



Industrial Compliance

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TANK CLOSURE REPORT

**Southern Pacific Transportation Company
1450 Sherwin Avenue
Emeryville, California**

IC Project No. 05100680

Prepared For:

**Southern Pacific Transportation Company
One Market Plaza
San Francisco, CA 94105**

September 29, 1994

Denver • Phoenix • Kansas City • Dallas • Houston • Los Angeles • Sacramento • Little Rock • Knoxville



TANK CLOSURE REPORT

Southern Pacific Transportation Company
1450 Sherwin Avenue
Emeryville, California

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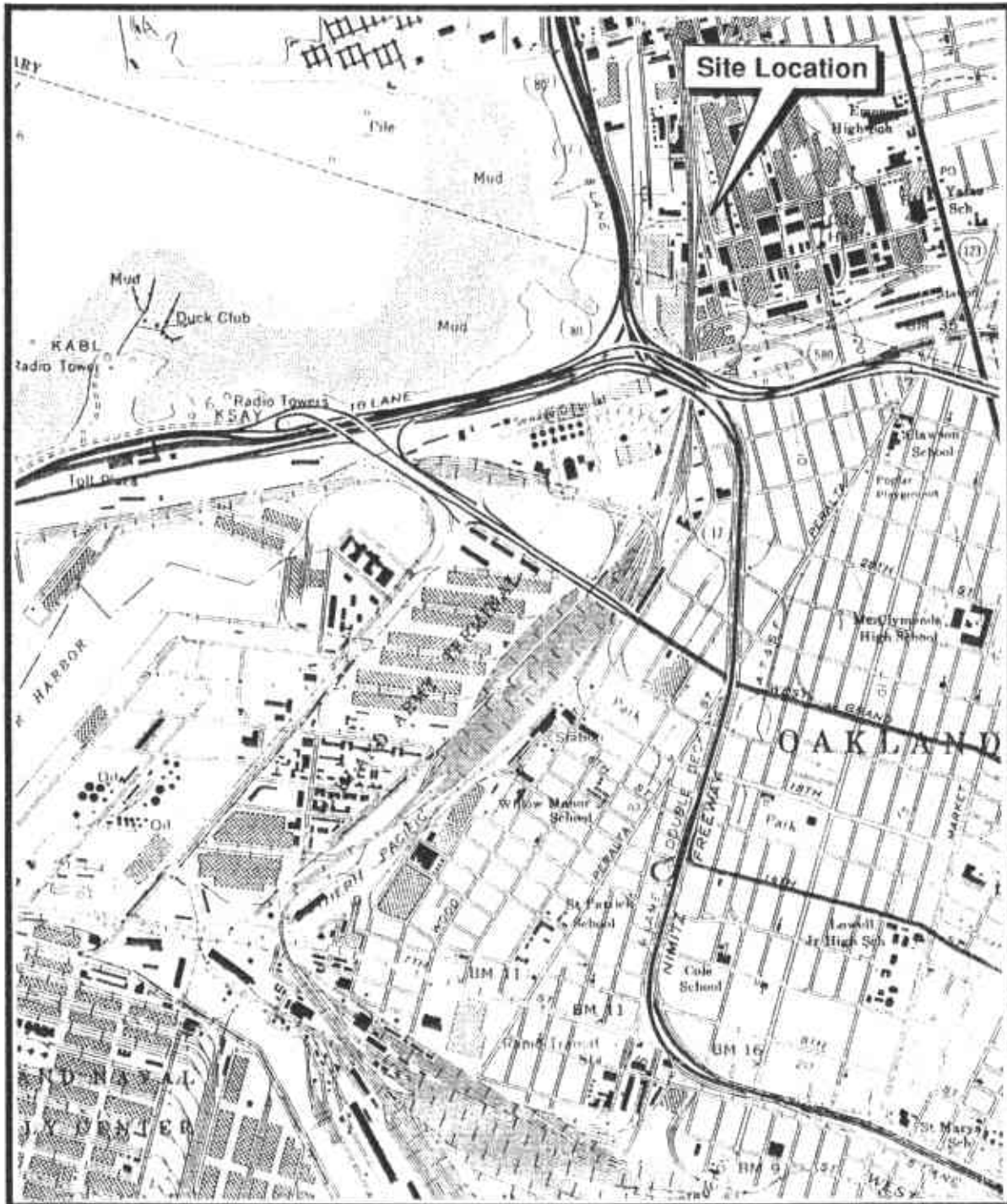


1.0 INTRODUCTION

Industrial Compliance (IC), on behalf of Southern Pacific Transportation Company (SPTCo), observed the removal of four underground storage tanks (USTs) on SPTCo right-of-way between July 25, 1994 and August 5, 1994. The USTs were located adjacent to the Sherwin-Williams Company (Sherwin-Williams) facility at 1450 Sherwin Street in Emeryville, California (see Figure 1). During access road improvements performed by a contractor for Sherwin-Williams, a vertical pipe was encountered in the subsurface which contained a petroleum substance. A representative of Sherwin-Williams informed SPTCo of the discovery. SPTCo maps of the area indicated that four USTs which contained Bunker C fuel were in the vicinity of the pipe. Bunker C (diesel #6) was used in the early 1900's to fuel steam locomotives.

Subsequent excavation of the area revealed four former, approximately 6,500 gallon, steel railcar tankers. The tankers were converted to USTs and interconnected with piping that was routed to the vertical pipe. The following sections describe the procedures that were used to remove the USTs, the site conditions, and recommendations for additional site action.

Excavation and removal of the USTs was observed by the Alameda County Department of Environmental Health (County) and the City of Emeryville Fire Department.



Approximate Scale in Feet



Reference:
 U.S.G.S. 7.5 Minute Series (Topographic)
 Oakland West Quadrangle
 California
 Dated: 1959; photorevised 1980



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**SITE LOCATION MAP
 SOUTHERN PACIFIC TRANSPORTATION COMPANY
 1450 SHERWIN STREET
 EMERYVILLE, CALIFORNIA**

Project No.: 05100680

Date: 09/12/94

Drawn By: Patil Decker

Checked By: Glenn Meeth

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2.0 BACKGROUND

According to SPTCo records, a fuel and water station was constructed at the subject site in 1930 to service steam locomotives used for local customer freight handling in the Emeryville area. The station included a 17,000 gallon water tank, pump house, and four USTs containing Bunker C oil used as fuel for the locomotives. Bunker C is a #6 diesel fuel consisting of petroleum hydrocarbons in the $C_{12} - C_{30}+$ carbon chain range. A Chevron Material Safety Data Sheet describes Bunker C as a black viscous liquid that is insoluble in water, has a specific gravity of 0.99 at 15.6 degrees Celsius, a flash point of 150 degrees Fahrenheit, and a viscosity of 25 - 150 centistokes at 50 degrees Celsius. The viscosity of Bunker C at ambient air temperatures generally requires that the Bunker C be heated before it can be pumped. Steam coils were generally installed in the Bunker C tanks to heat the oil. Bunker C does not pose a significant health threat to eyes or skin or to internal organs through either absorption through the skin or ingestion. However, prolonged breathing of vapors may effect the central nervous system.

The four former USTs were located on SPTCo property adjacent to the Sherwin-Williams facility (Figure 2). Sherwin-Williams has been in operation since the early 1900s manufacturing various types of coating products and lead-arsenate pesticides. After the dismantling and removal of Sherwin-Williams oil tank facility and solvent tank facility, two phases of soil and ground water investigations were conducted for Sherwin-Williams by Levine-Fricke. The first phase of the site investigation included the installation of seven shallow ground water monitoring wells (LF-1 through LF-7). The second phase of investigation included the installation of five additional shallow ground water monitoring wells (LF-8 through LF-13). The results of both investigations are discussed in the *Evaluation of Interim Remedial Measures at the Sherwin-Williams Facility Emeryville, California*, Levine-Fricke, December 20, 1991. The results indicate that the facility has

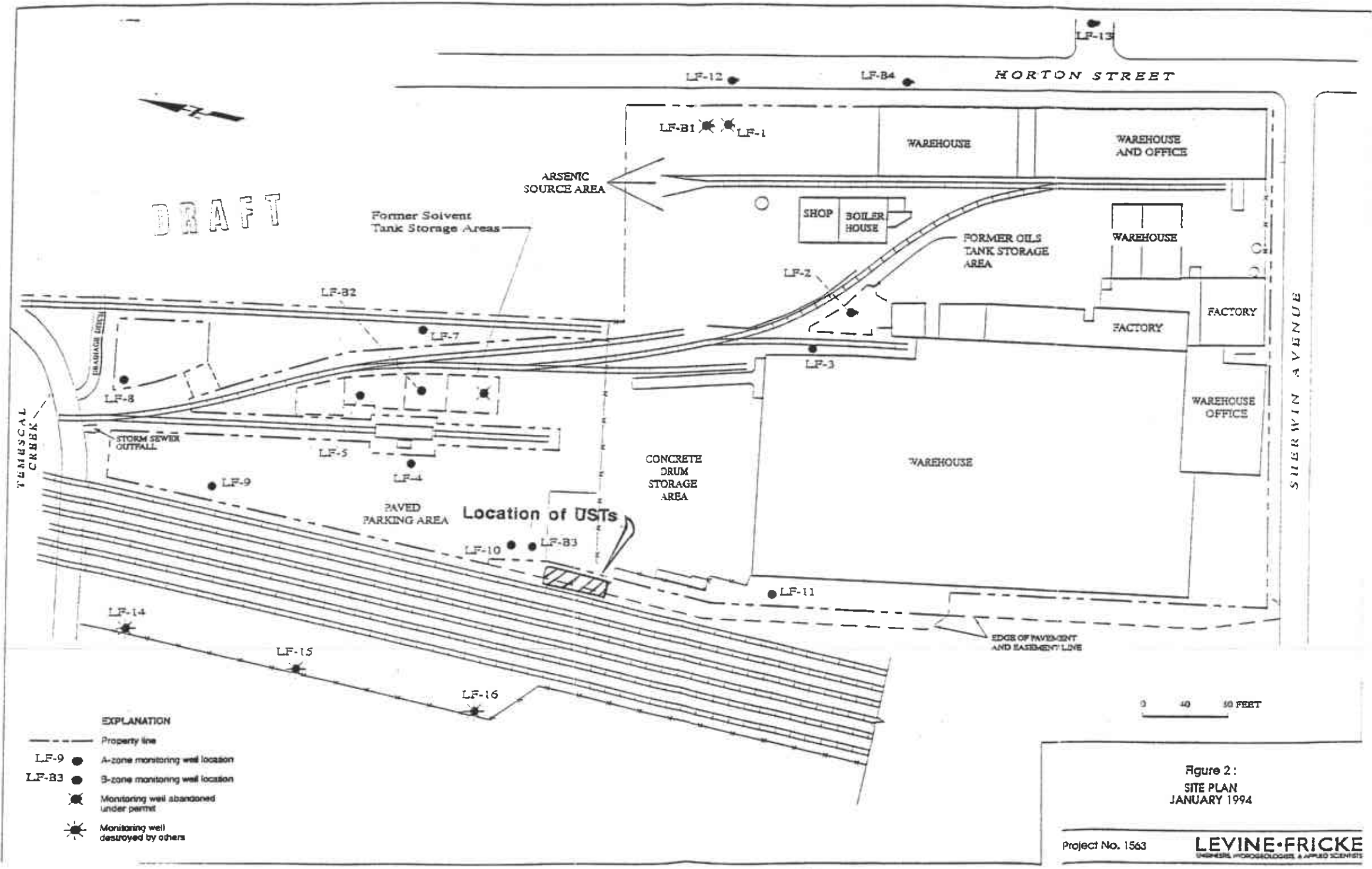



Figure 2:
SITE PLAN
JANUARY 1994

Project No. 1563 **LEVINE-FRICKE**
ENGINEERS, HYDROLOGISTS, & APPLIED SCIENTISTS

Reference:
Report of Semiannual Ground Water Monitoring
For the Period from July 1 through December 31,
1993 The Sherwin-Williams Plant, Emeryville,
California (June 10, 1994) Levine-Fricke.

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SITE PLAN
SOUTHERN PACIFIC TRANSPORTATION COMPANY
EMERYVILLE-SHERWIN-WILLIAMS
UST REMOVAL
EMERYVILLE, CALIFORNIA

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both soil and ground water impact with concentrations of volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH) as gasoline, and arsenic.

3.0 GEOLOGY AND HYDROGEOLOGIC CHARACTERISTICS

The site is located in the eastern portion of the San Francisco Bay Area in west-central California. The subsurface geology is comprised primarily of alluvial and bay sediments deposits. The site topography is relatively flat with surface drainage to the west into the San Francisco Bay. Soil lithology consists predominantly of clay and silty fine sands from ground surface to 12 feet below ground surface (bgs).

3.1 Levine-Fricke Investigation Findings

According to data collected by Levine-Fricke, two ground water zones were encountered. A shallow zone (A-zone) was encountered at a depth of 6 to 12 feet bgs and deeper ground water zone (B-zone) at a depth of 28 to 38 feet bgs. Ground water in the A-zone is present in 2 to 5 feet thick beds of sand and/or gravel interbedded with less permeable silty clayey sediments. The A-zone is overlain by a 5 to 6 foot thick confining to semi-confining layer of silty clay and gravelly silty clay sediments. Below the A-zone is a silty clay interval 10 to 18 feet thick. This clay-rich interval has a low permeability and acts as an aquitard to form a confining layer that separates the A-zone from the B-zone. The B-zone consists of a thick interval of well sorted, coarse-grained, sand and gravel units interbedded with some silty clay sediments.

Depth to ground water in January 1994 was approximately 6 feet bgs and flow direction calculated to the west at a gradient of 0.003.

4.0 FIELD PROCEDURES AND OBSERVATIONS

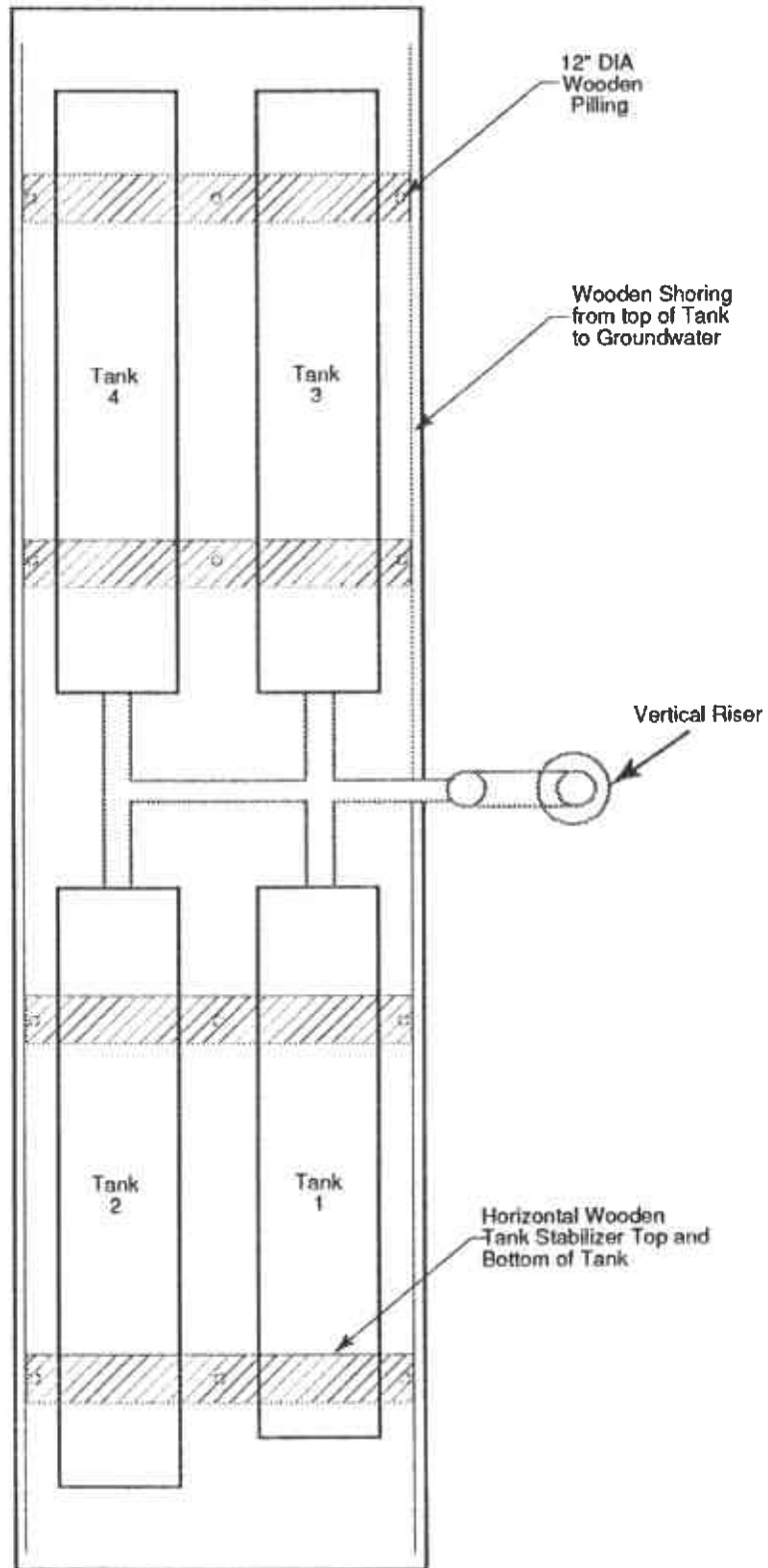
This section discusses the field procedures that were used to locate, excavate and remove the four USTs. Also discussed are the field observations recorded during the site work.

4.1 UST Location, Excavation and Removal

SPTCo contracted Granite Construction Company (Granite) to remove the USTs. During the week of July 18, Granite uncovered the four USTs, and assessed that the tanks were full of Bunker C oil. The USTs were located between a 7 inch thick concrete slab on the Sherwin-Williams property and a recently constructed SPTCo rail spur. Three of the riveted steel USTs were 31 feet long by 6 feet in diameter and the fourth UST (T1) was 27 feet long and 6 feet in diameter (see Figure 3). All of the USTs had 3/8-inch thick walls.

H & H Environmental Systems (H & H) was subcontracted by Granite to remove the Bunker C fuel from the USTs and to recycle the USTs after removal. During the week of July 25, 1994, the Bunker C fuel was pumped from the USTs by heating the Bunker C to approximately 110° fahrenheit with steam. The Bunker C was then pumped into tanker trucks and transported to Enviropur West Corporation, in Patterson, California, for recycling. A total of 30,450 gallons of Bunker C and water was removed from the tanks and recycled. Copies of manifests are included in Appendix A.

