019B Units: mg/L

Test Description	Method	Blank Result	Lmt	Spike Level	%Recovery LCS	QC Limits	Date Run
TRPH by IR	EPA 418.1	ND	0.5	2.0	105	75-125	08/31

ENVIRON

Counsel in Health and Environmental Science

9208084
(Soils) CHAIN-of-CUSTODY FORM * 9202085 (waters)

Sheet 1 of 4
5820 Shellmound St, Suite 700
Emeryville, California 94608
(415) 655-7400

PROJECT NAME: <u>LANEY COLLEGE</u> <u>SITE ASSESSMENT</u> CASE NO.: _____	COLLECTION DATE	COLLECTED BY (Initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES: <u>TRPH 4/8.1</u> <u>8010 + FIPOR 113</u> <u>8015 / LUFT</u>							MPELI
ENVIRON SAMPLE ID.	COMMENTS											
B-19-3.5	8/27	SS	Soil	1								AVSH
B-19-5.5				1								5 Day
B-1-3.0				1								TURN AROUND
B-1-6.0				1								
B-3-4.5				1								
B-9-3.0				1								Send Results
B-9-5.5			▼	1								Attn:
B-9	▼	▼	H ₂ O	7								DAVE HARNISH
B-2	▼	▼	H ₂ O	7	▼	▼	▼					
TOTAL	XX	XX	XX	21								

Relinquished by: [Signature] Date: 8/27/92 Time: 1730
 Received by: [Signature] Company: AELO Date: 8/27 Time: 539p
[Signature] Pete H. [Signature] MPELI 08/27/92 1830

ENVIRON

Counsel in Health and Environmental Science

(SOILS) 9208084

9208085 (WATERS)

CHAIN-of-CUSTODY FORM

Sheet 2 of 4
5820 Shellmound St, Suite 700
Emeryville, California 94608
(415) 655-7400

PROJECT NAME: <u>LANEY COLLEGE</u> <u>SITE ASSESSMENT</u> CASE NO.: <u>03-2921B</u>	COLLECTION DATE	COLLECTED BY (Initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES: <u>SOIL - Feom/13</u> <u>SOIL - LVET</u> <u>TRPH 418.1</u> <u>SOIL - Feom/13 + BTEX</u> <u>+ SOLO</u> <u>8/31/92 per JWB</u>										COMMENTS <u>MPELI</u>	
ENVIRON SAMPLE ID.											COMMENTS					
B-19	8/27	SS	H ₂ O	7	✓	✓	✓									RUSH
B-11	8/26	"	"	3			✓									5 Day
																TURN AROUND
																Send results
																attn:
																DAVE HARNISH
TOTAL	X	X	X	10												

Relinquished by: [Signature] Date: 8/27/92 Time: 1730

Received by: [Signature] Company: ASCO Date: 8/27 Time: 5:30p

[Signature] [Signature] Company: MPELI Date: 02/27/92 Time: 1830

ENVIRON

Counsel in Health and Environmental Science

9208084
(SOILS)

CHAIN-of-CUSTODY FORM

9208085
waters

Sheet 3 of 4
5820 Shellmound St, Suite 700
Emeryville, California 94608
(415) 655-7400

PROJECT NAME: <u>Laney College</u>	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES:							COMMENTS	
					EPA 718.1	EPA 8010 + Pb 113	EPA 8015M	EPA 8010 + Pb 113	EPA 8015M + EPA 418.1				
CASE NO.: <u>03-2821B</u>	ENVIRON SAMPLE ID.												
	<u>8/26/92</u>	<u>ISE</u>	<u>WATER</u>	<u>5</u>	<u>1</u>	<u>2</u>	<u>2</u>						<u>Analyse A before B</u> <u>(use B only if necessary)</u>
	<u>8/27/92</u>	<u>ISE</u>	<u>SOIL</u>	<u>1</u>	<u>1</u>			<u>1</u>					
			<u>SOIL</u>	<u>1</u>				<u>1</u>					<u>RUSH</u>
			<u>WATER</u>	<u>7</u>	<u>1</u>	<u>3</u>	<u>3</u>						<u>5 Day</u>
			<u>WATER</u>	<u>7</u>	<u>1</u>	<u>3</u>	<u>3</u>						<u>TURN AROUND,</u>
			<u>SOIL</u>	<u>1</u>				<u>1</u>					
			<u>SOIL</u>	<u>1</u>				<u>1</u>					<u>Send Results Attn:</u>
			<u>WATER</u>	<u>7</u>	<u>1</u>	<u>3</u>	<u>3</u>						<u>PAVE HARNISH</u>
	<u>TOTAL</u>	<u>X</u>	<u>X</u>	<u>X</u>									