Soil was excavated around the tanks to remove overburden soil from above and around the USTs. The visually impacted soil was stockpiled on site and encased in plastic sheeting. Ground water was encountered at 8 feet bgs and the bottom third of the USTs were submerged. As the Bunker C was removed the USTs began to float. Metal bars were used to bolt the USTs together and keep them from rolling in the excavation.



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Checked
By: **Steve Towle**

**SITE LOCATION MAP
SOUTHERN PACIFIC TRANSPORTATION COMPANY
EMERYVILLE-SHERWIN-WILLIAMS
UST REMOVAL
EMERYVILLE, CALIFORNIA**

Figure:
3

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On August 3, 1994, the USTs were removed from the excavation. A visual inspection of the four USTs indicated no holes or pitting and all appeared to be intact and in good condition. The 12-inch manifold connection port on each tank was sealed using plastic and rope, and any loose material was removed from the hulls of the tanks. The tanks were then placed on a flatbed trailer and fastened with heavy straps. After fastening, wooden sideboards were placed around the perimeter of the flatbed to secure the tanks during transport. The USTs were transported to the H & H facility in San Francisco, California for recycling.

4.2 Confirmation Soil Sampling

Eight confirmation soil samples were collected from the sidewalls of the excavation approximately 7 feet bgs. Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), TPH as diesel (TPH-D), and Bunker C oil (TPH-B) using EPA Method 8015-Modified; benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8020; oil and grease using EPA Method 5520, chlorinated solvents using EPA Method 8010; semivolatile organics extracted by the Waste Extraction Test (WET) and analyzed by EPA Method 8270; and leachable semivolatile organics extracted by the WET with deionized water and analyzed by EPA Method 8270 for analysis. The sample locations are shown on Figure 4. A summary of analytical results is presented in Section 5.0.

Samples were collected by placing a ladder into the excavation and driving a 2-inch diameter 6-inch long brass tube into the sidewall soil and removing it. The soil samples were labeled, sealed with Teflon sheets and plastic caps, logged onto a chain-of-custody form, and immediately placed in an iced cooler at 40°F for transport to Pace Incorporated analytical laboratories, in Novato, California.

T3T4-SW

T4-SW

T3-SW

T2T4-SW

T1T3-SW

T2-SW

T1-SW

Sherwin-Williams
Concrete
Storage Area

T1T2-SW



Approximate Scale in Feet
0 10'

LEGEND



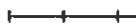
12" dia wooden piling



Sampling location

T1-SW

Sampling number



Rail Spur line

Note:

Soil samples taken in sidewall of excavation approximately 6" above ground water.



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**SOIL SAMPLE LOCATION MAP
SOUTHERN PACIFIC TRANSPORTATION COMPANY
EMERYVILLE-SHERWIN-WILLIAMS
UST REMOVAL
EMERYVILLE, CALIFORNIA**

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Date: **08/12/94**

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Checked By: **Steve Towle**

4.3 Ground Water Sampling

Two ground water samples were collected from the south end of the excavation. An 8-foot ladder was lowered into the excavation. The ladder rested on the bottom of the excavation below ground water and along the top of the sidewall. Samples were collected by using a disposable bailer and transferred into the sample bottles by inserting a sample port into the bottom of the bailer. Sample bottles were labeled, placed in a cooled ice chest and transported to Pace, Inc. analytical laboratory in Novato, California. A chain-of-custody form was completed and accompanied the sample upon shipment to the laboratory.

The two samples were composited at the laboratory and analyzed for TPH-G, TPH-D, and Bunker C oil using EPA Method 8015 Modified; BTEX using EPA Method 8020; oil and grease using EPA Method 5520; chlorinated solvents using EPA Method 8010; and semivolatile organics using EPA Method 9270. A summary of the analytical results is presented in Section 5.0.

4.4 Soil Disposal

Approximately 250 cubic yards of Bunker C impacted soil was excavated and stockpiled on site. Three soil samples were collected and composited in the laboratory for analysis. The composite sample was analyzed by EPA 7000 Method series for soluble arsenic and lead after extraction using the Toxic Characteristic Leaching Procedure (TCLP) method. Arsenic was detected at a concentration of 0.006 milligrams per liter (mg/L) and lead at a concentration of 1.1 mg/L, as shown in Table 1. Approximately 15 cubic yards of metal piping associated with the USTs was segregated and stockpiled. The soil and piping will be loaded into rail cars and transported to Utah for disposal at the East Carbon Disposal Corporation (ECDC) landfill.

TABLE 1
SUMMARY OF INORGANIC ANALYTICAL RESULTS - COMPOSITE STOCKPILE

Sample Location ^a	Sample ID Number	Date Sampled	Arsenic ^b (mg/L)	Lead ^b (mg/L)
Stockpile	28213, 28214, & 28299	08/04/94	0.006	1.1
Method Detection Limit			0.005	0.001

a See Figure 2 for sample locations

b Metals extracted using Toxic Characteristic Leaching Procedure (TCLP) and analyzed by EPA Method 7000 Series

mg/L Milligrams per liter



4.5 Proposed Backfill Procedures

The perimeter of the open excavation is currently secured with temporary fencing. Upon approval by the County, the excavation will be backfilled using a combination of rock and soil. The rock will be placed from the bottom of the excavation to the level of ground water. A geotextile fabric will then be laid over the rock. This will minimize soil backfill migration into the rock layer. The first soil lift placed on top of the fabric will be 24 inches thick prior to compaction. Subsequent lifts will not exceed 12 inches prior to compaction. The soil will be relatively non-expansive and compacted to a minimum of 90 percent of its maximum dry density. Soil compaction will be monitored and tested by BSK & Associates.

5.0 ANALYTICAL TEST RESULTS

Analytical test results of soil and water samples collected are summarized in Tables 2 through 6. The laboratory reports are presented in Appendix C.

5.1 Confirmation Soil Samples

Soil TPH-G concentrations range from nondetect to 18 milligrams per kilogram (mg/kg); however, no concentrations of BTEX were detected. Soil TPH-D concentrations range from nondetect to 4,400 mg/kg. Oil and grease concentrations range from nondetect to 7,700 mg/kg. All of the samples had detectable concentrations of Bunker C ranging from 8.4 mg/kg to 28,000 mg/kg. One of the eight samples (T4) has minor concentrations of extractable organics acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, and pyrene. These are common polynuclear aromatic hydrocarbons (PAHs) found in lower grade diesel fuels such as Bunker C. ✓

Samples T2T4 and T1T3 were also analyzed by the WET using deionized water and EPA Method 8270. Analysis indicated that neither sample contained any detectable concentrations of extractable organics.

5.2 Water Sample

One composite water sample was analyzed for organic and inorganic constituents. Detected organic constituents were TPH-G, benzene, toluene, xylenes, TPH-D, TPH-B and acenaphthene. Of the inorganic constituents, concentrations of arsenic, barium, and lead were detected at 0.018 mg/L, 0.16 mg/L, and 0.028 mg/L, respectively.

TABLE 2
SUMMARY OF ORGANIC ANALYTICAL RESULTS - CONFIRMATION SOIL SAMPLES

Sample Location ^a	Sample ID Number	Date Sampled	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	TPH-D (mg/kg)	TPH-B (mg/kg)	Oil & Grease (mg/kg)
T2 - Sidewall @ 7'	28210	08/03/94	ND	ND	ND	ND	ND	ND	8.4	ND
T2T4 - Sidewall @ 7'	28205	08/03/94	ND	ND	ND	ND	ND	ND	37	110
T4 - Sidewall @ 7'	28208	08/03/94	1.4	ND	ND	ND	ND	230	780 ^b	83
T3T4 - Sidewall @ 7'	28207	08/03/94	ND	ND	ND	ND	ND	30	230	67
T3 - Sidewall @ 7'	28209	08/03/94	2.5	ND	ND	ND	ND	540	1800 ^c	880
T1T3 - Sidewall @ 7'	28203	08/03/94	18	ND	ND	ND	ND	4400 ^e	28000 ^d	7700 ^e
T1 - Sidewall @ 7'	28204	08/03/94	4.3	ND	ND	ND	ND	1700 ^e	7400 ^f	2800
T1T2 - Sidewall @ 7'	28201	08/03/94	ND	ND	ND	ND	ND	ND	40	13
Method Detection Limit			1	0.005	0.005	0.005	0.005	5	8.3	50

a See Figure 2 for sample locations.

b Method detection limit (MDL) of 83 mg/kg.

c MDL of 120 mg/kg.

d MDL of 1050 mg/kg.

e MDL of 100 mg/kg.

f MDL of 420 mg/kg.

TPH-B Total petroleum hydrocarbons as bunker-C fuel

TPH-D Total petroleum hydrocarbons as diesel

TPH-G Total petroleum hydrocarbons as gasoline

mg/kg Milligrams per kilogram

ND Not detected at or above the method detection limit.

TABLE 3
SUMMARY OF EXTRACTABLE ORGANIC ANALYTICAL RESULTS - CONFIRMATION SOIL SAMPLES

Sample Location ^a	Sample ID Number	Date Sampled	Acenaphthene (µg/L)	Fluorene (µg/L)	Phenanthrene (µg/L)	Anthracene (µg/L)	Fluoranthene (µg/L)	Pyrene (µg/L)
T2 - Sidewall @ 7'	28210	08/03/94	<330	<330	<330	<330	<330	<330
T2T4 - Sidewall @ 7'	28205	08/03/94	<330	<330	<330	<330	<330	<330
	28205 ^b	08/03/94	<17	<17	<17	<17	<17	<17
T4 - Sidewall @ 7'	28208	08/03/94	540	430	1400	1350	990	750
T3T4 - Sidewall @ 7'	28207	08/03/94	<330	<330	<330	<330	<330	<330
T3 - Sidewall @ 7'	28209	08/03/94	<1,600	<1,600	<1,600	<1,600	<1,600	<1,600
T1T3 - Sidewall @ 7'	28203	08/03/94	<33,000	<33,000	<33,000	<33,000	<33,000	<33,000
	28203 ^b	08/03/94	<17	<17	<17	<17	<17	<17
T1 - Sidewall @ 7'	28204	08/03/94	<1,600	<1,600	<1,600 7500	<1,600 1900	<1,600 21600	<1,600 2400
T1T2 - Sidewall @ 7'	28201	08/03/94	<330	<330	<330	<330	<330	<330

a See Figure 2 for sample locations.

b Sample was also extracted with deionized water using the California Waste Extraction Test (WET) method and analyzed by EPA Method 8270. Chemical constituents analyzed by this method were not detected at or above the method detection limit (MDL). See Appendix C for the complete analytical report.

<330 Chemical analyte not detected at or above the method detection limit of 330 µg/L.

µg/L Micrograms per liter

Note: Method detection limits vary in relation to TPH concentrations in sample. The laboratory testing procedure require the above noted variations in MDLs.



TABLE 4
SUMMARY OF ORGANIC ANALYTICAL RESULTS - WATER SAMPLE

Sample Location ^a	Sample ID Number	Date Sampled	TPH-G (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	TPH-D (mg/L)	TPH-B (mg/L)	Oil & Grease (mg/L)	Acenaphthene ^b (mg/L)
South end of pit	26216 & 28216	08/03/94	0.150	0.0012	0.0008	ND	0.0024		6.1	ND	0.015
Method Detection Limit			0.005	0.005	0.005	0.005	0.005	0.05	0.25	5.0	0.010

^a See Figure 2 for sample locations.

^b Other extractable organic constituents analyzed by EPA Method 8270 and halogenated volatile organic constituents analyzed by EPA Method 8010 were not detected at or above the method detection limit (MDL). See Appendix C for complete laboratory report.

TPH-B Total petroleum hydrocarbons as Bunker-C fuel

TPH-D Total petroleum hydrocarbons as diesel

TPH-G Total petroleum hydrocarbons as gasoline

mg/L Milligrams per liter

ND Not detected at or above the method detection limit.

TABLE 5
SUMMARY OF INORGANIC ANALYTICAL RESULTS - WATER SAMPLE

Sample Location	Sample ID Number	Date Sampled	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
South end of pit	28215 & 28216	08/03/94	0.018	0.16	ND	ND	0.028	ND	ND	ND
Method Detection Limit			0.005	0.01	0.005	0.01	0.001	0.0002	0.005	0.01

a See Figure 2 for sample locations.

mg/L Milligrams per liter

ND Not detected at or above the method detection limit.

TABLE 6
SUMMARY OF INORGANIC ANALYTICAL RESULTS - COMPOSITE SOIL SAMPLE

Sample Location ^a	Sample ID Number	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
T1T2, T1T3, T2T4, T3T4 - Sidewall @ 7'	28201, 28203, 28205, 28207	08/03/94	82	82	ND	33	6.7	0.05	ND	ND
Method Detection Limit			0.5	1	1	1	0.5	0.02	0.5	1

a See Figure 2 for sample locations.

mg/L Milligrams per liter

ND Not detected at or above the method detection limit.

6.0 DATA INTERPRETATION AND CONCLUSIONS

The following discussion is based on the field observations, analytical results, and a review of Levine-Fricke reports: *Evaluation of Interim Remedial Measures at the Sherwin-Williams Facility Emeryville, California* (December 20, 1991), and *Report of Semiannual Ground-Water Monitoring For the Period from July 1 through December 31, 1993 The Sherwin-Williams Plant Emeryville, California* (June 10, 1994).

6.1 Soil

Observations and the results of excavation confirmation sampling indicate that Bunker C impacted soil remains on all sides of the excavation with the highest concentrations detected in the northwest and southwest corners of the excavation. The limits of the excavation could not be expanded due to physical site constraints, i.e., railroad tracks to the west and the concrete slab and slurry wall to the east.

IC has extensive experience with Bunker C in various media and has observed that Bunker C is relatively immobile in soil and insoluble in ground water. In addition, toxicologic studies (Health Based Cleanup Levels for San Luis Obispo Site, July 1990, Terra, Inc.) have indicated that the health based risks of exposure to Bunker C are minimal and soil cleanup levels, based on a one in one million increase in cancer risk, have been calculated to be approximately 10,000 mg/kg. To assess the potential for contaminants to leach from the soil, the WET was performed on the eight sidewall samples and the extracts were analyzed by EPA Method 8270. ^{2 sample T1 & T4} Only one sample had detectable concentrations of any of the ~~the~~ semivolatile compounds (acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, and pyrene). The detected concentrations of these compounds are below the EPA Region IX Preliminary Remediation Goals (PRGs) set forth on August 1, 1994. In addition, two of the sidewall samples (T2T4 and T1T3) were extracted by the WET using deionized water to

more closely resemble site conditions and then analyzed by EPA Method 8270. The analytical results indicated no detectable concentrations of semivolatile compounds. The WET analyses were performed to illustrate the relative non-leachability and immobility of Bunker C in soil.

The remaining Bunker C is located below ground surface in an industrial area with limited access. The majority of the former USTs location will be covered by an access driveway to the Sherwin-Williams property or by railroad track ballast. IC recommends no further action and that the excavation be backfilled pursuant to Section 2.4 of this report.

6.2 Water

The highest concentration of hydrocarbons detected in the grab water sample collected from the excavation was 6.1 mg/L of Bunker C carbon chain range hydrocarbon (TPH-B). Results from this sample may be unrepresentatively high due to the method of collection and the potential for residual product from the tanks or soil to be collected with the sample. BTEX compounds were below California Maximum Contaminant Levels (MCLs) except for benzene which exceeded the MCL by 0.0002 mg/L.

Installation of remedial measures, as well as ground water monitoring, is on going at the Sherwin-Williams site for petroleum hydrocarbons, solvents, and arsenic. Ground water quality data from Levine-Fricke ground water monitoring wells LF-9, LF-10, LF-11, LF-12, LF-14, LF-15 and LF-16 were reviewed. Tables from the Levine-Fricke's *Report of Semiannual Ground-Water Monitoring For the Period from July 1 through December 31, 1993 The Sherwin-Williams Plant Emeryville, California* (June 10, 1994), summarizing historical water-quality data from the above mentioned wells are included in Appendix D.

Also, a statistical comparison was done on the ground water quality data from the above mentioned wells and a water sample collected from the excavation of the USTs (see Table 7). This statistical comparison shows that the local ground water data collected from the upgradient Sherwin-Williams site, and the water sample collected from the excavation have concentrations within one order of magnitude for benzene, toluene, ethylbenzene, total xylenes, arsenic, and barium. These wells are located within a 200 foot radius of the former USTs (see Figure 2). Historical results from the A-zone wells, dating from June 1991 to January 1994, indicate concentrations of TPH-D ranging from nondetect to 1.5 mg/L and TPH-G ranging from nondetect to 0.7 mg/L.

Although the total dissolved solids (TDS) concentration range (460 mg/L to 870 mg/L, Levine-Fricke, June 10, 1994) of the shallow zone aquifer allows it to be classified as a potential drinking water source, it is unlikely that the aquifer will be developed for any beneficial use due to its shallow depth and the presence of and potential for contamination from the many industries in the area. Also, the potential for contaminants to migrate in ground water from the A-zone (see Section 3.1) to a deeper ground water zone is minimal due to the 10- to 18-foot thick low permeability confining layer.

The dissolved constituents in the grab water sample are either near or below the MCLs and PRGs, the impact has not migrated off site, the health risk is virtually non-existent, the aquifer is not developed for beneficial use, and the major source of impact has been removed. Therefore, based on IC's understanding of the San Francisco Bay Regional Water Quality Board's non-attainment area policy, it is recommended that the excavation be backfilled and that monitoring of the nearby wells be continued on a semi-annual basis. IC also understands that Levine-Fricke has proposed to install additional ground water monitoring wells approximately 50 feet west (down gradient) of the former USTs location. These wells could be used for site monitoring.

TABLE 7
 STATISTICAL COMPARISON BETWEEN LOCAL GROUND WATER CHEMICAL DATA
 AND WATER SAMPLE COLLECTED FROM UST EXCAVATION

Well Location ^a	Benzene		Toluene		Ethylbenzene		Total Xylenes		TPH-G		TPH-D		Arsenic		Barium	
	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.
LF-9	0.0020	0.0017	0.0024	0.0015	0.0069	0.0076	0.0018	0.0010	0.520	0.095	0.340	0.154	0.084	0.056	0.130	0.093
LF-10	0.0016	0.0009	0.0018	0.0010	0.0018	0.0010	0.0018	0.0010	0.275	0.208	0.651	0.489	0.667	0.373	0.170	0.112
LF-11	0.0016	0.0010	0.0029	0.0031	0.0017	0.0010	0.0017	0.0010	0.042	0.020	0.315	0.250	0.016	0.009	0.133	0.047
LF-12	0.0100	0.0065	0.0022	0.0014	0.0018	0.0010	0.0018	0.0010	0.025	0	0.040	0.033	0.013	0.010	0.058	0.038
LF-14	0.0018	0.0010	0.0018	0.0010	0.0018	0.0010	0.0018	0.0010	0.040	0.025	0.159	0.093	0.097	0.035	0.013	0.187
LF-15	0.0018	0.0010	0.0018	0.0010	0.0017	0.0011	0.0018	0.0010	0.025	0	0.043	0.037	0.005	0.002	0.099	0.077
LF-16	0.0017	0.0011	0.0035	0.0023	0.0017	0.0011	0.0018	0.0010	0.033	0.014	0.052	0.031	0.005	0.003	0.076	0.053
Water Sample-South end of pit ^b	0.0012		0.0008		0.005		0.0024		0.150		3.2		0.018		0.16	

a Levine-Fricke monitoring well locations. Organic and inorganic statistical data calculated from Tables 1 through 5 in Levine-Fricke's *Report of Semiannual Ground-Water Monitoring For the Period from July 1 through December 31, 1993 The Sherwin-Williams Plant Emeryville, California* (June 10, 1994).

b Water sample collected from south end of pit (sample ID number 28215 & 28216).

mean The sum of the data divide by the number of sampling events. Concentrations representing the method detection limit were divide by two before added to the sum.

std. dev. Standard deviation calculation from *Environmental Protection Agency Test Methods for Evaluating Solid Wastes, Volume II, SW-846* (November, 1986).



UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CA0006913706** Manifest Document No. **00495** of **1** Page **1**

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
SOUTHERN PACIFIC TRANSPORTATION
One Market Plaza, San Francisco, CA. 94105

A. State Manifest Document Number
93620485

4. Generator's Phone **(415) 543-2550**

B. State Generator's ID#

5. Transporter 1 Company Name **H&H SHIP SERVICE COMPANY**

6. US EPA ID Number **CA0004771168**

C. State Transporter's ID# **428068**

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone# **(415) 543-4835**

9. Designated Facility Name and Site Address
ENVIROPUR WEST CORPORATION
13331 N. Highway 33
Patterson, CA. 95363

10. US EPA ID Number **CA0083155728**

G. State Facility's ID# **CA008315667281**

H. Facility's Phone# **(800) 874-4444**

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type 13. Total Quantity 14. Unit Wt/Vol 15. Waste Number

a. **OIL AND WATER**
NON-RCRA HAZARDOUS WASTE LIQUID

0 0 1 **WT** **0.138100** **G**

State **223**

EPA/Other

b.

State

EPA/Other

c.

State

EPA/Other

d.

State

EPA/Other

16. Additional Descriptors for Materials Listed Above

FUEL OIL AND WATER

K. Handling Codes for Wastes Listed Above

a. **01**

b.

c.

d.

15. Special Handling Instructions and Additional Information

JOB #14714
24 Hr. Emergency Contact: H&H#(415)543-4835
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR

JOB SITE: SOUTHERN PACIFIC TRANSP.
1450 Sherwin Avenue
Emeryville, California

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name **ON BEHALF OF GRANITE CONST.** Signature **ON BEHALF OF GRANITE CONST.** Month **0** Day **7** Year **2 5 9 4**

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name **ROBERT V. PETRUCCI** Signature **Robert V. Petrucci** Month **0** Day **7** Year **2 5 9 4**

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
 Printed/Typed Name Signature Month Day Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR

FACILITY

93020400

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR

FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD0010671132106		Manifest Document No. 20486		2. Page 1 of 2		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address SOUTHERN PACIFIC TRANSPORTATION One Market Plaza, San Francisco, CA. 94105				A. State Manifest Document Number 93620486			
4. Generator's Phone (415) 541-2559				B. State Generator's ID			
5. Transporter 1 Company Name H&H SHIP SERVICE COMPANY		6. US EPA ID Number CAD004771158		C. State Transporter's ID 428041		D. Transporter's Phone (415) 543-4835	
7. Transporter 2 Company Name				E. State Transporter's ID			
9. Designated Facility Name and Site Address ENVIROPUR WEST CORPORATION 13331 N. Highway 33 Patterson, CA. 95363				10. US EPA ID Number CADDB3155728		G. State Facility's ID CADDB3155728	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) OIL AND WATER NON-RCRA HAZARDOUS WASTE LIQUID				12. Containers No. 001 Type TT		13. Total Quantity 03800	
						14. Unit G	
						I. Waste Number 223	
						EPA/Other	
						State	
						EPA/Other	
						State	
						EPA/Other	
						State	
						EPA/Other	
J. Additional Descriptions for Materials Listed Above FUEL, OIL AND WATER				K. Handling Codes for Wastes Listed Above a. 01 b. c. d.			
15. Special Handling Instructions and Additional Information JOB #14714 24 Hr. Emergency Contact: H&H#(415)543-4835 APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR JOB SITE: SOUTHERN PACIFIC TRANSP. 1450 Sherwin Avenue Emeryville, California							
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Printed/Typed Name STEVEN F. Towle		Signature <i>[Signature]</i>		Month 07		Day 23	
				Year 94			
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name JIMMIE H. REESE		Signature <i>[Signature]</i>		Month 07		Day 25	
				Year 94			
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month		Day	
				Year			
19. Discrepancy Indication Space							
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name		Signature		Month		Day	
				Year			

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CAD00691320620433** Manifest Document No. **93620493** of **1** 2. Page 1
 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
SOUTHERN PACIFIC TRANSPORTATION
One Market Plaza, San Francisco, CA. 94105

A. State Manifest Document Number
93620493

4. Generator's Phone **(415) 541-2550**

B. State Generator's ID

5. Transporter 1 Company Name
H&H SHIP SERVICE COMPANY

6. US EPA ID Number
CAD004771168

C. State Transporter's ID
428067

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone
(415) 543-4835

9. Designated Facility Name and Site Address
ENVIROPUR WEST CORPORATION
13331 N. Highway 33
Patterson, CA. 95363

10. US EPA ID Number
CAD083166728

E. State Facility's ID

F. Facility's Phone
(800) 874-4444

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers		13. Total Quantity	14. Unit Wt/Vol	15. Waste Number
	No.	Type			
a. OIL AND WATER NON-RCRA HAZARDOUS WASTE LIQUID	001	??	04800	3	State 223 EPA/Other
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

16. Additional Descriptions for Materials Listed Above
FOUL OIL AND WATER

K. Handling Codes for Wastes Listed Above
 a. **01** b.
 c. d.

15. Special Handling Instructions and Additional Information
JOB #14714
24 Hr. Emergency Contact: H&H (415) 543-4835
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR
JOB SITE: SOUTHERN PACIFIC TRANSP.
1450 Sherwin Avenue
Emeryville, California

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
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Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name **JIMMIE H. REESE** Signature _____ Month **07** Day **26** Year **94**

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
 Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR

FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1 800-424-8802. WITHIN CALIFORNIA, CALL 1 800 852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C A D D 0 6 9 1 3 2 0 6		Manifest Document No. 2 0 4 9 4		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.							
3. Generator's Name and Mailing Address SOUTHERN PACIFIC TRANSPORTATION One Market Plaza, San Francisco, CA. 94105				A. State Manifest Document Number 93620434											
4. Generator's Phone (415) 543-3550				B. State Generator's ID:											
5. Transporter 1 Company Name H&H SHIP SERVICE COMPANY				6. US EPA ID Number C A D D 0 8 7 7 1 1 5 8		C. State Transporter's ID 420060 428041		D. Transporter's Phone (415) 543-4835							
7. Transporter 2 Company Name				8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone							
9. Designated Facility Name and Site Address ENVIROPUR WEST CORPORATION 13331 N. Highway 33 Patterson, CA. 95363				10. US EPA ID Number C A D D 8 8 1 5 5 7 2 8		G. State Facility's ID C A D D 8 8 1 5 5 7 2 8		H. Facility's Phone (800) 876-4444							
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) a. OIL AND WATER NON-RCRA HAZARDOUS WASTE LIQUID						12. Containers		13. Total Quantity		14. Unit Wt/Vol		L. Waste Number			
						No. Type		Quantity		Unit Wt/Vol		State			
						0 0 1 T T		41500		3		223			
						EPA/Other		State		EPA/Other		State			
						EPA/Other		State		EPA/Other		State			
15. Special Handling Instructions and Additional Information JOB #14714 24 Hr. Emergency Contact: H&H (415) 543-4835 APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR						K. Handling Codes for Wastes Listed Above a. 01									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						Printed/Typed Name Steve Towle									
17. Transporter 1 Acknowledgement of Receipt of Materials						Signature <i>[Signature]</i>		Month		Day		Year			
18. Transporter 2 Acknowledgement of Receipt of Materials						Signature <i>[Signature]</i>		Month		Day		Year			
19. Discrepancy Indication Space															
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.						Printed/Typed Name		Signature		Month		Day		Year	

DO NOT WRITE BELOW THIS LINE.

93620497
 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550
 GENERATOR
 HAZARDOUS WASTE
 FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address SOUTHERN PACIFIC TRANSPORTATION One Market Plaza, San Francisco, CA. 94105		C A D 0 0 6 9 1 3 2 0 6		2 0 4 9 7	A. State Manifest Document Number 93620497
4. Generator's Phone (415) 541-2550		6. US EPA ID Number		B. State Generator's ID#	
5. Transporter 1 Company Name H&H SHIP SERVICE COMPANY		7. Transporter 2 Company Name		C. State Transporter's ID# 428067	
9. Designated Facility Name and Site Address ENVIROPUR WEST CORPORATION 13331 N. Highway 33 Patterson, CA. 95363		10. US EPA ID Number C A D 0 8 3 1 5 5 7 2 8		D. Transporter's Phone (415) 543-4835	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers		13. Total Quantity	14. Unit Wt/Vol
a. OIL AND WATER NON-RCRA HAZARDOUS WASTE LIQUID		0 0 1 T T		04500	G
b.					
c.					
d.					
15. Special Handling Instructions and Additional Information JOB #14714 24 Hr. Emergency Contact: H&H#(415)543-4835 APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR		16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.		17. Handling Codes for Wastes Listed Above a. 01	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name: Steve Towle Signature: <i>[Signature]</i> Month: 0 Day: 7 Year: 2 0 9 4		18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name: JIMMIE H. REESE Signature: <i>[Signature]</i> Month: 0 Day: 7 Year: 2 7 9 4		19. Discrepancy Indication Space	
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____					

DO NOT WRITE BELOW THIS LINE.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. Manifest Document No. 2. Page 1 of 1
 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
SOUTHERN PACIFIC TRANSPORTATION
 One Market Plaza, San Francisco, CA. 94105

A. State Manifest Document Number
93620495

4. Generator's Phone (415) 541-2559

B. State Generator's ID:

5. Transporter 1 Company Name

6. US EPA ID Number

C. State Transporter's ID: **428041**

H&H SHIP SERVICE COMPANY

C A D 0 0 4 7 7 1 1 6 3

D. Transporter's Phone: (415) 543-4835

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID:

9. Designated Facility Name and Site Address
ENVIROPUR WEST CORPORATION
 13331 N. Highway 33
 Patterson, CA. 95363

10. US EPA ID Number

G. State Facility's ID: **C A D 0 8 3 1 6 6 7 2 3**

H. Facility's Phone: (800) 874-4444

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers
 No. Type

13. Total Quantity

14. Unit
 Wt/Vol

15. Waste Number

a. **OIL AND WATER**
NON-RCRA HAZARDOUS WASTE LIQUID

0 0 1 T P 4500 3

State: **223**

EPA/Other:

State:

EPA/Other:

State:

EPA/Other:

State:

EPA/Other:

State:

EPA/Other:

State:

EPA/Other:

12. Additional Descriptions for Materials Listed Above:

FUEL, OIL AND WATER

K. Handling Codes for Wastes Listed Above

a. **01**

b.

c.

d.

15. Special Handling Instructions and Additional Information

JOB #14714
24 Hr. Emergency Contact: H&H (415) 543-4835
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR

JOB SITE: SOUTHERN PACIFIC TRANSP.
1450 Sherwin Avenue
Emeryville, California

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Printed/Typed Name: **Steve [Signature]** Signature: [Signature] Month: 0 Day: 7 Year: 2 7 9 4

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name: **ROBERT V. PETRUCCI** Signature: [Signature] Month: 0 Day: 7 Year: 2 7 9 4

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name: Signature: Month: Day: Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
 Printed/Typed Name: Signature: Month: Day: Year:

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GENERATOR

FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CAD006983206** Manifest Document No. **21014016** 2. Page 1 of 1
 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
SOUTHERN PACIFIC TRANSPORTATION
One Market Plaza, San Francisco, CA. 94105

A. State Manifest Document Number
93620496

4. Generator's Phone **(415) 541-2559**

B. State Generator's ID

5. Transporter 1 Company Name
H&H SHIP SERVICE COMPANY

C. State Transporter's ID
428041

7. Transporter 2 Company Name

D. Transporter's Phone
(415) 543-4835

6. US EPA ID Number

9. Designated Facility Name and Site Address
ENVIROPUR WEST CORPORATION
13331 N. Highway 33
Patterson, CA. 95363

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID
CAD0083155728

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers		13. Total Quantity	14. Unit Wt/Vol	15. Waste Numbers
	No.	Type			
a. OIL AND WATER NON-RCRA HAZARDOUS WASTE LIQUID	001	TP	0133100	3	State 223 EPA/Other
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

16. Additional Descriptions for Materials Listed Above
FUEL OIL AND WATER

K. Handling Codes for Wastes Listed Above
 a. **01**
 b.
 c.

15. Special Handling Instructions and Additional Information
JOB #14714 **JOB SITE: SOUTHERN PACIFIC TRANSP.**
24 Hr. Emergency Contact: H&H (415) 543-4835 **1450 Sherwin Avenue**
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR **Emeryville, California**

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Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name **JIMMIE H. REESE** Signature _____ Month _____ Day _____ Year _____

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
 Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550
 GENERATOR

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **C A D 0 0 6 9 1 3 2 0 6** Manifest Document No. **2 0 5 1 6** 2. Page 1 of 1
 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
SOUTHERN PACIFIC TRANSPORTATION
One Market Plaza, San Francisco, CA. 94105

A. State Manifest Document Number
93620516

4. Generator's Phone **(415) 541-2559**

B. State Generator's ID: _____

5. Transporter 1 Company Name

6. US EPA ID Number

C. State Transporter's ID: **428067**

H&H SHIP SERVICE COMPANY

C A D 0 0 4 7 7 1 1 6 8

D. Transporter's Phone: **(415) 543-4835**

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID: _____

ENVIRONMENTAL WEST CORPORATION

13331 N. Highway 33

Patterson, CA. 95363

C A D 0 8 3 1 6 6 7 2 8

F. Transporter's Phone: _____

G. State Facility ID: **1 2 0 8 3 1 6 6 7 2 8**

H. Facility Phone: **(800) 874-4444**

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers
 No. Type

13. Total Quantity

14. Unit Wt./Vol

15. Waste Number
 State
 EPA/Other

**OIL AND WATER
 NON-RCRA HAZARDOUS WASTE LIQUID**

0 0 1 T T

012510

3

b.

State

EPA/Other

c.

State

EPA/Other

d.

State

EPA/Other

16. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

a. **01** b. _____
 c. _____ d. _____

15. Special Handling instructions and Additional Information

JOB 414714
24 Hr. Emergency Contact: H&H (415) 543-4835
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR

JOB SITE: SOUTHERN PACIFIC TRANSP.
1450 Sherwin Avenue
Emeryville, California

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name: **ROBERT V. PETRUCCI** Signature: _____ Month: _____ Day: _____ Year: _____

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR

FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C A D 0 0 6 9 1 3 2 0 6	Manifest Document No. 0 0 0 0 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address SOUTHERN PACIFIC TRANSPORTATION One Market Plaza, San Francisco, CA. 94105			A. State Manifest Document Number 93620550		
4. Generator's Phone (415) 541-2559			B. State Generator's ID		
5. Transporter 1 Company Name H & H SHIP SERVICE COMPANY		6. US EPA ID Number C A D 0 0 4 7 7 1 1 6 8		C. State Transporter's ID 428054	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (415) 543-4835	
9. Designated Facility Name and Site Address H & H SHIP SERVICE COMPANY 220 TERRY A. FRANCOIS STREET SAN FRANCISCO, CA. 94107		10. US EPA ID Number C A D 0 0 4 7 7 1 1 6 8		E. State Facility's ID C A D 0 0 4 7 7 1 1 6 8	
				F. Facility's Phone (415) 543-4835	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste Number State EPA/Other
RESIDUE BUNKER "C" OIL TANK NON-RCRA HAZARDOUS WASTE SOLID		0 0 1 T 2 0 6 5 0 0		P	State 512 EPA/Other
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other
16. Additional Descriptions for Materials Listed Above EMPTY 6,500 gallon tank last containing bunker "C" oil. Tank inerted with dry ice for safe transport. PROFILE #A4428			K. Handling Codes for Wastes Listed Above a. 01		
15. Special Handling Instructions and Additional Information JOB #14754 24 Hr. Emergency Contact: H & H # (415) 543-4835 APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR JOB SITE: SOUTHERN PACIFIC TRANSP. 1450 Sherwin Avenue Emeryville, California					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name <i>Jimmie Reese</i>		Signature <i>Jimmie Reese</i>		Month Day Year 0 8 0 3 9 4	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name JIMMIE REESE		Signature <i>Jimmie Reese</i>		Month Day Year 0 8 0 3 9 4	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature		Month Day Year	

DO NOT WRITE BELOW THIS LINE.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD006913206000 Manifest Document No. 2. Page 1 of 1 information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
SOUTHERN PACIFIC TRANSPORTATION
One Market Plaza, San Francisco, CA. 94105

A. State Manifest Document Number
93620551

4. Generator's Phone (415) 541-3559

B. State Generator's ID#

5. Transporter 1 Company Name H & H SHIP SERVICE COMPANY 6. US EPA ID Number CAD004771159

C. State Transporter's ID# 428034

7. Transporter 2 Company Name

D. Transporter's Phone# (415) 543-4835

9. Designated Facility Name and Site Address
H & H SHIP SERVICE COMPANY
220 TERRY A. FRANCOIS STREET
SAN FRANCISCO CA 94107

E. State Transporter's ID#

F. Transporter's Phone# (415) 543-4835

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

a. **RESIDUE BUNKER "C" OIL TANK**
NON-RCRA HAZARDOUS WASTE SOLID

12. Containers No. Type 13. Total Quantity 14. Unit Wt/Vol 15. Waste Number

001 IMP 06500 P State 512
 EPA/Other

b. State
 EPA/Other
 c. State
 EPA/Other
 d. State
 EPA/Other

J. Additional Descriptions for Materials Listed Above

6,500 gallon tank last containing bunker oil. Tank inerted with dry ice for safe.
PROFILE #A428

K. Handling Codes for Wastes Listed Above

a. 01 b.
 c. d.