Relinquished by:
[Signature]

Date:
8/27/92

Time:
1730

Received by:
[Signature]
Peter H. Ho

Company:
ASRO
MAELI

Date:
8/27
8/27/92

Time:
5:30p
1830

ENVIRON

Counsel in Health and Environmental Science

9208084
(SOILS)

9208084
(WATERS)

CHAIN-of-CUSTODY FORM

Sheet 4 of 4
5820 Shellmound St, Suite 700
Emeryville, California 94608
(415) 655-7400

PROJECT NAME: <u>Laney College</u>		COLLECTION DATE	COLLECTED BY (Initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES:								COMMENTS
CASE NO.: <u>03-2821B</u>						EPA 718.1 EPA 8010-FF-113 EPA 8015M EPA 8017-F-113 EPA 8015-1, EPA 817-1								
ENVIRON SAMPLE ID.														
B-7		8/27/92	JSE	WATER	7	1	3	3						RUSH
B-8-2.5-3.0		92		SOIL	1				1					5 Day
B-8-5.5-6.0				SOIL	1				1					TURNOAROUND
B-8				WATER	7	1	3	3						
B-3				WATER	7	1	3	3						
B-20-3.5-4.0				SOIL	1				1					Sand Results
B-20-6.5-7.0				SOIL	1				1					Attn: Dave Hurnish
TOTAL					25	3	9	9	4					

Relinquished by:
[Signature]

Date:
8/27/92

Time:
1730

Received by:
[Signature]

Company:
AERO

Date:
8/31

Time:
530p

[Signature]

MELI

8/27/92

1830

MATEX/ETC

Mid-Pacific Environmental Laboratory, Inc.
625B Clyde Avenue
Mountain View, CA 94043
(415) 964-0844
FAX (415) 961-7113

Environ
5820 Shellmound St. Suite 700
Emeryville, CA 94608

September 11, 1992
MPCLI Order#: 92-08-090
Date Received: 08/28/92

Attn: David Harnish

Subject: Analysis of 2 Soil, 4 Water Samples

Work ID: 03-2821B Laney College

P.O. #: 03-2821B

Pages in report: 31

Analysis of soil samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of water samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of soil samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Analysis of water samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Solid samples were analyzed for total petroleum hydrocarbons by SM 5520 (Standard Methods for the Examination of Water and Wastewater - 17th Ed. 1989).

Liquid samples were analyzed for total recoverable petroleum hydrocarbons by USEPA Method 418.1 (Methods for the Chemical Analysis of Water and Wastes-1983).

NOTES

Sample B-13-5.5-6.0 was listed as such on the chain of custody, however, the container label for this sample listed B-13-6.5-7.0. This sample was processed per the chain of custody.

recycled paper

Sample TB-B-16 was received with a bubble of less than one-quarter inch in one of six vials.

Samples were received at 12 degrees centigrade. Samples were analyzed "as is", per Jeff Edwards (08/31/92).

QC Batches 0039A/B and 0019A/B: In the analysis of TRPH, the QC limits for the percent recovery are 75-125%.

TPH-Gasoline/BTXE: For sample B-12, pH was 7 upon analysis.

QC Batch S074A: In the analysis of TPH-Gasoline/BTXE, the percent recoveries of all spike compounds in the MS/MSD were outside of QC limits. The percent recoveries of these compounds in the LCS were within QC limits, demonstrating that the analytical system was in control. Therefore, the out-of-limits recoveries can be attributed to matrix interference.

All analyses have been conducted in batches of 20 samples or less. Each QC batch consists of a method blank, a Matrix Spike, a Matrix Spike Duplicate and a Laboratory Control Sample. The QC information is in a separate QC Report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC Report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

GC/MS equipment used for EPA Method 8270 analyses was tuned against DFTFP and met all criteria.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations existed:

- 1) one or more analytes was present at a level above the linear calibration range of the instrument; or
- 2) compounds were present at levels that could damage the instrument.