15. Special Handling Instructions and Additional Information

JOB #14754
24 Hr. Emergency Contact: H & H # (415) 543-4835
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR

JOB SITE: SOUTHERN PACIFIC TRANSP.
1450 Sherwin Avenue
Emeryville California

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name Steve Towle Signature [Signature] Month 03 Day 07 Year 94

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name ROBERT PETRUCCI Signature [Signature] Month 08 Day 03 Year 94

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
 Printed/Typed Name Signature Month Day Year

DO NOT WRITE BELOW THIS LINE.

93620551
 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550
 GENERATOR
 FACILITY

93620552
 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550
 GENERATOR
 TRANSPORTER
 FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C A D 0 0 6 9 1 3 2 0 5 0 1 0 0 0 3	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address SOUTHERN PACIFIC TRANSPORTATION One Market Plaza, San Francisco, CA. 94105		A. State Manifest Document Number 93620552		B. State Generator's ID	
4. Generator's Phone (415) 543-2559		C. State Transporter's ID 428035		D. Transporter's Phone	
5. Transporter 1 Company Name H & H SHIP SERVICE COMPANY		6. US EPA ID Number C A D 0 0 4 7 7 1 1 5 3		E. State Transporter's ID (415) 543-4835	
7. Transporter 2 Company Name		8. US EPA ID Number		F. Transporter's Phone	
9. Designated Facility Name and Site Address H & H SHIP SERVICE COMPANY 220 TERRY A. FRANCOIS STREET SAN FRANCISCO, CA. 94107		10. US EPA ID Number C A D 0 0 4 7 7 1 1 5 3		G. State Facility ID (415) 543-4835	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers		13. Total Quantity	
a. RESIDUE BUNKER "C" OIL TANK NON-RCRA HAZARDOUS WASTE SOLID		No. Type		14. Unit Wt/Vol	
b.		0 0 1 P 0 5 5 0 0		P	
c.				E. Waste Number	
d.				State 312	
				EPA/Other	
				State	
				EPA/Other	
				State	
				EPA/Other	
15. Special Handling Instructions and Additional Information		K. Handling Codes for Wastes Listed Above			
J. Additional Descriptions for Materials Listed Above: EMPTY 6 500 gallon tank last containing bunker "C" oil. Tank inerted with dry ice for safe transport. PROFILE 8A4428		a. 01		b.	
15. Special Handling Instructions and Additional Information JOB #14754 24 Hr. Emergency Contact: H & H # (415) 543-4835 APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR		JOB SITE: SOUTHERN PACIFIC TRANSP. 1450 Sherwin Avenue Emeryville, California			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.					
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Printed/Typed Name		Signature		Month Day Year	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name JIMMIE REESE		Signature <i>Jimmie Reese</i>		Month Day Year 0 8 0 3 9 4	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.					
Printed/Typed Name		Signature		Month Day Year	

DO NOT WRITE BELOW THIS LINE.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **C A D 0 0 6 9 1 3 2 0 6** Manifest Document No. **1 0 0 0 0 1 4** 2. Page **1** of **1** Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
SOUTHERN PACIFIC TRANSPORTATION
One Market Plaza, San Francisco, CA 94105

A. State Manifest Document Number
93620553

4. Generator's Phone (415) **541-2559**

B. State Generator's ID:

5. Transporter 1 Company Name

a. US EPA ID Number

C. State Transporter's ID:
428054

H & H SHIP SERVICE COMPANY

C A D 0 0 4 7 7 1 1 6 3

D. Transporter's Phone:
(415) 543-4835

7. Transporter 2 Company Name

B. US EPA ID Number

E. State Transporter's ID:

9. Designated Facility Name and Site Address
H & H SHIP SERVICE COMPANY
320 TERRY A. FRANCOIS STREET
SAN FRANCISCO, CA 94107

10. US EPA ID Number

G. State Facility's ID:
C A D 0 0 4 7 7 1 1 6 3

H. Facility's Phone:
(415) 543-4835

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers
 No. Type

13. Total
 Quantity

14. Unit
 Wt./Vol

I. Waste Number

RESIDUE BUNKER "C" OIL TANK
NON-RCRA HAZARDOUS WASTE SOLID

0 0 1 2 0 6 5 0 0 3

State **512**

EPA/Other

State

EPA/Other

State

EPA/Other

State

EPA/Other

J. Additional Descriptions for Materials Listed Above:

EMPTY 6,500 gallon tank last containing bunker
"C" oil. Tank inerted with dry ice for safe
transport.
PROFILE #A4428

K. Handling Codes for Wastes Listed Above

a. **01**

c.

b.

d.

15. Special Handling Instructions and Additional Information

ICB #14754

24 hr. Emergency Contact: H & H #415 543-4835

APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR

JOB SITE: SOUTHERN PACIFIC TRANS
 1450 Sherwin Avenue
 Emeryville, California

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Printed/Typed Name Signature Month Day Year

[Signature]

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

ROBERT J. PETRUSO

[Signature]

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name

Signature

Month Day Year

DO NOT WRITE BELOW THIS LINE.

93620553 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1 800 424 8802; WITHIN CALIFORNIA, CALL 1-800 852-7550

GENERATOR

TRANSPORTER

FACILITY

SUSAN L. HUGO

DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621

PHONE NO. 510/271-4320

ACCEPTED

Underground Storage Tank Closure Permit Application
Alameda County Division of Hazardous Materials
80 Swan Way, Suite 200,
Oakland, CA 94621
Telephone (510) 432-4320

These closure/removal plans have been received and found to be acceptable in accordance with the requirements of State and Local Health Codes. The plans indicated by this Department are subject to State and local laws. The applicant is responsible for issuance of any required permits for excavation/demolition.
One copy of the plans must be submitted with the removal of all contents from the tank and with the removal of any hazardous materials. Specifications must be submitted to the City of Oakland Fire and Building Inspections Department for review. If any changes meet the requirements of State and local laws.
Notify this Department at least 72 hours prior to the following required inspections:

- Removal of Tank(s) and Piping
- Sampling
- Final Inspection

Issuance of a closure permit is dependent upon the acceptance of all applicable laws and regulations.

VIOLATION IS SUBJECT TO PENALTY FOR
NON-COMPLIANCE WITH INSPECTIONS

*These plans change made on
page 2, 5, 6
Susan L. Hugo
1/18/84*

UNDERGROUND TANK CLOSURE PLAN

* * * Complete according to attached instructions * * *

1. Business Name Southern Pacific Transportation Company
Business Owner Public Corporation
 2. Site Address 1450 Sherwin Avenue
City Emeryville Zip 94608 Phone (415) 541-2559
(Randy Smith)
 3. Mailing Address One Market Plaza
City San Francisco Zip 94105 Phone (415) 541-2559
(Randy Smith)
 4. Land Owner Southern Pacific Transportation Company
Address One Market Plaza, San Fran. City, State Ca. Zip 94105
 5. Generator name under which tank will be manifested Southern Pacific Transportation Company
- EPA I.D. No. under which tank will be manifested CAD006913206

6. Contractor Granite Construction Company
Address P.O. Box 50085
City Watsonville, Ca. Phone (408) 724-1011
License Type CA Haz Certificate ID# 04-0510552 #89
AP. 5/31/95

Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board. Indicate that the certificate has been received, in addition, to holding the appropriate contractors license type.

7. Consultant Industrial Compliance
Address 9719 Lincoln Village Dr., Suite 310
City Sacramento, Ca 95827 Phone (916) 369-8971

8. Contact Person for Investigation
Name Diane Beau Laurier Title Environmental Scientist
Phone (916) 369-8971

9. Number of tanks being closed under this plan 1 definite. There is a possibility that up to 3 additional tanks may be present. Tank(s) have not been used since 1953.
Length of piping being removed under this plan approximately 150 feet
Total number of tanks at facility 1 to 4
Need to investigate the presence of additional tanks!

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

** Underground tanks are hazardous waste and must be handled **
as hazardous waste

a) Product/Residual Sludge/Rinsate Transporter

Name H & H Environmental EPA I.D. No. CAD 004771168
Hauler License No. 0334 License Exp. Date 1-31-95
Address 220 China Basin
City San Francisco State Ca. Zip 94107

b) Product/Residual Sludge/Rinsate Disposal Site

Name Petroleum Recycling Corp. (PRC) EPA I.D. No. CAD 083166778
Address 13331 N. Highway 33
City Patterson State Ca. Zip 93363

c) Tank and Piping Transporter

Name H & H Environmental EPA I.D. No. CAD 004771168
Hauler License No. 0034 License Exp. Date 1/31/95
Address 220 China Basin
City San Francisco State Ca. zip 94107

d) Tank and Piping Disposal Site

Name H & H Environmental Services EPA I.D. No. CAD 004771168
Address 220 China Basin
City San Francisco, State Ca. zip 94107

11. Experienced Sample Collector

Name Diane Beaulaurier and Evelyn Ransom
Company Industrial Compliance
Address 9719 Lincoln Village Drive, Suite 310
City Sacramento State Ca. zip 95827 Phone (916) 369-8971

12. Laboratory

Name Sequoia Analytical
Address 1900 Bates Avenue, Suite 1
City Concord State Ca. zip 94520
State Certification No. 1271

13. Have tanks or pipes leaked in the past? Yes [] No []

If yes, describe. Unknown

14. Describe methods to be used for rendering tank inert

Product in tank will be heated and pumped out. Any remaining sludge and/or solids will be removed. Tank will be rendered inert with dry ice and verified inert with a combustible gas meter.

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be plugged.

The Bay Area Air Quality Management District (771-6000), along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of explosion proof combustible gas meters to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.

15. Tank History and Sampling Information

Tank		Material to be sampled (tank contents, soil, ground-water, etc.)	Location and Depth of Samples
Capacity	Use History (see instructions)		
6500 gallon	Tank installed in 1930 to provide local re-fueling with Bunker C fuel for steam engines.	Soil Ground Water (if present) Tank Contents	beneath tank(s) at maximum of two feet below native soil. Sidewalls. Below piping every 20 feet. Recharge into excavation (if present) Product sample from tank.

One soil sample must be collected for every 20 feet of piping that is removed. A ground water sample must be collected should any ground water be present in the excavation.

Excavated/Stockpiled Soil	
stockpiled Soil Volume (Estimated) 100 Cubic Yards	Sampling Plan 1 sample per 50 cubic yards stockpiled soil

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

16. Chemical methods and associated detection limits to be used for analyzing samples

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
Total oil and grease	None	EPA Method 413.2	50 ppm
TPH diesel	3050	GC/FID	(1.0 ppm) Soil
STEX		GC/FID	(0.005 ppm) Soil

17. Submit Site Health and Safety Plan (See Instructions)

18. Submit Worker's Compensation Certificate copy
Granite - Self-Insured
Name of Insurer Industrial Compliance - Johnson & Higgins of Colorado, Inc.
19. Submit Plot Plan (See Instructions)
20. Enclose Deposit (See Instructions)
21. Report any leaks or contamination to this office within 5 days of discovery. The report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (see Instructions)
22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions.

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true.

I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.


I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

Signature of Contractor


Name (please type) Mark Garding for Granite Construction Company

Signature 

Date 6-30-90

Signature of Site Owner or Operator

Name (please type) Randall T. Smith for Southern Pacific Transportation Company

Signature 

Date 6/20/90

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A
COMPLETE THIS FORM FOR EACH FACILITY/SITE



MARK ONLY ONE ITEM

<input checked="" type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input type="checkbox"/> 7 PERMANENTLY CLOSED SITE
<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY SITE CLOSURE	

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DBA OR FACILITY NAME <i>Southern Pacific Transportation Company</i>		NAME OF OPERATOR <i>(Genard Sherwin-Williams plant)</i>	
ADDRESS <i>1450 Sherwin Avenue</i>		NEAREST CROSS STREET <i>Halleck</i>	PARCEL # (OPTIONAL)
CITY NAME <i>Emeryville</i>		STATE <i>CA</i>	ZIP CODE <i>94608</i>
SITE PHONE # WITH AREA CODE <i>no site phone</i>			
<input checked="" type="checkbox"/> BOX TO INDICATE <input checked="" type="checkbox"/> CORPORATION <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> LOCAL-AGENCY DISTRICTS* <input type="checkbox"/> COUNTY-AGENCY* <input type="checkbox"/> STATE-AGENCY* <input type="checkbox"/> FEDERAL-AGENCY*			
* If owner of UST is a public agency, complete the following: name of Supervisor of division, section, or office which operates the UST			
TYPE OF BUSINESS <input type="checkbox"/> 1 GAS STATION <input type="checkbox"/> 2 DISTRIBUTOR <input type="checkbox"/> 3 FARM <input type="checkbox"/> 4 PROCESSOR <input checked="" type="checkbox"/> 5 OTHER		<input type="checkbox"/> INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE <i>4</i>
		E. P. A. I. D. # (optional) <i>CAD006913206</i>	

EMERGENCY CONTACT PERSON (PRIMARY)

DAYS: NAME (LAST, FIRST) <i>Smith, Randall T.</i>	PHONE # WITH AREA CODE <i>(415) 541-2550</i>	DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE
NIGHTS: NAME (LAST, FIRST) <i>Southern Pacific Transp. Co.</i>	PHONE # WITH AREA CODE <i>(503) 545-2743</i>	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

EMERGENCY CONTACT PERSON (SECONDARY) - optional

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME <i>Southern Pacific Transportation Co</i>	CARE OF ADDRESS INFORMATION <i>Randall T. Smith</i>
MAILING OR STREET ADDRESS <i>One Market Plaza</i>	<input checked="" type="checkbox"/> BOX TO INDICATE <input checked="" type="checkbox"/> CORPORATION <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> LOCAL-AGENCY <input type="checkbox"/> STATE-AGENCY <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> COUNTY-AGENCY <input type="checkbox"/> FEDERAL-AGENCY
CITY NAME <i>San Francisco CA 94105</i>	STATE ZIP CODE PHONE # WITH AREA CODE <i>(415) 541-2550</i>

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER <i>Southern Pacific Transportation Co</i>	CARE OF ADDRESS INFORMATION <i>Randall T. Smith</i>
MAILING OR STREET ADDRESS <i>One Market Plaza</i>	<input checked="" type="checkbox"/> BOX TO INDICATE <input checked="" type="checkbox"/> CORPORATION <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> LOCAL-AGENCY <input type="checkbox"/> STATE-AGENCY <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> COUNTY-AGENCY <input type="checkbox"/> FEDERAL-AGENCY
CITY NAME <i>San Francisco CA 94105</i>	STATE ZIP CODE PHONE # WITH AREA CODE

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY(TK) HQ 44-0019365

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) - IDENTIFY THE METHOD(S) USED

<input checked="" type="checkbox"/> BOX TO INDICATE	<input checked="" type="checkbox"/> 1 SELF-INSURED	<input type="checkbox"/> 2 GUARANTEE	<input type="checkbox"/> 3 INSURANCE	<input type="checkbox"/> 4 SURETY BOND
	<input type="checkbox"/> 5 LETTER OF CREDIT	<input type="checkbox"/> 6 EXEMPTION	<input type="checkbox"/> 99 OTHER	

VI. LEGAL NOTIFICATION AND BILLING ADDRESS Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING: I II III

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

OWNER'S NAME (PRINTED & SIGNED) <i>Evelyn C. Ransom</i>	OWNER'S TITLE <i>Industrial Compliance Environmental Technician</i>	DATE MONTH/DAY/YEAR <i>7/19/94</i>
--	--	---------------------------------------

LOCAL AGENCY USE ONLY

COUNTY # <input type="text"/>	JURISDICTION # <input type="text"/>	FACILITY # <input type="text"/>
LOCATION CODE - OPTIONAL	CENSUS TRACT # - OPTIONAL	SUPVISOR - DISTRICT CODE - OPTIONAL

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.
OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM 1 NEW PERMIT 2 INTERIM PERMIT 3 RENEWAL PERMIT 4 AMENDED PERMIT 5 CHANGE OF INFORMATION 6 TEMPORARY TANK CLOSURE 7 PERMANENTLY CLOSED ON SITE 8 TANK REMOVED

OSR OR FACILITY NAME WHERE TANK IS INSTALLED: Southern Pacific Transportation Company

I. TANK DESCRIPTION COMPLETE ALL ITEMS - SPECIFY IF UNKNOWN

A. OWNER'S TANK I.D. # unknown B. MANUFACTURED BY: unknown
C. DATE INSTALLED (MO/DAY/YEAR) unknown @ 1930 D. TANK CAPACITY IN GALLONS: @ 6,500 gallons

II. TANK CONTENTS FA-1 IS MARKED, COMPLETE ITEM C.

1 MOTOR VEHICLE FUEL 4 OIL 3. 1a REGULAR UNLEADED 3 DIESEL 6 AVIATION GAS
 2 PETROLEUM 80 EMPTY 1 PRODUCT 7b PREMIUM UNLEADED 4 GASAHOL 7 METHANOL
 3 CHEMICAL PRODUCT 95 UNKNOWN 2 WASTE 2 LEADED 99 OTHER (DESCRIBE IN ITEM D. BELOW)
D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED Bunker C Fuel C.A.S.#:

III. TANK CONSTRUCTION MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM 1 DOUBLE WALL 3 SINGLE WALL WITH EXTERIOR LINER 95 UNKNOWN
 2 SINGLE WALL 4 SECONDARY CONTAINMENT (VAULTED TANK) 99 OTHER
B. TANK MATERIAL (Primary Tank) 1 BARE STEEL 2 STAINLESS STEEL 3 FIBERGLASS 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC
 5 CONCRETE 6 POLYVINYL CHLORIDE 7 ALUMINUM 8 100% METHANOL COMPATIBLE WFRP
 9 BRONZE 10 GALVANIZED STEEL 95 UNKNOWN 99 OTHER
C. INTERIOR LINING 1 RUBBER LINED 2 ALKYD LINING 3 EPOXY LINING 4 PHENOLIC LINING
 5 GLASS LINING 6 UNLINED 95 UNKNOWN 99 OTHER
D. CORROSION PROTECTION 1 POLYETHYLENE WRAP 2 COATING 3 VINYL WRAP 4 FIBERGLASS REINFORCED PLASTIC
 5 CATHODIC PROTECTION 91 NONE 95 UNKNOWN 99 OTHER
E. SPILL AND OVERFILL SPILL CONTAINMENT INSTALLED (YEAR) none OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) none