The following flags and abbreviations are used in this report:

- ND - Not detected above the detection limit stated.
- ** - See other dilution.
- Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.
- Acetone - Not an 8020 compound.
- MS(D) - Matrix Spike (Duplicate)
- LCS(D) - Laboratory Control Sample (Duplicate)
- RPD - Relative percent difference
- N/A - Not applicable

Page 3

Mid-Pacific

REPORT

Work Order # 92-08-090

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by:

Elizabeth M. Speer
Client Services

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-13-3.5-4.0

Collected: 08/28/92

MPELI ID: 9208090-01A

Received: 08/28/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	66	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-13-3.5-4.0

Collected: 08/28/92

MPELI ID: 9208090-01B

Received: 08/28/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074B

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	66	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B-13-5.5-6.0

Collected: 08/28/92

MPELI ID: 9208090-02A

Received: 08/28/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S018A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	6.2
Chloromethane	ND	6.2
Vinyl Chloride	ND	6.2
Bromomethane	ND	6.2
Chloroethane	ND	6.2
Trichlorofluoromethane	ND	6.2
1,1-Dichloroethene	ND	6.2
Methylene Chloride	ND	6.2
trans-1,2-Dichloroethene	ND	6.2
1,1-Dichloroethane	ND	6.2
cis-1,2-Dichloroethene	ND	6.2
Chloroform	ND	6.2
1,1,1-Trichloroethane	ND	6.2
Carbon Tetrachloride	ND	6.2
1,2-Dichloroethane	ND	6.2
Trichloroethene	ND	6.2
1,2-Dichloropropane	ND	6.2
Bromodichloromethane	ND	6.2
2-Chloroethylvinyl ether	ND	62
trans-1,3-Dichloropropene	ND	6.2
1,1,2-Trichloroethane	ND	6.2
Tetrachloroethene	ND	6.2
Dibromochloromethane	ND	6.2
Chlorobenzene	ND	6.2
Bromoform	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.2
1,3-Dichlorobenzene	ND	6.2
1,4-Dichlorobenzene	ND	6.2
1,2-Dichlorobenzene	ND	6.2
Freon 113	ND	6.2
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	77	66-126

Environ
Analytical Results - TPH as Gas, BTX by GC /soilClient ID: B-13-5.5-6.0

Collected: 08/28/92

MPELI ID: 9208090-02B

Received: 08/28/92

Matrix: SOIL

Analyzed: 09/01/92

QC Batch: S074B

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	56	42-137

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-20
 MPELI ID: 9208090-03A
 Matrix: WATER
 QC Batch: B184D

Collected: 08/28/92
 Received: 08/28/92
 Analyzed: 09/02/92
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	**	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	77	66-126

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-20
 MPELI ID: 9208090-03D
 Matrix: WATER
 QC Batch: B184D

Collected: 08/28/92
 Received: 08/28/92
 Analyzed: 09/02/92
 Dilution factor: 2.00

<u>PARAMETER</u>	<u>CONCENTRATION, ug/L</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane		ND	1.0
Chloromethane		ND	1.0
Vinyl Chloride		ND	1.0
Bromomethane		ND	1.0
Chloroethane		ND	1.0
Trichlorofluoromethane		ND	1.0
1,1-Dichloroethene		ND	1.0
Methylene Chloride		ND	1.0
trans-1,2-Dichloroethene		ND	1.0
1,1-Dichloroethane		ND	1.0
cis-1,2-Dichloroethene		ND	1.0
Chloroform		ND	1.0
1,1,1-Trichloroethane		ND	1.0
Carbon Tetrachloride		ND	1.0
1,2-Dichloroethane		110	1.0
Trichloroethene		ND	1.0
1,2-Dichloropropane		ND	1.0
Bromodichloromethane		ND	1.0
2-Chloroethylvinyl ether		ND	10
trans-1,3-Dichloropropene		ND	1.0
1,1,2-Trichloroethane		ND	1.0
Tetrachloroethene		ND	1.0
Dibromochloromethane		ND	1.0
Chlorobenzene		ND	1.0
Bromoform		ND	1.0
1,1,2,2-Tetrachloroethane		ND	1.0
1,3-Dichlorobenzene		ND	1.0
1,4-Dichlorobenzene		ND	1.0
1,2-Dichlorobenzene		ND	1.0
Freon 113		ND	1.0
<u>SURROGATE</u>		<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane		74	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: B-20
MPELI ID: 9208090-03B
Matrix: WATER
QC Batch: I010BCollected: 08/28/92
Received: 08/28/92
Analyzed: 09/02/92
Dilution factor: 10.0

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	780	5.0
Toluene	97	5.0
Ethylbenzene	210	5.0
Total Xylenes	120	5.0
Gasoline	4800	500
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	83	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-12MPOLI ID: 9208090-04A

Matrix: WATER

QC Batch: B184D

Collected: 08/28/92

Received: 08/28/92

Analyzed: 09/02/92

Dilution factor: 1.00

<u>PARAMETER</u>	<u>Concentration, ug/L</u>	
	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B-12
MPELI ID: 9208090-04B
Matrix: WATER
QC Batch: I011B

Collected: 08/28/92
Received: 08/28/92
Analyzed: 09/01/92
Dilution factor: 1.00

Concentration, ug/L

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	83	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B-16
MPELI ID: 9208090-05A
Matrix: WATER
QC Batch: B184D

Collected: 08/28/92
Received: 08/28/92
Analyzed: 09/02/92
Dilution factor: 1.00

<u>PARAMETER</u>	<u>Concentration,</u>	<u>ug/L</u>
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	75	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: B-16
MPELI ID: 9208090-05B
Matrix: WATER
QC Batch: I011BCollected: 08/28/92
Received: 08/28/92
Analyzed: 09/01/92
Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	80	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: TB-B-16MPELI ID: 9208090-06A

Matrix: WATER

QC Batch: B184D

Collected: 08/28/92

Received: 08/28/92

Analyzed: 09/03/92

Dilution factor: 1.00

<u>PARAMETER</u>	<u>Concentration, ug/L</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane		ND	0.50
Chloromethane		ND	0.50
Vinyl Chloride		ND	0.50
Bromomethane		ND	0.50
Chloroethane		ND	0.50
Trichlorofluoromethane		ND	0.50
1,1-Dichloroethene		ND	0.50
Methylene Chloride		ND	0.50
trans-1,2-Dichloroethene		ND	0.50
1,1-Dichloroethane		ND	0.50
cis-1,2-Dichloroethene		ND	0.50
Chloroform		ND	0.50
1,1,1-Trichloroethane		ND	0.50
Carbon Tetrachloride		ND	0.50
1,2-Dichloroethane		ND	0.50
Trichloroethene		ND	0.50
1,2-Dichloropropane		ND	0.50
Bromodichloromethane		ND	0.50
2-Chloroethylvinyl ether		ND	5.0
trans-1,3-Dichloropropene		ND	0.50
1,1,2-Trichloroethane		ND	0.50
Tetrachloroethene		ND	0.50
Dibromochloromethane		ND	0.50
Chlorobenzene		ND	0.50
Bromoform		ND	0.50
1,1,2,2-Tetrachloroethane		ND	0.50
1,3-Dichlorobenzene		ND	0.50
1,4-Dichlorobenzene		ND	0.50
1,2-Dichlorobenzene		ND	0.50
Freon 113		ND	0.50
<u>SURROGATE</u>		<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane		74	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2OClient ID: TB-B-16

Collected: 08/28/92

MPELI ID: 9208090-06B

Received: 08/28/92

Matrix: WATER

Analyzed: 09/01/92

QC Batch: I011B

Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	77	58-127

Environ

Client ID: B-13-3.5-4.0
MPELI ID: 9208090 - 01C
Matrix: SOIL

Date collected: 08/28/92
Date received: 08/28/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	29 mg/kg	09/01	09/02	0039B

Environ

Client ID: B-13-5.5-6.0
MPELI ID: 9208090 - 02C
Matrix: SOIL

Date collected: 08/28/92
Date received: 08/28/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	120	28 mg/kg	09/01	09/02	0039B

Environ

Client ID: B-20

MPELI ID: 9208090 - 03C

Matrix: WATER

Date collected: 08/28/92

Date received: 08/28/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	0.80	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-12
MPELI ID: 9208090 - 04C
Matrix: WATER

Date collected: 08/28/92
Date received: 08/28/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