IV. PIPING INFORMATION CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE A U 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A/U 99 OTHER
B. CONSTRUCTION A U 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A (U) 95 UNKNOWN A U 99 OTHER
C. MATERIAL AND CORROSION PROTECTION A U 1 BARE STEEL A U 2 STAINLESS STEEL A U 3 POLYVINYL CHLORIDE (PVC) A U 4 FIBERGLASS PIPE
A U 5 ALUMINUM A U 6 CONCRETE A U 7 STEEL W/ COATING A U 8 100% METHANOL COMPATIBLE WFRP
A U 9 GALVANIZED STEEL A U 10 CATHODIC PROTECTION A (U) 95 UNKNOWN A U 99 OTHER
D. LEAK DETECTION 1 AUTOMATIC LINE LEAK DETECTOR 2 LINE TIGHTNESS TESTING 3 INTERSTITIAL MONITORING 99 OTHER

V. TANK LEAK DETECTION

1 VISUAL CHECK 2 INVENTORY RECONCILIATION 3 VADOZE MONITORING 4 AUTOMATIC TANK GAUGING 5 GROUND WATER MONITORING
 6 TANK TESTING 7 INTERSTITIAL MONITORING 91 NONE 95 UNKNOWN 99 OTHER

VI. TANK CLOSURE INFORMATION

1. ESTIMATED DATE LAST USED (MO/DAY/YR) 1958 2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING 26,500 GALLONS 3. WAS TANK FILLED WITH INERT MATERIAL? YES NO

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

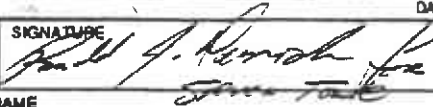
APPLICANT'S NAME (PRINTED & SIGNATURE) Walter C. Ransom Agent For SPTCO DATE 7/18/94

LOCAL AGENCY USE ONLY THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
PERMIT NUMBER	PERMIT APPROVED BY/DATE		PERMIT EXPIRATION DATE	

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED.
FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input type="checkbox"/> NO		FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.	
REPORT DATE 01/09/01		CASE #		SIGNED _____ DATE _____	
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Steven E. Towle		PHONE (916) 369-8971		SIGNATURE 
	REPRESENTING <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER		COMPANY OR AGENCY NAME INDUSTRIAL COMPLIANCE		
	ADDRESS 9719 Lincoln Village Drive, Suite 310 Sacramento, Ca 95827				
RESPONSIBLE PARTY	NAME SPTCo. <input type="checkbox"/> UNKNOWN		CONTACT PERSON Randall T. Smith		PHONE (415) 541-2559
	ADDRESS One Market Plaza San Francisco, Ca 94105				
SITE LOCATION	FACILITY NAME (IF APPLICABLE) Southern Pacific Transportation Company		OPERATOR		PHONE () N/A
	ADDRESS 1450 Sherwin Avenue Emeryville, Alameda 94608		CROSS STREET Halleck		
	LOCAL AGENCY Alameda County Health Agency				
IMPLEMENTING AGENCIES	AGENCY NAME Alameda County Health Agency		CONTACT PERSON Susan L. Hugo		PHONE (510) 567-6700
	REGIONAL BOARD				
SUBSTANCES INVOLVED	(1) NAME Bunker C Fuel				QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN
	(2) <input type="checkbox"/> UNKNOWN				
DISCOVERY/ABATEMENT	DATE DISCOVERED 01/03/01		HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input type="checkbox"/> TANK TEST <input type="checkbox"/> TANK REMOVAL <input checked="" type="checkbox"/> OTHER <u>Surface Grading</u>		
	DATE DISCHARGE BEGAN 01/22/01		METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input type="checkbox"/> REMOVE CONTENTS <input checked="" type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> REPLACE TANK <input type="checkbox"/> OTHER		
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE _____				
SOURCE/CAUSE	SOURCE OF DISCHARGE <input type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER		CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER		
	CHECK ONE ONLY <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)				
CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION <input type="checkbox"/> LEAK BEING CONFIRMED <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input checked="" type="checkbox"/> CLEANUP UNDERWAY				
	CHECK APPROPRIATE ACTION(S) <input checked="" type="checkbox"/> CAP SITE (CS) <input checked="" type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input checked="" type="checkbox"/> OTHER (OT) <u>Monitoring</u>				
	COMMENTS				

CITY OF EMERYVILLE
 FIRE DEPARTMENT
 6303 HOLLIS STREET
 EMERYVILLE, CA., 94608
 (510) 596-3750

FIRE DEPARTMENT
 USE ONLY

(PERMIT NUMBER)

APPLICATION AND PERMIT

THIS APPLICATION IS YOUR PERMIT WHEN PROPERLY FILLED OUT,
 SIGNED, VALIDATED AND FEES PAID.

ADDRESS: 1450 SHERWIN AVE
 BUSINESS NAME: SOUTHERN PACIFIC TRANS CO
 CONTACT PERSON: Randy Smith
 TELEPHONE NUMBER: (415) 541-2559

DESCRIPTION OF OPERATION:

UST Removal (4 tanks)

APPLICANT READ AND SIGN BELOW:

I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT
 THE INFORMATION GIVEN IS TRUE AND CORRECT. I AGREE TO
 COMPLY WITH ALL LOCAL ORDINANCES AND STATE LAWS THAT
 RELATE TO THIS PERMIT. I HEREBY AUTHORIZE REPRESENTATIVES
 OF THE CITY TO ENTER UPON THE ABOVE MENTIONED PROPERTY TO
 VERIFY COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT, AT
 ANY REASONABLE TIME.

Building Owner
 Business Operator
 Date of Application: 8-1-94
Randy Smith
Southern Pacific Transportation Co.

Application Received:

Date: _____ Signed: _____

Permit Issued:

Date: _____ Signed: _____

EFD Permit Type(s):
 (see reverse)

Expiration Date:

TOTAL FEES DUE: \$125.00/tank

MAKE CHECK PAYABLE TO THE CITY
 OF EMERYVILLE.

FEES ARE ESTABLISHED THRU THE
 CITY OF EMERYVILLE MASTER FEE
 SCHEDULE ADOPTED JUNE 1, 1993.
 COPY AVAILABLE ON REQUEST.

Occupancy Group/Division:
 (per UBC Table 5A)

OCCUPANCY TYPE:

Commercial Assembly
 Industrial Educational
 Residential H class
 Other Specify: _____

THIS PERMIT MUST BE AVAILABLE FOR INSPECTION AT ALL TIMES

REVOCAION OF PERMIT

THE CHIEF IS AUTHORIZED TO SUSPEND/REVOKE A PERMIT WHEN THE CHIEF HAS
 DETERMINED THAT SECTION 4.107, 1991 UBC HAS BEEN VIOLATED.

POSTING OF PERMIT

PERMIT(S) SHALL BE KEPT ON THE PREMISES DESIGNATED AT ALL TIMES AND
 SHALL BE AVAILABLE FOR INSPECTION AT ANY TIME BY ANY PERSON(S) WHO
 ARE AUTHORIZED BY THE CHIEF OF THE EMERYVILLE FIRE DEPARTMENT.

DATE	INSPECTION NOTES/COMMENTS	INSPECTOR
8-1-94	applic. delivered to Mr. Steve Tole, on-site at 1450 Sherwin (rear)	STW

CITY OF EMERYVILLE
 INSPECTION SERVICES DEPT.
 2200 POWELL STREET, 12TH FLOOR
 EMERYVILLE, CA 94608
 (415) 596-4310



VALIDATE HERE

P. (7-2017) 710P
 Permit Number

APPLICATION AND PERMIT

THIS APPLICATION IS YOUR PERMIT WHEN PROPERLY FILLED OUT, SIGNED, VALIDATED & FEES PAID.

BUILDING ADDRESS
 1475 Showin Avenue

TRACT _____ **LOT** _____ **APH** _____

NAME _____

ADDRESS _____ **PHONE** _____

CITY _____ **ST.** _____ **ZIP** _____

NAME _____ **LICENSE #** _____

ADDRESS _____ **PHONE** _____

CITY _____ **ST.** _____ **ZIP** _____

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

LICENSE # AND CLASS _____ **CITY BUSINESS TAX #** _____

CONTRACTOR NAME _____

ADDRESS _____

CITY _____ **PHONE** _____

SIGNATURE _____ **DATE** _____

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant or such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

I, as owner of the property, or my employees with wages as their sole compensation, will perform the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sole requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption in this subdivision on more than two structures more than once during any three-year period, (Sec. 7044, Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law).

I am exempt under Sec. _____, B&P.C. for this reason _____

Signature _____ **Date** _____

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C).

Policy _____ **Company Name** _____

Certified copy is hereby furnished.

Certified copy is filed with the city building inspection department.

Signature _____ **Date** _____

(This section need not be completed if the permit is for one hundred dollars (\$100) or less.)

I certify that in the performance of the work for which this permit is issued, I shall employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Signature _____ **Date** _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.) (If no lender indicate "None").

LENDER _____

ADDRESS _____

I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS TRUE AND CORRECT. I AGREE TO COMPLY WITH ALL LOCAL ORDINANCES AND STATE LAWS RELATING TO BUILDING CONSTRUCTION AND I MAKE THIS STATEMENT UNDER PENALTY OF LAW. I HEREBY AUTHORIZE REPRESENTATIVES OF THIS CITY TO ENTER UPON ABOVE MENTIONED PROPERTY FOR INSPECTION PURPOSES. NOTICE: THIS PERMIT WILL EXPIRE BY LIMITATION IF WORK IS NOT STARTED WITHIN 180 DAYS OR IF WORK IS ABANDONED FOR MORE THAN 180 DAYS. DO NOT CONCEAL OR COVER ANY CONSTRUCTION UNTIL THE WORK IS INSPECTED AND THE INSPECTION IS RECORDED ON THE FIELD CARD ISSUED FOR THIS PERMIT. ALL INSPECTION REQUESTS ARE REQUIRED 24 HOURS IN ADVANCE OF THIS INSPECTION.

I hereby agree to save, indemnify and keep harmless the City of Emeryville, and its officers, employees and agents against all liabilities, judgments, costs and expenses which may accrue against the City in consequence of the granting of this permit or from the use or occupancy of any sidewalk, street or sub sidewalk, or otherwise by virtue thereof, and will in all things strictly comply with the conditions under which this permit is granted.

Contractor

Owner

Signature of Contractor/Owner or Agent _____ **Date** _____

Agent for Contractor Owner

Address of Agent _____

ADDRESS _____ **CITY** _____ **STATE** _____ **ZIP** _____ **TELEPHONE** _____

DO NOT WRITE IN THIS SPACE

Application Received _____

Date _____ Signed _____

Permit Issued _____

Date _____ Signed _____

<input type="checkbox"/> Single Family	<input type="checkbox"/> New Addition	<input type="checkbox"/> Grading:
<input type="checkbox"/> Apartment	<input type="checkbox"/> Alteration	<input type="checkbox"/> Excavation
<input type="checkbox"/> Condominium	<input type="checkbox"/> Repair	<input type="checkbox"/> Fill
<input type="checkbox"/> Commercial	<input type="checkbox"/> Improve	<input type="checkbox"/> Drainage
<input type="checkbox"/> Industrial	<input type="checkbox"/> Other	<input type="checkbox"/> Other
<input type="checkbox"/> Public Building		
<input type="checkbox"/> Accessory		
<input type="checkbox"/> Other		

Describe Briefly All Proposed Construction Work

Removal of 1 to 1 underground storage tanks. Backfill and construction of excavation. Estimated valuation of \$10,000.

New Building Floor Area (Sq Ft)

1st _____ 2nd _____ 3rd _____ Total _____

Garage _____ Carport _____ # Bedrooms _____ # Baths _____

Building Setbacks

Front _____ Rear _____ Left _____ Right _____

Occupancy Group and Division _____ Type _____ (Per URC Table 5A) (Per URC Table 17A)

Valuation of Proposed Work \$ _____ (Includes all labor and materials, all lighting, heating, ventilation, water supply, plumbing, electrical, fire sprinklers, elevator equipment therein and thereon.)

THIS PERMIT SHALL COVER:

<input type="checkbox"/> Building	<input type="checkbox"/> Plan Check	<input type="checkbox"/> Electrical
<input type="checkbox"/> Plumbing	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Insulation
<input type="checkbox"/> Solar	<input type="checkbox"/> Sign	<input type="checkbox"/> Pool/Spa
<input type="checkbox"/> S. M. I. P.	<input type="checkbox"/> Grading	<input type="checkbox"/> Other _____

DO NOT WRITE BELOW THIS LINE

Planning Approval Date _____ Fire Dept. Approval Date _____

Health Dept. Approval Date _____ Final Approval Date _____

Special Conditions _____

Valence Date _____ Use Permit Date _____

PERMIT FEES

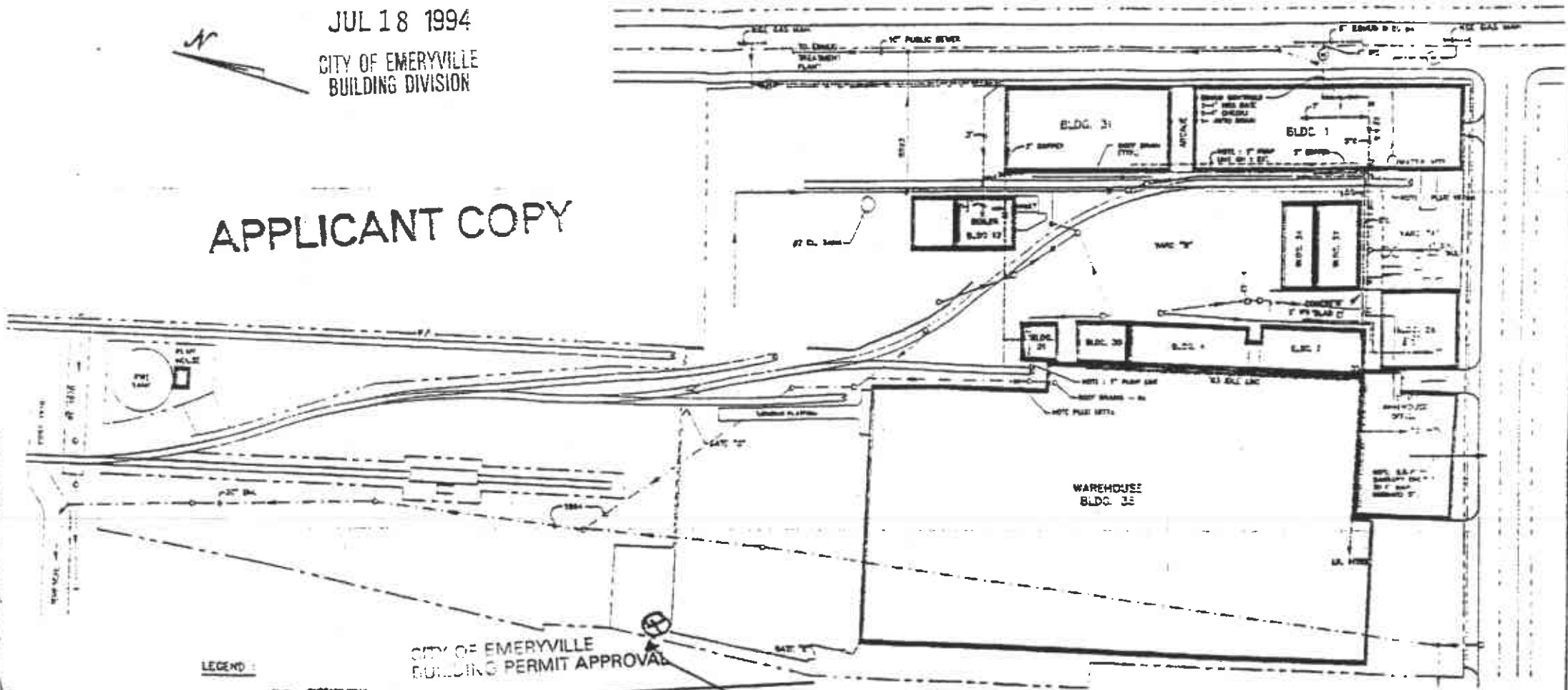
Building	_____
Plan Check	_____
Filing	_____
Electrical	_____
Plumbing	_____
Mechanical	_____
Insulation	_____
Fire	_____
Traffic	_____
School	_____
S. M. I. P. SR137.4	_____
Grading	_____
Annexation	_____
Sewer Connection	_____
Community Development	_____
Growth Impact Fee	_____
Total	\$ 175.00

From Robert/Margaret Elmer Fuelgas Systems
 Co. Industrial Compliance
 City of Emeryville
 Building Dept.
 Phone (510) 458-~~8095~~ 8095
 Fax (916) 369-8971
 (916) 369-8370

confirm receipt.
 Thank you!