Environ

Client ID: B-16
MPCLI ID: 9208090 - 05C
Matrix: WATER

Date collected: 08/28/92
Date received: 08/28/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
TRPH by IR	EPA 418.1	ND	0.50 mg/L	08/29	08/31	0019B

8010 Volatiles in Soil

QC Batch#: S018A
Units: ug/kg
Prep Date: 08/31/92

Analysis Dates
Blank: 09/02/92
MS: 09/01/92
MSD: 09/01/92
LCS: 09/01/92

Analytes	Blank		Spike Level	%Recovery		LCS	QC LIMITS	RPD
	Result	Limit		MS	MSD			
Dichlorodifluoromethane	ND	6.2						
Chloromethane	ND	6.2						
Vinyl Chloride	ND	6.2						
Bromomethane	ND	6.2						
Chloroethane	ND	6.2						
Trichlorofluoromethane	ND	6.2						
1,1-Dichloroethene	ND	6.2	250	51	46	64	28-167	10
Methylene Chloride	ND	6.2						
trans-1,2-Dichloroethene	ND	6.2						
1,1-Dichloroethane	ND	6.2						
cis-1,2-Dichloroethene	ND	6.2						
Chloroform	ND	6.2	250	62	60	72	49-133	3.3
1,1,1-Trichloroethane	ND	6.2						
Carbon Tetrachloride	ND	6.2	250	66	62	78	43-143	6.2
1,2-Dichloroethane	ND	6.2	250	68	68	80	51-147	0
Trichloroethene	ND	6.2	250	72	72	86	35-146	0
1,2-Dichloropropane	ND	6.2						
Bromodichloromethane	ND	6.2						
2-Chloroethylvinyl ether	ND	6.2						
trans-1,3-Dichloropropene	ND	6.2						
1,1,2-Trichloroethane	ND	6.2						
Tetrachloroethene	ND	6.2	250	70	68	82	26-162	2.9
Dibromochloromethane	ND	6.2						
Chlorobenzene	ND	6.2	250	64	64	75	38-150	0
Bromoform	ND	6.2						
1,1,2,2-Tetrachloroethane	ND	6.2						
1,3-Dichlorobenzene	ND	6.2						
1,4-Dichlorobenzene	ND	6.2	250	58	58	68	42-143	0
1,2-Dichlorobenzene	ND	6.2						
Freon 113	ND	6.2						
Bromochloromethane (surr)	72%			80	78	76	66-126	

8010 Volatiles in H2O

QC Batch#: B184A
Units: ug/L
Prep Date: N/A

Analysis Dates
Blank: 08/28/92
MS: 08/28/92
MSD: 08/28/92
LCS: 08/28/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery		<u>LCS</u>	QC	
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>		<u>LIMITS</u>	<u>RPD</u>
Dichlorodifluoromethane	ND	0.50						
Chloromethane	ND	0.50						
Vinyl Chloride	ND	0.50						
Bromomethane	ND	0.50						
Chloroethane	ND	0.50						
Trichlorofluoromethane	ND	0.50						
1,1-Dichloroethene	ND	0.50	10	75	68	76	28-167	9.8
Methylene Chloride	ND	0.50						
trans-1,2-Dichloroethene	ND	0.50						
1,1-Dichloroethane	ND	0.50						
cis-1,2-Dichloroethene	ND	0.50						
Chloroform	ND	0.50	10	80	79	85	49-133	1.3
1,1,1-Trichloroethane	ND	0.50						
Carbon Tetrachloride	ND	0.50	10	83	86	93	43-143	3.6
1,2-Dichloroethane	ND	0.50	10	95	100	106	51-177	5.1
Trichloroethene	ND	0.50	10	90	92	97	35-146	2.2
1,2-Dichloropropane	ND	0.50						
Bromodichloromethane	ND	0.50						
2-Chloroethylvinyl ether	ND	5.0						
trans-1,3-Dichloropropene	ND	0.50						
1,1,2-Trichloroethane	ND	0.50						
Tetrachloroethene	ND	0.50	10	76	83	90	26-162	8.8
Dibromochloromethane	ND	0.50						
Chlorobenzene	ND	0.50	10	78	75	81	38-150	3.9
Bromoform	ND	0.50						
1,1,2,2-Tetrachloroethane	ND	0.50						
1,3-Dichlorobenzene	ND	0.50						
1,4-Dichlorobenzene	ND	0.50	10	83	73	77	42-143	13
1,2-Dichlorobenzene	ND	0.50						
Freon 113	ND	0.50						
Bromochloromethane (surr)	67%		10	96	99	88	66-126	

8010 Volatiles in H2O

QC Batch#: B184D

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 09/02/92

LCS: 09/02/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery <u>LCS</u>	QC <u>LIMITS</u>
	<u>Result</u>	<u>Limit</u>			
Dichlorodifluoromethane	ND	0.50			
Chloromethane	ND	0.50			
Vinyl Chloride	ND	0.50			
Bromomethane	ND	0.50			
Chloroethane	ND	0.50			
Trichlorofluoromethane	ND	0.50			
1,1-Dichloroethene	ND	0.50	10	58	28-167
Methylene Chloride	ND	0.50			
trans-1,2-Dichloroethene	ND	0.50			
1,1-Dichloroethane	ND	0.50			
cis-1,2-Dichloroethene	ND	0.50			
Chloroform	ND	0.50	10	74	49-133
1,1,1-Trichloroethane	ND	0.50			
Carbon Tetrachloride	ND	0.50	10	80	43-143
1,2-Dichloroethane	ND	0.50	10	86	51-177
Trichloroethene	ND	0.50	10	86	35-146
1,2-Dichloropropane	ND	0.50			
Bromodichloromethane	ND	0.50			
2-Chloroethylvinyl ether	ND	5.0			
trans-1,3-Dichloropropene	ND	0.50			
1,1,2-Trichloroethane	ND	0.50			
Tetrachloroethene	ND	0.50	10	79	26-162
Dibromochloromethane	ND	0.50			
Chlorobenzene	ND	0.50	10	77	38-150
Bromoform	ND	0.50			
1,1,2,2-Tetrachloroethane	ND	0.50			
1,3-Dichlorobenzene	ND	0.50			
1,4-Dichlorobenzene	ND	0.50	10	71	42-143
1,2-Dichlorobenzene	ND	0.50			
Freon 113	ND	0.50			
Bromochloromethane (surr)	82%		10	96	66-126

Gas BTEX in soil

QC Batch#: S074A
 Units: ug/kg
 Prep Date: 08/31/92

Analysis Dates
 Blank: 08/31/92
 MS: 08/31/92
 MSD: 08/31/92
 LCS: 08/31/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery			QC	
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	5	125	73	72	87	74-136	1.4
Toluene	ND	5	125	75	73	89	77-131	2.7
Ethylbenzene	ND	5	125	70	69	86	76-130	1.4
Total Xylenes	ND	5	125	73	72	90	79-124	1.4
Gasoline	ND	1000						
Bromofluorobenzene (surr)	89%		1250	68	68	85	42-137	

Gas BTEX in soil

QC Batch#: **S074B**
Units: ug/kg
Prep Date: 09/01/92

Analysis Dates
Blank: 09/01/92
LCS: 09/01/92

<u>Analytes</u>	Blank		Spike	%Recovery	QC
	<u>Result</u>	<u>Limit</u>	<u>level</u>	<u>LCS</u>	<u>LIMITS</u>
Benzene	ND	5	125	99	74-136
Toluene	ND	5	125	98	77-131
Ethylbenzene	ND	5	125	93	76-130
Total Xylenes	ND	5	125	97	79-124
Gasoline	ND	1000			
Bromofluorobenzene (surr)	107%		1250	94	42-137

Gas BTEX in Water

QC Batch#: I010A
 Units: ug/L
 Prep Date: N/A

Analysis Dates
 Blank: 08/29/92
 MS: 08/29/92
 MSD: 08/29/92
 LCS: 08/29/92

<u>Analytes</u>	Blank		Spike level	%Recovery			QC	
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	.5	10	92	96	99	74-136	4.3
Toluene	ND	.5	10	98	102	101	77-131	4.0
Ethylbenzene	ND	.5	10	98	101	98	76-130	3.0
Total Xylenes	ND	.5	20	103	106	103	79-124	2.9
Gasoline	ND	50						
Bromofluorobenzene (surr)	90%			97	94	96	58-127	