APPLICANT COPY

RECEIVED
 JUL 18 1994
 CITY OF EMERYVILLE
 BUILDING DIVISION



LEGEND:

- SURFACE DRAIN
- PUBLIC WORKS
- PLANNING DEPARTMENT
- FIRE DEPARTMENT
- BUILDING DIVISION
- PERMIT NUMBER
- RAILROAD TRACKS
- SURVEY LINE

CITY OF EMERYVILLE
 BUILDING PERMIT APPROVAL

Public Works
 Planning Department
 Fire Department
 Building Division
 Permit Number

TANK LOCATION

EMERYVILLE		CORPORATE ENGINEERING DEPT	
		SPOKANE, OR	
OAKLAND, CALIFORNIA			
SEWER, CITY GAS, AND DOMESTIC WATER PLAN			
Plan No.	022-0101-POD1	Scale	AS SHOWN

August 19, 1994

Mr. Ron Derrick
Industrial Compliance
9719 Lincoln Village Dr. Suite 310
Sacramento, CA 95827

RE: PACE Project No. 440804.529
Client Reference: Emeryville-UST Removal 0570680

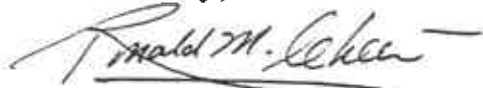
Dear Mr. Derrick:

Enclosed is the report of laboratory analyses for samples received August 04 - 08, 1994.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,



Ronald M. Chew
Project Manager

Enclosures

RECEIVED

AUG 24 1994

INDUSTRIAL COMPLIANCE

August 17, 1994

Mr. Ron Derrick
Industrial Compliance
9719 Lincoln Village Dr. Suite 310
Sacramento, CA 95827

RE: PACE Project No. 440810.517
Client Reference: Emeryville-AKA Proj.#440804.529

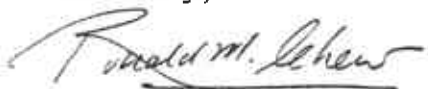
Dear Mr. Derrick:

Enclosed is the report of laboratory analyses for samples received August 10, 1994.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,



Ronald M. Chew
Project Manager

Enclosures

RECEIVED

AUG 19 1994

INDUSTRIAL COMPLIANCE



REPORT OF LABORATORY ANALYSIS

Industrial Compliance
 c/o I-880/Cypress Railroad Relocation
 Southern Pacific Transport Co.
 Oakland, CA 94623-1374

August 19, 1994
 PACE Project Number: 440804529

Attn: Mr. Ron Derrick

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369177
 Date Collected: 08/03/94
 Date Received: 08/04/94

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Ground Water</u>	<u>DATE ANALYZED</u>
------------------	--------------	------------	---------------------	----------------------

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Arsenic (EPA Method 7060, Furnace AAS)	mg/L	0.005	0.018	08/12/94
Barium (EPA Method 6010/200.7, ICP)	mg/L	0.01	0.16	08/11/94
Cadmium (EPA Method 6010/200.7, ICP)	mg/L	0.005	ND	08/11/94
Chromium (EPA Method 6010/200.7, ICP)	mg/L	0.01	ND	08/11/94
Lead (EPA Method 7421, Furnace AAS)	mg/L	0.001	0.028	08/12/94
Mercury (EPA Method 7470, Cold Vapor AA)	mg/L	0.0002	ND	08/17/94
Selenium (EPA Method 7740, Furnace AAS)	mg/L	0.005	ND	08/12/94
Silver (EPA Method 6010/200.7, ICP)	mg/L	0.01	ND	08/11/94

ORGANIC ANALYSIS

EXTRACTABLE FUELS EPA 3510/8015

Extractable Fuels, as Diesel	mg/L	0.05	3.2	08/15/94
Extractable Fuels, as Bunker C	mg/L	0.25	6.1 HP	08/20/94
Date Extracted			08/10/94	

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol	ug/L	10	ND	08/17/94
bis(2-Chloroethyl)ether	ug/L	10	ND	08/17/94
2-Chlorophenol	ug/L	10	ND	08/17/94
1,3-Dichlorobenzene	ug/L	10	ND	08/17/94
1,4-Dichlorobenzene	ug/L	10	ND	08/17/94
Benzyl Alcohol	ug/L	20	ND	08/17/94
1,2-Dichlorobenzene	ug/L	10	ND	08/17/94
2-Methylphenol	ug/L	10	ND	08/17/94
bis(2-Chloroisopropyl)ether	ug/L	10	ND	08/17/94
4-Methylphenol	ug/L	10	ND	08/17/94
n-Nitroso-di-n-propylamine	ug/L	10	ND	08/17/94
Hexachloroethane	ug/L	10	ND	08/17/94
Nitrobenzene	ug/L	10	ND	08/17/94

REPORT OF LABORATORY ANALYSIS

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369177
 Date Collected: 08/03/94
 Date Received: 08/04/94
 Client Sample ID: Ground

Parameter Units MDL Water DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2-Nitrophenol	ug/L	10	ND	08/17/94
2,4-Dimethylphenol	ug/L	10	ND	08/17/94
bis(2-Chloroethoxy)methane	ug/L	10	ND	08/17/94
2,4-Dichlorophenol	ug/L	10	ND	08/17/94
1,2,4-Trichlorobenzene	ug/L	10	ND	08/17/94
Naphthalene	ug/L	10	ND	08/17/94
Benzoic Acid	ug/L	50	ND	08/17/94
4-Chloroaniline	ug/L	20	ND	08/17/94
Hexachlorobutadiene	ug/L	10	ND	08/17/94
4-Chloro-3-methylphenol	ug/L	20	ND	08/17/94
2-Methylnaphthalene	ug/L	10	ND	08/17/94
Hexachlorocyclopentadiene	ug/L	10	ND	08/17/94
2,4,6-Trichlorophenol	ug/L	10	ND	08/17/94
2,4,5-Trichlorophenol	ug/L	10	ND	08/17/94
2-Chloronaphthalene	ug/L	10	ND	08/17/94
2-Nitroaniline	ug/L	50	ND	08/17/94
Dimethylphthalate	ug/L	10	ND	08/17/94
Acenaphthylene	ug/L	10	ND	08/17/94
2,6-Dinitrotoluene	ug/L	10	ND	08/17/94
3-Nitroaniline	ug/L	50	ND	08/17/94
Acenaphthene	ug/L	10	15	08/17/94
2,4-Dinitrophenol	ug/L	50	ND	08/17/94
4-Nitrophenol	ug/L	50	ND	08/17/94
Dibenzofuran	ug/L	10	ND	08/17/94
2,4-Dinitrotoluene	ug/L	10	ND	08/17/94
Diethylphthalate	ug/L	10	ND	08/17/94
Fluorene	ug/L	10	ND	08/17/94
4-Chlorophenyl-phenylether	ug/L	10	ND	08/17/94
4-Nitroaniline	ug/L	50	ND	08/17/94
4,6-Dinitro-2-methylphenol	ug/L	50	ND	08/17/94
n-Nitrosodiphenylamine	ug/L	10	ND	08/17/94

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369177
 Date Collected: 08/03/94
 Date Received: 08/04/94
 Client Sample ID: Ground
 Parameter Water

Units MDL DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

4-Bromophenyl-phenylether	ug/L	10	ND	08/17/94
Hexachlorobenzene	ug/L	10	ND	08/17/94
Pentachlorophenol	ug/L	50	ND	08/17/94
Phenanthrene	ug/L	10	ND	08/17/94
Anthracene	ug/L	10	ND	08/17/94
Di-n-butylphthalate	ug/L	10	ND	08/17/94
Fluoranthene	ug/L	10	ND	08/17/94
Pyrene	ug/L	10	ND	08/17/94
Butylbenzylphthalate	ug/L	10	ND	08/17/94
Benzo(a)anthracene	ug/L	10	ND	08/17/94
3,3'-Dichlorobenzidine	ug/L	20	ND	08/17/94
Chrysene	ug/L	10	ND	08/17/94
bis(2-Ethylhexyl)phthalate	ug/L	10	ND	08/17/94
Di-n-octylphthalate	ug/L	10	ND	08/17/94
Benzo(b)fluoranthene	ug/L	10	ND	08/17/94
Benzo(k)fluoranthene	ug/L	10	ND	08/17/94
Benzo(a)pyrene	ug/L	10	ND	08/17/94
Indeno(1,2,3-cd)pyrene	ug/L	10	ND	08/17/94
Dibenzo(a,h)anthracene	ug/L	10	ND	08/17/94
Benzo(g,h,i)perylene	ug/L	10	ND	08/17/94
2-Fluorophenol (surrogate)	%		56	08/17/94
Phenol-d6 (surrogate)	%		69	08/17/94
Nitrobenzene-d5 (surrogate)	%		73	08/17/94
2-Fluorobiphenyl (surrogate)	%		70	08/17/94
2,4,6-Tribromophenol (surrogate)	%		103	08/17/94
Terphenyl-d14 (surrogate)	%		45	08/17/94
Date Extracted			08/10/94	
OIL AND GREASE, SILICA GEL (LUFT)				
Oil and Grease, Gravimetric (SM5520)	mg/L	5.0	ND	08/10/94
Date Extracted			08/10/94	

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Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369177
 Date Collected: 08/03/94
 Date Received: 08/04/94

Client Sample ID:
 Parameter

Units MDL Ground Water DATE ANALYZED

ORGANIC ANALYSIS

HALOGENATED VOLATILE ORGANICS BY 8010
 VOLATILE HALOCARBONS BY EPA 8010

Dichlorodifluoromethane	ug/L	2.0	ND	08/10/94
Chloromethane	ug/L	2.0	ND	08/10/94
Vinyl Chloride	ug/L	2.0	ND	08/10/94
Bromomethane	ug/L	2.0	ND	08/10/94
Chloroethane	ug/L	2.0	ND	08/10/94
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	08/10/94
1,1-Dichloroethene	ug/L	0.5	ND	08/10/94
Methylene Chloride	ug/L	2.0	ND	08/10/94
trans-1,2-Dichloroethene	ug/L	0.5	ND	08/10/94
1,1-Dichloroethane	ug/L	0.5	ND	08/10/94
cis-1,2-Dichloroethene	ug/L	0.5	ND	08/10/94
Chloroform	ug/L	0.5	ND	08/10/94
1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND	08/10/94
Carbon Tetrachloride	ug/L	0.5	ND	08/10/94
1,2-Dichloroethane (EDC)	ug/L	0.5	ND	08/10/94
Trichloroethene (TCE)	ug/L	0.5	ND	08/10/94
1,2-Dichloropropane	ug/L	0.5	ND	08/10/94
Bromodichloromethane	ug/L	0.5	ND	08/10/94
Dibromomethane	ug/L	0.5	ND	08/10/94
2-Chloroethylvinyl ether	ug/L	0.5	ND	08/10/94
cis-1,3-Dichloropropene	ug/L	0.5	ND	08/10/94
trans-1,3-Dichloropropene	ug/L	0.5	ND	08/10/94
1,1,2-Trichloroethane	ug/L	0.5	ND	08/10/94
Tetrachloroethene	ug/L	0.5	ND	08/10/94
Dibromochloromethane	ug/L	0.5	ND	08/10/94
Chlorobenzene	ug/L	0.5	ND	08/10/94
1,1,1,2-Tetrachloroethane	ug/L	0.5	ND	08/10/94
Bromoform	ug/L	0.5	ND	08/10/94
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	08/10/94
1,2,3-Trichloropropane	ug/L	0.5	ND	08/10/94

REPORT OF LABORATORY ANALYSIS

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

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 Date Collected: 08/03/94
 Date Received: 08/04/94
 Client Sample ID:
 Parameter

ORGANIC ANALYSIS

HALOGENATED VOLATILE ORGANICS BY 8010

Parameter	Units	MDL	Water	Ground	DATE ANALYZED
Bromobenzene	ug/L	0.5	ND		08/10/94
1,3-Dichlorobenzene	ug/L	0.5	ND		08/10/94
1,4-Dichlorobenzene	ug/L	0.5	ND		08/10/94
Benzyl Chloride	ug/L	0.5	ND		08/10/94
1,2-Dichlorobenzene	ug/L	0.5	ND		08/10/94
Bromochloromethane (Surrogate Recovery)	%		100		08/10/94
1,4-Dichlorobutane (Surrogate Recovery)	%		127		08/10/94

PURGEABLE FUELS AND AROMATICS

Parameter	Units	MDL	Water	Ground	DATE ANALYZED
TOTAL FUEL HYDROCARBONS, (LIGHT):			-		08/10/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	150		08/10/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-		08/10/94
Benzene	ug/L	0.5	1.2		08/10/94
Toluene	ug/L	0.5	0.8		08/10/94
Ethylbenzene	ug/L	0.5	ND		08/10/94
Xylenes, Total	ug/L	0.5	2.4		08/10/94

REPORT OF LABORATORY ANALYSIS

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70 0369231
08/03/94
08/04/94
8270

T2

Units MDL soil DATE ANALYZED

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/12/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	ND	08/12/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/12/94
Benzene	ug/kg wet	5.0	ND	08/12/94
Toluene	ug/kg wet	5.0	ND	08/12/94
Ethylbenzene	ug/kg wet	5.0	ND	08/12/94
Xylenes, Total	ug/kg wet	5.0	ND	08/12/94

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	5.0	ND	08/15/94
Extractable Fuels, as Bunker C	mg/kg	8.3	8.4	08/15/94
Date Extracted				08/11/94

OIL AND GREASE, SILICA GEL (LUFT)

Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	ND	08/17/94
Date Extracted				08/12/94

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethyl)ether	ug/kg	330	ND	08/15/94
2-Chlorophenol	ug/kg	330	ND	08/15/94
1,3-Dichlorobenzene	ug/kg	330	ND	08/15/94
1,4-Dichlorobenzene	ug/kg	330	ND	08/15/94
Benzyl Alcohol	ug/kg	660	ND	08/15/94
1,2-Dichlorobenzene	ug/kg	330	ND	08/15/94
2-Methylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroisopropyl)ether	ug/kg	330	ND	08/15/94
4-Methylphenol	ug/kg	330	ND	08/15/94
n-Nitroso-di-n-propylamine	ug/kg	330	ND	08/15/94
Hexachloroethane	ug/kg	330	ND	08/15/94
Nitrobenzene	ug/kg	330	ND	08/15/94
Isophorone	ug/kg	330	ND	08/15/94
2-Nitrophenol	ug/kg	330	ND	08/15/94

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August 19, 1994
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PACE Sample Number:
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Parameter

70 0369231 ¹²
08/03/94
08/04/94
28210

Units MDL DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2,4-Dimethylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethoxy)methane	ug/kg	330	ND	08/15/94
2,4-Dichlorophenol	ug/kg	330	ND	08/15/94
1,2,4-Trichlorobenzene	ug/kg	330	ND	08/15/94
Naphthalene	ug/kg	330	ND	08/15/94
Benzoic Acid	ug/kg	1700	ND	08/15/94
4-Chloroaniline	ug/kg	660	ND	08/15/94
Hexachlorobutadiene	ug/kg	330	ND	08/15/94
4-Chloro-3-methylphenol	ug/kg	660	ND	08/15/94
2-Methylnaphthalene	ug/kg	330	ND	08/15/94
Hexachlorocyclopentadiene	ug/kg	330	ND	08/15/94
2,4,6-Trichlorophenol	ug/kg	330	ND	08/15/94
2,4,5-Trichlorophenol	ug/kg	330	ND	08/15/94
2-Chloronaphthalene	ug/kg	330	ND	08/15/94
2-Nitroaniline	ug/kg	1700	ND	08/15/94
Dimethylphthalate	ug/kg	330	ND	08/15/94
Acenaphthylene	ug/kg	330	ND	08/15/94
2,6-Dinitrotoluene	ug/kg	330	ND	08/15/94
3-Nitroaniline	ug/kg	1700	ND	08/15/94
Acenaphthene	ug/kg	330	ND	08/15/94
2,4-Dinitrophenol	ug/kg	1700	ND	08/15/94
4-Nitrophenol	ug/kg	1700	ND	08/15/94
Dibenzofuran	ug/kg	330	ND	08/15/94
2,4-Dinitrotoluene	ug/kg	330	ND	08/15/94
Diethylphthalate	ug/kg	330	ND	08/15/94
Fluorene	ug/kg	330	ND	08/15/94
4-Chlorophenyl-phenylether	ug/kg	330	ND	08/15/94
4-Nitroaniline	ug/kg	1700	ND	08/15/94
4,6-Dinitro-2-methylphenol	ug/kg	1700	ND	08/15/94
n-Nitrosodiphenylamine	ug/kg	330	ND	08/15/94
4-Bromophenyl-phenylether	ug/kg	330	ND	08/15/94

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August 19, 1994
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Parameter

70 0369231 *12*
08/03/94
08/04/94
28210

Units MDL DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Hexachlorobenzene	ug/kg	330	ND	08/15/94
Pentachlorophenol	ug/kg	1700	ND	08/15/94
Phenanthrene	ug/kg	330	ND	08/15/94
Anthracene	ug/kg	330	ND	08/15/94
Di-n-butylphthalate	ug/kg	330	ND	08/15/94
Fluoranthene	ug/kg	330	ND	08/15/94
Pyrene	ug/kg	330	ND	08/15/94
Butylbenzylphthalate	ug/kg	330	ND	08/15/94
Benzo(a)anthracene	ug/kg	330	ND	08/15/94
3,3'-Dichlorobenzidine	ug/kg	660	ND	08/15/94
Chrysene	ug/kg	330	ND	08/15/94
bis(2-Ethylhexyl)phthalate	ug/kg	330	ND	08/15/94
Di-n-octylphthalate	ug/kg	330	ND	08/15/94
Benzo(b)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(k)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(a)pyrene	ug/kg	330	ND	08/15/94
Indeno(1,2,3-cd)pyrene	ug/kg	330	ND	08/15/94
Dibenzo(a,h)anthracene	ug/kg	330	ND	08/15/94
Benzo(g,h,i)perylene	ug/kg	330	ND	08/15/94
2-Fluorophenol (surrogate)	%		87	08/15/94
Phenol-d6 (surrogate)	%		96	08/15/94
Nitrobenzene-d5 (surrogate)	%		97	08/15/94
2-Fluorobiphenyl (surrogate)	%		87	08/15/94
2,4,6-Tribromophenol (surrogate)	%		96	08/15/94
Terphenyl-d14 (surrogate)	%		91	08/15/94
Date Extracted			08/12/94	

REPORT OF LABORATORY ANALYSIS

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number:
 Date Collected:
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70 0369240
 08/03/94
 08/04/94

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<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/13/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	ND	08/13/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/13/94
Benzene	ug/kg wet	5.0	ND	08/13/94
Toluene	ug/kg wet	5.0	ND	08/13/94
Ethylbenzene	ug/kg wet	5.0	ND	08/13/94
Xylenes, Total	ug/kg wet	5.0	ND	08/13/94

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	5.0	ND	08/15/94
Extractable Fuels, as Bunker C	mg/kg	8.3	ND	08/15/94
Date Extracted			08/11/94	

OIL AND GREASE, SILICA GEL (LUFT)

Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	110	08/17/94
Date Extracted			08/12/94	

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethyl)ether	ug/kg	330	ND	08/15/94
2-Chlorophenol	ug/kg	330	ND	08/15/94
1,3-Dichlorobenzene	ug/kg	330	ND	08/15/94
1,4-Dichlorobenzene	ug/kg	330	ND	08/15/94
Benzyl Alcohol	ug/kg	660	ND	08/15/94
1,2-Dichlorobenzene	ug/kg	330	ND	08/15/94
2-Methylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroisopropyl)ether	ug/kg	330	ND	08/15/94
4-Methylphenol	ug/kg	330	ND	08/15/94
n-Nitroso-di-n-propylamine	ug/kg	330	ND	08/15/94
Hexachloroethane	ug/kg	330	ND	08/15/94
Nitrobenzene	ug/kg	330	ND	08/15/94
Isophorone	ug/kg	330	ND	08/15/94
2-Nitrophenol	ug/kg	330	ND	08/15/94

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Parameter

70 0369240
08/03/94
08/04/94
28205

T274

Units MDL DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2,4-Dimethylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethoxy)methane	ug/kg	330	ND	08/15/94
2,4-Dichlorophenol	ug/kg	330	ND	08/15/94
1,2,4-Trichlorobenzene	ug/kg	330	ND	08/15/94
Naphthalene	ug/kg	330	ND	08/15/94
Benzoic Acid	ug/kg	1700	ND	08/15/94
4-Chloroaniline	ug/kg	660	ND	08/15/94
Hexachlorobutadiene	ug/kg	330	ND	08/15/94
4-Chloro-3-methylphenol	ug/kg	660	ND	08/15/94
2-Methylnaphthalene	ug/kg	330	ND	08/15/94
Hexachlorocyclopentadiene	ug/kg	330	ND	08/15/94
2,4,6-Trichlorophenol	ug/kg	330	ND	08/15/94
2,4,5-Trichlorophenol	ug/kg	330	ND	08/15/94
2-Chloronaphthalene	ug/kg	330	ND	08/15/94
2-Nitroaniline	ug/kg	1700	ND	08/15/94
Dimethylphthalate	ug/kg	330	ND	08/15/94
Acenaphthylene	ug/kg	330	ND	08/15/94
2,6-Dinitrotoluene	ug/kg	330	ND	08/15/94
3-Nitroaniline	ug/kg	1700	ND	08/15/94
Acenaphthene	ug/kg	330	ND	08/15/94
2,4-Dinitrophenol	ug/kg	1700	ND	08/15/94
4-Nitrophenol	ug/kg	1700	ND	08/15/94
Dibenzofuran	ug/kg	330	ND	08/15/94
2,4-Dinitrotoluene	ug/kg	330	ND	08/15/94
Diethylphthalate	ug/kg	330	ND	08/15/94
Fluorene	ug/kg	330	ND	08/15/94
4-Chlorophenyl-phenylether	ug/kg	330	ND	08/15/94
4-Nitroaniline	ug/kg	1700	ND	08/15/94
4,6-Dinitro-2-methylphenol	ug/kg	1700	ND	08/15/94
n-Nitrosodiphenylamine	ug/kg	330	ND	08/15/94
4-Bromophenyl-phenylether	ug/kg	330	ND	08/15/94

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August 19, 1994
PACE Project Number: 440804529

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70 0369240
08/03/94
08/04/94
28205

T214

Units MDL DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Hexachlorobenzene	ug/kg	330	ND	08/15/94
Pentachlorophenol	ug/kg	1700	ND	08/15/94
Phenanthrene	ug/kg	330	ND	08/15/94
Anthracene	ug/kg	330	ND	08/15/94
Di-n-butylphthalate	ug/kg	330	ND	08/15/94
Fluoranthene	ug/kg	330	ND	08/15/94
Pyrene	ug/kg	330	ND	08/15/94
Butylbenzylphthalate	ug/kg	330	ND	08/15/94
Benzo(a)anthracene	ug/kg	330	ND	08/15/94
3,3'-Dichlorobenzidine	ug/kg	660	ND	08/15/94
Chrysene	ug/kg	330	ND	08/15/94
bis(2-Ethylhexyl)phthalate	ug/kg	330	ND	08/15/94
Di-n-octylphthalate	ug/kg	330	ND	08/15/94
Benzo(b)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(k)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(a)pyrene	ug/kg	330	ND	08/15/94
Indeno(1,2,3-cd)pyrene	ug/kg	330	ND	08/15/94
Dibenzo(a,h)anthracene	ug/kg	330	ND	08/15/94
Benzo(g,h,i)perylene	ug/kg	330	ND	08/15/94
2-Fluorophenol (surrogate)	%		90	08/15/94
Phenol-d6 (surrogate)	%		101	08/15/94
Nitrobenzene-d5 (surrogate)	%		102	08/15/94
2-Fluorobiphenyl (surrogate)	%		92	08/15/94
2,4,6-Tribromophenol (surrogate)	%		104	08/15/94
Terphenyl-d14 (surrogate)	%		96	08/15/94
Date Extracted				08/12/94

HALOGENATED VOLATILE ORGANICS BY 8010

VOLATILE HALOCARBONS BY EPA 8010

Dichlorodifluoromethane	ug/kg	20	ND	08/11/94
Chloromethane	ug/kg	20	ND	08/11/94
Vinyl Chloride	ug/kg	20	ND	08/11/94

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ORGANIC ANALYSIS

HALOGENATED VOLATILE ORGANICS BY 8010

Bromomethane	ug/kg	20	ND	08/11/94
Chloroethane	ug/kg	20	ND	08/11/94
Trichlorofluoromethane	ug/kg	20	ND	08/11/94
1,1-Dichloroethene	ug/kg	5.0	ND	08/11/94
Methylene Chloride	ug/kg	20	ND	08/11/94
trans-1,2-Dichloroethene	ug/kg	5.0	ND	08/11/94
1,1-Dichloroethane	ug/kg	5.0	ND	08/11/94
cis-1,2-Dichloroethene	ug/kg	5.0	ND	08/11/94
Chloroform	ug/kg	5.0	ND	08/11/94
1,1,1-Trichloroethane (TCA)	ug/kg	5.0	ND	08/11/94
Carbon Tetrachloride	ug/kg	5.0	ND	08/11/94
1,2-Dichloroethane (EDC)	ug/kg	5.0	ND	08/11/94
Trichloroethene (TCE)	ug/kg	5.0	ND	08/11/94
1,2-Dichloropropane	ug/kg	5.0	ND	08/11/94
Bromodichloromethane	ug/kg	5.0	ND	08/11/94
Dibromomethane	ug/kg	5.0	ND	08/11/94
2-Chloroethylvinyl ether	ug/kg	5.0	ND	08/11/94
cis-1,3-Dichloropropene	ug/kg	5.0	ND	08/11/94
trans-1,3-Dichloropropene	ug/kg	5.0	ND	08/11/94
1,1,2-Trichloroethane	ug/kg	5.0	ND	08/11/94
Tetrachloroethene	ug/kg	5.0	ND	08/11/94
Dibromochloromethane	ug/kg	5.0	ND	08/11/94
Chlorobenzene	ug/kg	5.0	ND	08/11/94
1,1,1,2-Tetrachloroethane	ug/kg	5.0	ND	08/11/94
Bromoform	ug/kg	5.0	ND	08/11/94
1,1,2,2-Tetrachloroethane	ug/kg	5.0	ND	08/11/94
1,2,3-Trichloropropane	ug/kg	5.0	ND	08/11/94
Bromobenzene	ug/kg	5.0	ND	08/11/94
1,3-Dichlorobenzene	ug/kg	5.0	ND	08/11/94
1,4-Dichlorobenzene	ug/kg	5.0	ND	08/11/94
Benzyl Chloride	ug/kg	5.0	ND	08/11/94

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ORGANIC ANALYSIS

HALOGENATED VOLATILE ORGANICS BY 8010

1,2-Dichlorobenzene	ug/kg	5.0	ND	08/11/94
Bromochloromethane (Surrogate Recovery)	%		123	08/11/94
1,4-Dichlorobutane (Surrogate Recovery)	%		120	08/11/94

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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):				08/13/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	1400 LB	08/13/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):				08/13/94
Benzene	ug/kg wet	5.0	ND	08/13/94
Toluene	ug/kg wet	5.0	ND	08/13/94
Ethylbenzene	ug/kg wet	5.0	ND	08/13/94
Xylenes, Total	ug/kg wet	5.0	ND	08/13/94

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	5.0	230 HP	08/15/94
Extractable Fuels, as Bunker C	mg/kg	83	780	08/15/94
Date Extracted			08/11/94	

OIL AND GREASE, SILICA GEL (LUFT)

Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	83	08/17/94
Date Extracted			08/12/94	

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethyl)ether	ug/kg	330	ND	08/15/94
2-Chlorophenol	ug/kg	330	ND	08/15/94
1,3-Dichlorobenzene	ug/kg	330	ND	08/15/94
1,4-Dichlorobenzene	ug/kg	330	ND	08/15/94
Benzyl Alcohol	ug/kg	660	ND	08/15/94
1,2-Dichlorobenzene	ug/kg	330	ND	08/15/94
2-Methylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroisopropyl)ether	ug/kg	330	ND	08/15/94
4-Methylphenol	ug/kg	330	ND	08/15/94
n-Nitroso-di-n-propylamine	ug/kg	330	ND	08/15/94
Hexachloroethane	ug/kg	330	ND	08/15/94
Nitrobenzene	ug/kg	330	ND	08/15/94
Isophorone	ug/kg	330	ND	08/15/94
2-Nitrophenol	ug/kg	330	ND	08/15/94

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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2,4-Dimethylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethoxy)methane	ug/kg	330	ND	08/15/94
2,4-Dichlorophenol	ug/kg	330	ND	08/15/94
1,2,4-Trichlorobenzene	ug/kg	330	ND	08/15/94
Naphthalene	ug/kg	330	ND	08/15/94
Benzoic Acid	ug/kg	1700	ND	08/15/94
4-Chloroaniline	ug/kg	660	ND	08/15/94
Hexachlorobutadiene	ug/kg	330	ND	08/15/94
4-Chloro-3-methylphenol	ug/kg	660	ND	08/15/94
2-Methylnaphthalene	ug/kg	330	ND	08/15/94
Hexachlorocyclopentadiene	ug/kg	330	ND	08/15/94
2,4,6-Trichlorophenol	ug/kg	330	ND	08/15/94
2,4,5-Trichlorophenol	ug/kg	330	ND	08/15/94
2-Chloronaphthalene	ug/kg	330	ND	08/15/94
2-Nitroaniline	ug/kg	1700	ND	08/15/94
Dimethylphthalate	ug/kg	330	ND	08/15/94
Acenaphthylene	ug/kg	330	ND	08/15/94
2,6-Dinitrotoluene	ug/kg	330	ND	08/15/94
3-Nitroaniline	ug/kg	1700	ND	08/15/94
Acenaphthene	ug/kg	330	548	08/15/94
2,4-Dinitrophenol	ug/kg	1700	ND	08/15/94
4-Nitrophenol	ug/kg	1700	ND	08/15/94
Dibenzofuran	ug/kg	330	ND	08/15/94
2,4-Dinitrotoluene	ug/kg	330	ND	08/15/94
Diethylphthalate	ug/kg	330	ND	08/15/94
Fluorene	ug/kg	330	430	08/15/94
4-Chlorophenyl-phenylether	ug/kg	330	ND	08/15/94
4-Nitroaniline	ug/kg	1700	ND	08/15/94
4,6-Dinitro-2-methylphenol	ug/kg	1700	ND	08/15/94
n-Nitrosodiphenylamine	ug/kg	330	ND	08/15/94
4-Bromophenyl-phenylether	ug/kg	330	ND	08/15/94

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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Hexachlorobenzene	ug/kg	330	ND	08/15/94
Pentachlorophenol	ug/kg	1700	ND	08/15/94
Phenanthrene	ug/kg	330	1400	08/15/94
Anthracene	ug/kg	330	370	08/15/94
Di-n-butylphthalate	ug/kg	330	ND	08/15/94
Fluoranthene	ug/kg	330	990	08/15/94
Pyrene	ug/kg	330	750	08/15/94
Butylbenzylphthalate	ug/kg	330	ND	08/15/94
Benzo(a)anthracene	ug/kg	330	ND	08/15/94
3,3'-Dichlorobenzidine	ug/kg	660	ND	08/15/94
Chrysene	ug/kg	330	ND	08/15/94
bis(2-Ethylhexyl)phthalate	ug/kg	330	ND	08/15/94
Di-n-octylphthalate	ug/kg	330	ND	08/15/94
Benzo(b)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(k)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(a)pyrene	ug/kg	330	ND	08/15/94
Indeno(1,2,3-cd)pyrene	ug/kg	330	ND	08/15/94
Dibenzo(a,h)anthracene	ug/kg	330	ND	08/15/94
Benzo(g,h,i)perylene	ug/kg	330	ND	08/15/94
2-Fluorophenol (surrogate)	%		88	08/15/94
Phenol-d6 (surrogate)	%		100	08/15/94
Nitrobenzene-d5 (surrogate)	%		102	08/15/94
2-Fluorobiphenyl (surrogate)	%		94	08/15/94
2,4,6-Tribromophenol (surrogate)	%		117	08/15/94
Terphenyl-d14 (surrogate)	%		105	08/15/94
Date Extracted			08/12/94	

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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/15/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	ND	08/15/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/15/94
Benzene	ug/kg wet	5.0	ND	08/15/94
Toluene	ug/kg wet	5.0	ND	08/15/94
Ethylbenzene	ug/kg wet	5.0	ND	08/15/94
Xylenes, Total	ug/kg wet	5.0	ND	08/15/94

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	5.0	30 HP	08/16/94
Extractable Fuels, as Bunker C	mg/kg	8.3	230	08/16/94
Date Extracted			08/11/94	

OIL AND GREASE, SILICA GEL (LUFT)

Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	67	08/17/94
Date Extracted			08/12/94	

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethyl)ether	ug/kg	330	ND	08/15/94
2-Chlorophenol	ug/kg	330	ND	08/15/94
1,3-Dichlorobenzene	ug/kg	330	ND	08/15/94
1,4-Dichlorobenzene	ug/kg	330	ND	08/15/94
Benzyl Alcohol	ug/kg	660	ND	08/15/94
1,2-Dichlorobenzene	ug/kg	330	ND	08/15/94
2-Methylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroisopropyl)ether	ug/kg	330	ND	08/15/94
4-Methylphenol	ug/kg	330	ND	08/15/94
n-Nitroso-di-n-propylamine	ug/kg	330	ND	08/15/94
Hexachloroethane	ug/kg	330	ND	08/15/94
Nitrobenzene	ug/kg	330	ND	08/15/94
Isophorone	ug/kg	330	ND	08/15/94
2-Nitrophenol	ug/kg	330	ND	08/15/94

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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2,4-Dimethylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethoxy)methane	ug/kg	330	ND	08/15/94
2,4-Dichlorophenol	ug/kg	330	ND	08/15/94
1,2,4-Trichlorobenzene	ug/kg	330	ND	08/15/94
Naphthalene	ug/kg	330	ND	08/15/94
Benzoic Acid	ug/kg	1700	ND	08/15/94
4-Chloroaniline	ug/kg	660	ND	08/15/94
Hexachlorobutadiene	ug/kg	330	ND	08/15/94
4-Chloro-3-methylphenol	ug/kg	660	ND	08/15/94
2-Methylnaphthalene	ug/kg	330	ND	08/15/94
Hexachlorocyclopentadiene	ug/kg	330	ND	08/15/94
2,4,6-Trichlorophenol	ug/kg	330	ND	08/15/94
2,4,5-Trichlorophenol	ug/kg	330	ND	08/15/94
2-Chloronaphthalene	ug/kg	330	ND	08/15/94
2-Nitroaniline	ug/kg	1700	ND	08/15/94
Dimethylphthalate	ug/kg	330	ND	08/15/94
Acenaphthylene	ug/kg	330	ND	08/15/94
2,6-Dinitrotoluene	ug/kg	330	ND	08/15/94
3-Nitroaniline	ug/kg	1700	ND	08/15/94
Acenaphthene	ug/kg	330	ND	08/15/94
2,4-Dinitrophenol	ug/kg	1700	ND	08/15/94
4-Nitrophenol	ug/kg	1700	ND	08/15/94
Dibenzofuran	ug/kg	330	ND	08/15/94
2,4-Dinitrotoluene	ug/kg	330	ND	08/15/94
Diethylphthalate	ug/kg	330	ND	08/15/94
Fluorene	ug/kg	330	ND	08/15/94
4-Chlorophenyl-phenylether	ug/kg	330	ND	08/15/94
4-Nitroaniline	ug/kg	1700	ND	08/15/94
4,6-Dinitro-2-methylphenol	ug/kg	1700	ND	08/15/94
n-Nitrosodiphenylamine	ug/kg	330	ND	08/15/94
4-Bromophenyl-phenylether	ug/kg	330	ND	08/15/94

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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Hexachlorobenzene	ug/kg	330	ND	08/15/94
Pentachlorophenol	ug/kg	1700	ND	08/15/94
Phenanthrene	ug/kg	330	ND	08/15/94
Anthracene	ug/kg	330	ND	08/15/94
Di-n-butylphthalate	ug/kg	330	ND	08/15/94
Fluoranthene	ug/kg	330	ND	08/15/94
Pyrene	ug/kg	330	ND	08/15/94
Butylbenzylphthalate	ug/kg	330	ND	08/15/94
Benzo(a)anthracene	ug/kg	330	ND	08/15/94
3,3'-Dichlorobenzidine	ug/kg	660	ND	08/15/94
Chrysene	ug/kg	330	ND	08/15/94
bis(2-Ethylhexyl)phthalate	ug/kg	330	ND	08/15/94
Di-n-octylphthalate	ug/kg	330	ND	08/15/94
Benzo(b)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(k)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(a)pyrene	ug/kg	330	ND	08/15/94
Indeno(1,2,3-cd)pyrene	ug/kg	330	ND	08/15/94
Dibenzo(a,h)anthracene	ug/kg	330	ND	08/15/94
Benzo(g,h,i)perylene	ug/kg	330	ND	08/15/94
2-Fluorophenol (surrogate)	%		91	08/15/94
Phenol-d6 (surrogate)	%		101	08/15/94
Nitrobenzene-d5 (surrogate)	%		101	08/15/94
2-Fluorobiphenyl (surrogate)	%		95	08/15/94
2,4,6-Tribromophenol (surrogate)	%		99	08/15/94
Terphenyl-d14 (surrogate)	%		100	08/15/94
Date Extracted				08/12/94

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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/15/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	2500 HP ✓	08/15/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/15/94
Benzene	ug/kg wet	5.0	ND	08/15/94
Toluene	ug/kg wet	5.0	ND	08/15/94
Ethylbenzene	ug/kg wet	5.0	ND	08/15/94
Xylenes, Total	ug/kg wet	5.0	ND	08/15/94

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	50	540 HP	08/15/94
Extractable Fuels, as Bunker C	mg/kg	83	1800	08/15/94
Date Extracted			08/11/94	

OIL AND GREASE, SILICA GEL (LUFT)

Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	880 ✓	08/17/94
Date Extracted			08/12/94	

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol	ug/kg	1600	ND	08/17/94
bis(2-Chloroethyl)ether	ug/kg	1600	ND	08/17/94
2-Chlorophenol	ug/kg	1600	ND	08/17/94
1,3-Dichlorobenzene	ug/kg	1600	ND	08/17/94
1,4-Dichlorobenzene	ug/kg	1600	ND	08/17/94
Benzyl Alcohol	ug/kg	3300	ND	08/17/94
1,2-Dichlorobenzene	ug/kg	1600	ND	08/17/94
2-Methylphenol	ug/kg	1600	ND	08/17/94
bis(2-Chloroisopropyl)ether	ug/kg	1600	ND	08/17/94
4-Methylphenol	ug/kg	1600	ND	08/17/94
n-Nitroso-di-n-propylamine	ug/kg	1600	ND	08/17/94
Hexachloroethane	ug/kg	1600	ND	08/17/94
Nitrobenzene	ug/kg	1600	ND	08/17/94
Isophorone	ug/kg	1600	ND	08/17/94
2-Nitrophenol	ug/kg	1600	ND	08/17/94