Gas BTEX in Water

QC Batch#: IQ10B

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 09/02/92

LCS: 09/02/92

<u>Analytes</u>	Blank		Spike	%Recovery	QC
	<u>Result</u>	<u>Limit</u>	<u>level</u>	<u>LCS</u>	<u>LIMITS</u>
Benzene	ND	.5	10	87	74-136
Toluene	ND	.5	10	88	77-131
Ethylbenzene	ND	.5	10	87	76-130
Total Xylenes	ND	.5	20	91	79-124
Gasoline	ND	50			
Bromofluorobenzene (surr)	87%			84	58-127

Gas BTEX in Water

QC Batch#: I011A
 Units: ug/L
 Prep Date: N/A

Analysis Dates
 Blank: 08/31/92
 MS: 08/31/92
 MSD: 08/31/92
 LCS: 08/31/92

<u>Analytes</u>	Blank		Spike	%Recovery			QC	
	<u>Result</u>	<u>Limit</u>	<u>level</u>	<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	.5	10	103	86	84	74-136	18
Toluene	ND	.5	10	83	68	87	77-131	20
Ethylbenzene	ND	.5	10	108	92	86	76-130	16
Total Xylenes	ND	.5	20	106	90	91	79-124	16
Gasoline	ND	50						
Bromofluorobenzene (surr)	83%			80	87	85	58-127	

Gas BTEX in Water

QC Batch#: I011B

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 09/01/92

LCS: 09/01/92

<u>Analytes</u>	Blank		Spike	%Recovery	QC
	<u>Result</u>	<u>Limit</u>	<u>level</u>	<u>LCS</u>	<u>LIMITS</u>
Benzene	ND	.5	10	88	74-136
Toluene	ND	.5	10	90	77-131
Ethylbenzene	ND	.5	10	87	76-130
Total Xylenes	ND	.5	20	91	79-124
Gasoline	ND	50			
Bromofluorobenzene (surr)	76%			83	58-127

Environ

Batch #: 0039A Units: mg/kg

Test Description	Method	Blank		Spike	%Recovery			QC		Date Run
		Result	Lmt		MS	MSD	LCS	Limits	RPD	
TRPH by IR	EPA 418.1	ND	25	2.0	120	120	110	75-125	0	09/01

Batch #: 0039B Units: mg/kg

Test Description	Method	Blank		Spike	%Recovery			QC		Date Run
		Result	Lmt		LCS	Limits	RPD			
TRPH by IR	EPA 418.1	ND	25	2.0		110	75-125			09/02

Batch #: 0019A Units: mg/L

Test Description	Method	Blank		Spike	%Recovery			QC		Date Run
		Result	Lmt		LCS	LCS	Limits	RPD		
TRPH by IR	EPA 418.1	ND	0.5	2.0	100	95	75-125	5.1		08/28

Batch #: 0019B Units: mg/L

Test Description	Method	Blank		Spike	%Recovery			QC		Date Run
		Result	Lmt		LCS	Limits	RPD			
TRPH by IR	EPA 418.1	ND	0.5	2.0		105	75-125			08/31

CHAIN-OF-CUSTODY FORM

92-08-090

PROJECT NAME: <u>Laney College</u> CASE NO.: <u>03-2821B</u>	COLLECTION DATE	COLLECTED BY (Initials)	MATRIX	TOTAL NO. OF CONTAINERS	ANALYSES: EPA 8010 + From 113 EPA 8015M EPA 8010 + From 113 EPA 8015M EPA 816.1							COMMENTS								
ENVIRON SAMPLE ID.	SAMPLES WARM, 12°C #5 JP																			
1 B-12-3.5-4.0	8/28/92	JSE	SOIL	1	1															
2 B-12-5.5-6.0	8/28/92	JSE	SOIL	1	1															
3 B-20	8/28/92	JSE	WATER	7	3	3	1													
4 B-12	8/28/92	JSE	WATER	7	3	3	1													
5 B-16	8/28/92	JSE	WATER	7	3	3	1													
6 TB-B-16	8/28/92	JSE	WATER	6	3	3														
TOTAL	X	X	X																	

Relinquished by: Jeffrey Edwards Date: 8/28/92 Time: 1500
Blumide Date: 8/28/92 Time: 4:18P
 Received by: Blumide Company: Caro Date: 8/28/92 Time: 2:53P
Watt Company: MPEL Date: 8/28/92 Time: 1600