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<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
2,4-Dimethylphenol	ug/kg	1600	ND 08/17/94
bis(2-Chloroethoxy)methane	ug/kg	1600	ND 08/17/94
2,4-Dichlorophenol	ug/kg	1600	ND 08/17/94
1,2,4-Trichlorobenzene	ug/kg	1600	ND 08/17/94
Naphthalene	ug/kg	1600	ND 08/17/94
Benzoic Acid	ug/kg	8500	ND 08/17/94
4-Chloroaniline	ug/kg	3300	ND 08/17/94
Hexachlorobutadiene	ug/kg	1600	ND 08/17/94
4-Chloro-3-methylphenol	ug/kg	3300	ND 08/17/94
2-Methylnaphthalene	ug/kg	1600	ND 08/17/94
Hexachlorocyclopentadiene	ug/kg	1600	ND 08/17/94
2,4,6-Trichlorophenol	ug/kg	1600	ND 08/17/94
2,4,5-Trichlorophenol	ug/kg	1600	ND 08/17/94
2-Chloronaphthalene	ug/kg	1600	ND 08/17/94
2-Nitroaniline	ug/kg	8500	ND 08/17/94
Dimethylphthalate	ug/kg	1600	ND 08/17/94
Acenaphthylene	ug/kg	1600	ND 08/17/94
2,6-Dinitrotoluene	ug/kg	1600	ND 08/17/94
3-Nitroaniline	ug/kg	8500	ND 08/17/94
Acenaphthene	ug/kg	1600	ND 08/17/94
2,4-Dinitrophenol	ug/kg	8500	ND 08/17/94
4-Nitrophenol	ug/kg	8500	ND 08/17/94
Dibenzofuran	ug/kg	1600	ND 08/17/94
2,4-Dinitrotoluene	ug/kg	1600	ND 08/17/94
Diethylphthalate	ug/kg	1600	ND 08/17/94
Fluorene	ug/kg	1600	ND 08/17/94
4-Chlorophenyl-phenylether	ug/kg	1600	ND 08/17/94
4-Nitroaniline	ug/kg	8500	ND 08/17/94
4,6-Dinitro-2-methylphenol	ug/kg	8500	ND 08/17/94
n-Nitrosodiphenylamine	ug/kg	1600	ND 08/17/94
4-Bromophenyl-phenylether	ug/kg	1600	ND 08/17/94

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Units MDL DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Parameter	Units	MDL	HI	DATE ANALYZED
Hexachlorobenzene	ug/kg	1600	ND	08/17/94
Pentachlorophenol	ug/kg	8500	ND	08/17/94
Phenanthrene	ug/kg	1600	ND	08/17/94
Anthracene	ug/kg	1600	ND	08/17/94
Di-n-butylphthalate	ug/kg	1600	ND	08/17/94
Fluoranthene	ug/kg	1600	ND	08/17/94
Pyrene	ug/kg	1600	ND	08/17/94
Butylbenzylphthalate	ug/kg	1600	ND	08/17/94
Benzo(a)anthracene	ug/kg	1600	ND	08/17/94
3,3'-Dichlorobenzidine	ug/kg	3300	ND	08/17/94
Chrysene	ug/kg	1600	ND	08/17/94
bis(2-Ethylhexyl)phthalate	ug/kg	1600	ND	08/17/94
Di-n-octylphthalate	ug/kg	1600	ND	08/17/94
Benzo(b)fluoranthene	ug/kg	1600	ND	08/17/94
Benzo(k)fluoranthene	ug/kg	1600	ND	08/17/94
Benzo(a)pyrene	ug/kg	1600	ND	08/17/94
Indeno(1,2,3-cd)pyrene	ug/kg	1600	ND	08/17/94
Dibenzo(a,h)anthracene	ug/kg	1600	ND	08/17/94
Benzo(g,h,i)perylene	ug/kg	1600	ND	08/17/94
2-Fluorophenol (surrogate)	%		96	08/17/94
Phenol-d6 (surrogate)	%		112	08/17/94
Nitrobenzene-d5 (surrogate)	%		119	08/17/94
2-Fluorobiphenyl (surrogate)	%		155	08/17/94
2,4,6-Tribromophenol (surrogate)	%		137	08/17/94
Terphenyl-d14 (surrogate)	%		150	08/17/94
Date Extracted				08/12/94

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Units MDL DATE ANALYZED

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):

Purgeable Fuels, as Gasoline (EPA 8015M) ug/kg wet 1000 18000 HP 08/15/94

PURGEABLE AROMATICS (BTXE BY EPA 8020M):

Benzene ug/kg wet 5.0 ND 08/15/94

Toluene ug/kg wet 5.0 ND 08/15/94

Ethylbenzene ug/kg wet 5.0 ND 08/15/94

Xylenes, Total ug/kg wet 5.0 ND 08/15/94

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel mg/kg 120 4400 HP 08/15/94

Extractable Fuels, as Bunker C mg/kg 1050 28000 08/15/94

Date Extracted 08/11/94

OIL AND GREASE, SILICA GEL (LUFT)

Oil and Grease, Gravimetric (SM5520) mg/kg wet 50 7700 08/17/94

Date Extracted 08/12/94

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol ug/kg 33000 ND 08/17/94

bis(2-Chloroethyl)ether ug/kg 33000 ND 08/17/94

2-Chlorophenol ug/kg 33000 ND 08/17/94

1,3-Dichlorobenzene ug/kg 33000 ND 08/17/94

1,4-Dichlorobenzene ug/kg 33000 ND 08/17/94

Benzyl Alcohol ug/kg 66000 ND 08/17/94

1,2-Dichlorobenzene ug/kg 33000 ND 08/17/94

2-Methylphenol ug/kg 33000 ND 08/17/94

bis(2-Chloroisopropyl)ether ug/kg 33000 ND 08/17/94

4-Methylphenol ug/kg 33000 ND 08/17/94

n-Nitroso-di-n-propylamine ug/kg 33000 ND 08/17/94

Hexachloroethane ug/kg 33000 ND 08/17/94

Nitrobenzene ug/kg 33000 ND 08/17/94

Isophorone ug/kg 33000 ND 08/17/94

2-Nitrophenol ug/kg 33000 ND 08/17/94

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Parameter	Units	MDL		DATE ANALYZED
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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2,4-Dimethylphenol	ug/kg	33000	ND	08/17/94
bis(2-Chloroethoxy)methane	ug/kg	33000	ND	08/17/94
2,4-Dichlorophenol	ug/kg	33000	ND	08/17/94
1,2,4-Trichlorobenzene	ug/kg	33000	ND	08/17/94
Naphthalene	ug/kg	33000	ND	08/17/94
Benzoic Acid	ug/kg	170000	ND	08/17/94
4-Chloroaniline	ug/kg	66000	ND	08/17/94
Hexachlorobutadiene	ug/kg	33000	ND	08/17/94
4-Chloro-3-methylphenol	ug/kg	66000	ND	08/17/94
2-Methylnaphthalene	ug/kg	33000	ND	08/17/94
Hexachlorocyclopentadiene	ug/kg	33000	ND	08/17/94
2,4,6-Trichlorophenol	ug/kg	33000	ND	08/17/94
2,4,5-Trichlorophenol	ug/kg	33000	ND	08/17/94
2-Chloronaphthalene	ug/kg	33000	ND	08/17/94
2-Nitroaniline	ug/kg	170000	ND	08/17/94
Dimethylphthalate	ug/kg	33000	ND	08/17/94
Acenaphthylene	ug/kg	33000	ND	08/17/94
2,6-Dinitrotoluene	ug/kg	33000	ND	08/17/94
3-Nitroaniline	ug/kg	170000	ND	08/17/94
Acenaphthene	ug/kg	33000	ND	08/17/94
2,4-Dinitrophenol	ug/kg	170000	ND	08/17/94
4-Nitrophenol	ug/kg	170000	ND	08/17/94
Dibenzofuran	ug/kg	33000	ND	08/17/94
2,4-Dinitrotoluene	ug/kg	33000	ND	08/17/94
Diethylphthalate	ug/kg	33000	ND	08/17/94
Fluorene	ug/kg	33000	ND	08/17/94
4-Chlorophenyl-phenylether	ug/kg	33000	ND	08/17/94
4-Nitroaniline	ug/kg	170000	ND	08/17/94
4,6-Dinitro-2-methylphenol	ug/kg	170000	ND	08/17/94
n-Nitrosodiphenylamine	ug/kg	33000	ND	08/17/94
4-Bromophenyl-phenylether	ug/kg	33000	ND	08/17/94

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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Hexachlorobenzene	ug/kg	33000	HI	08/17/94
Pentachlorophenol	ug/kg	170000	ND	08/17/94
Phenanthrene	ug/kg	33000	ND	08/17/94
Anthracene	ug/kg	33000	ND	08/17/94
Di-n-butylphthalate	ug/kg	33000	ND	08/17/94
Fluoranthene	ug/kg	33000	ND	08/17/94

Pyrene	ug/kg	33000	ND	08/17/94
Butylbenzylphthalate	ug/kg	33000	ND	08/17/94
Benzo(a)anthracene	ug/kg	33000	ND	08/17/94
3,3'-Dichlorobenzidine	ug/kg	66000	ND	08/17/94
Chrysene	ug/kg	33000	ND	08/17/94
bis(2-Ethylhexyl)phthalate	ug/kg	33000	ND	08/17/94

Di-n-octylphthalate	ug/kg	33000	ND	08/17/94
Benzo(b)fluoranthene	ug/kg	33000	ND	08/17/94
Benzo(k)fluoranthene	ug/kg	33000	ND	08/17/94
Benzo(a)pyrene	ug/kg	33000	ND	08/17/94
Indeno(1,2,3-cd)pyrene	ug/kg	33000	ND	08/17/94
Dibenzo(a,h)anthracene	ug/kg	33000	ND	08/17/94

Benzo(g,h,i)perylene	ug/kg	33000	ND	08/17/94
2-Fluorophenol (surrogate)	%		ND SR	08/17/94
Phenol-d6 (surrogate)	%		ND	08/17/94
Nitrobenzene-d5 (surrogate)	%		ND	08/17/94
2-Fluorobiphenyl (surrogate)	%		ND	08/17/94
2,4,6-Tribromophenol (surrogate)	%		ND	08/17/94

Terphenyl-d14 (surrogate)	%		ND	08/17/94
Date Extracted			08/12/94	

HALOGENATED VOLATILE ORGANICS BY 8010

VOLATILE HALOCARBONS BY EPA 8010

Dichlorodifluoromethane	ug/kg	20	ND	08/15/94
Chloromethane	ug/kg	20	ND	08/15/94
Vinyl Chloride	ug/kg	20	ND	08/15/94

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ORGANIC ANALYSIS

HALOGENATED VOLATILE ORGANICS BY 8010

Bromomethane	ug/kg	20	ND	08/15/94
Chloroethane	ug/kg	20	ND	08/15/94
Trichlorofluoromethane	ug/kg	20	ND	08/15/94
1,1-Dichloroethene	ug/kg	5.0	ND	08/15/94
Methylene Chloride	ug/kg	20	30	08/15/94
trans-1,2-Dichloroethene	ug/kg	5.0	ND	08/15/94
1,1-Dichloroethane	ug/kg	5.0	ND	08/15/94
cis-1,2-Dichloroethene	ug/kg	5.0	ND	08/15/94
Chloroform	ug/kg	5.0	ND	08/15/94
1,1,1-Trichloroethane (TCA)	ug/kg	5.0	ND	08/15/94
Carbon Tetrachloride	ug/kg	5.0	ND	08/15/94
1,2-Dichloroethane (EDC)	ug/kg	5.0	ND	08/15/94
Trichloroethene (TCE)	ug/kg	5.0	ND	08/15/94
1,2-Dichloropropane	ug/kg	5.0	ND	08/15/94
Bromodichloromethane	ug/kg	5.0	ND	08/15/94
Dibromomethane	ug/kg	5.0	ND	08/15/94
2-Chloroethylvinyl ether	ug/kg	5.0	ND	08/15/94
cis-1,3-Dichloropropene	ug/kg	5.0	ND	08/15/94
trans-1,3-Dichloropropene	ug/kg	5.0	ND	08/15/94
1,1,2-Trichloroethane	ug/kg	5.0	ND	08/15/94
Tetrachloroethene	ug/kg	5.0	ND	08/15/94
Dibromochloromethane	ug/kg	5.0	ND	08/15/94
Chlorobenzene	ug/kg	5.0	ND	08/15/94
1,1,1,2-Tetrachloroethane	ug/kg	5.0	ND	08/15/94
Bromoform	ug/kg	5.0	ND	08/15/94
1,1,2,2-Tetrachloroethane	ug/kg	5.0	ND	08/15/94
1,2,3-Trichloropropane	ug/kg	5.0	ND	08/15/94
Bromobenzene	ug/kg	5.0	ND	08/15/94
1,3-Dichlorobenzene	ug/kg	5.0	ND	08/15/94
1,4-Dichlorobenzene	ug/kg	5.0	ND	08/15/94
Benzyl Chloride	ug/kg	5.0	ND	08/15/94



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ORGANIC ANALYSIS

HALOGENATED VOLATILE ORGANICS BY 8010

1,2-Dichlorobenzene	ug/kg	5.0	ND	08/15/94
Bromochloromethane (Surrogate Recovery)	%		142	08/15/94
1,4-Dichlorobutane (Surrogate Recovery)	%		112	08/15/94

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<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):				08/15/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	4300 HP	08/15/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):				08/15/94
Benzene	ug/kg wet	5.0	ND	08/15/94
Toluene	ug/kg wet	5.0	ND	08/15/94
Ethylbenzene	ug/kg wet	5.0	ND	08/15/94
Xylenes, Total	ug/kg wet	5.0	ND	08/15/94

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	100	1700 HP	08/15/94
Extractable Fuels, as Bunker C	mg/kg	420	7400	08/15/94
Date Extracted			08/11/94	

OIL AND GREASE, SILICA GEL (LUFT)

Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	2800	08/17/94
Date Extracted			08/12/94	

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol	ug/kg	1600	ND	08/17/94
bis(2-Chloroethyl)ether	ug/kg	1600	ND	08/17/94
2-Chlorophenol	ug/kg	1600	ND	08/17/94
1,3-Dichlorobenzene	ug/kg	1600	ND	08/17/94
1,4-Dichlorobenzene	ug/kg	1600	ND	08/17/94
Benzyl Alcohol	ug/kg	3300	ND	08/17/94
1,2-Dichlorobenzene	ug/kg	1600	ND	08/17/94
2-Methylphenol	ug/kg	1600	ND	08/17/94
bis(2-Chloroisopropyl)ether	ug/kg	1600	ND	08/17/94
4-Methylphenol	ug/kg	1600	ND	08/17/94
n-Nitroso-di-n-propylamine	ug/kg	1600	ND	08/17/94
Hexachloroethane	ug/kg	1600	ND	08/17/94
Nitrobenzene	ug/kg	1600	ND	08/17/94
Isophorone	ug/kg	1600	ND	08/17/94
2-Nitrophenol	ug/kg	1600	ND	08/17/94

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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Parameter	Units	MDL	H1	DATE ANALYZED
2,4-Dimethylphenol	ug/kg	1600	ND	08/17/94
bis(2-Chloroethoxy)methane	ug/kg	1600	ND	08/17/94
2,4-Dichlorophenol	ug/kg	1600	ND	08/17/94
1,2,4-Trichlorobenzene	ug/kg	1600	ND	08/17/94
Naphthalene	ug/kg	1600	ND	08/17/94
Benzoic Acid	ug/kg	8500	ND	08/17/94
4-Chloroaniline	ug/kg	3300	ND	08/17/94
Hexachlorobutadiene	ug/kg	1600	ND	08/17/94
4-Chloro-3-methylphenol	ug/kg	3300	ND	08/17/94
2-Methylnaphthalene	ug/kg	1600	ND	08/17/94
Hexachlorocyclopentadiene	ug/kg	1600	ND	08/17/94
2,4,6-Trichlorophenol	ug/kg	1600	ND	08/17/94
2,4,5-Trichlorophenol	ug/kg	1600	ND	08/17/94
2-Chloronaphthalene	ug/kg	1600	ND	08/17/94
2-Nitroaniline	ug/kg	8500	ND	08/17/94
Dimethylphthalate	ug/kg	1600	ND	08/17/94
Acenaphthylene	ug/kg	1600	ND	08/17/94
2,6-Dinitrotoluene	ug/kg	1600	ND	08/17/94
3-Nitroaniline	ug/kg	8500	ND	08/17/94
Acenaphthene	ug/kg	1600	ND	08/17/94
2,4-Dinitrophenol	ug/kg	8500	ND	08/17/94
4-Nitrophenol	ug/kg	8500	ND	08/17/94
Dibenzofuran	ug/kg	1600	ND	08/17/94
2,4-Dinitrotoluene	ug/kg	1600	ND	08/17/94
Diethylphthalate	ug/kg	1600	ND	08/17/94
Fluorene	ug/kg	1600	ND	08/17/94
4-Chlorophenyl-phenylether	ug/kg	1600	ND	08/17/94
4-Nitroaniline	ug/kg	8500	ND	08/17/94
4,6-Dinitro-2-methylphenol	ug/kg	8500	ND	08/17/94
n-Nitrosodiphenylamine	ug/kg	1600	ND	08/17/94
4-Bromophenyl-phenylether	ug/kg	1600	ND	08/17/94

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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Hexachlorobenzene	ug/kg	1600	ND	08/17/94
Pentachlorophenol	ug/kg	8500	ND	08/17/94
Phenanthrene	ug/kg	1600	4500	08/17/94
Anthracene	ug/kg	1600	1900	08/17/94
Di-n-butylphthalate	ug/kg	1600	ND	08/17/94
Fluoranthene	ug/kg	1600	ND	08/17/94
Pyrene	ug/kg	1600	2900	08/17/94
Butylbenzylphthalate	ug/kg	1600	ND	08/17/94
Benzo(a)anthracene	ug/kg	1600	ND	08/17/94
3,3'-Dichlorobenzidine	ug/kg	3300	ND	08/17/94
Chrysene	ug/kg	1600	ND	08/17/94
bis(2-Ethylhexyl)phthalate	ug/kg	1600	ND	08/17/94
Di-n-octylphthalate	ug/kg	1600	ND	08/17/94
Benzo(b)fluoranthene	ug/kg	1600	ND	08/17/94
Benzo(k)fluoranthene	ug/kg	1600	ND	08/17/94
Benzo(a)pyrene	ug/kg	1600	ND	08/17/94
Indeno(1,2,3-cd)pyrene	ug/kg	1600	ND	08/17/94
Dibenzo(a,h)anthracene	ug/kg	1600	ND	08/17/94
Benzo(g,h,i)perylene	ug/kg	1600	ND	08/17/94
2-Fluorophenol (surrogate)	%	100		08/17/94
Phenol-d6 (surrogate)	%	114		08/17/94
Nitrobenzene-d5 (surrogate)	%	112		08/17/94
2-Fluorobiphenyl (surrogate)	%	147		08/17/94
2,4,6-Tribromophenol (surrogate)	%	156		08/17/94
Terphenyl-d14 (surrogate)	%	165		08/17/94
Date Extracted				08/12/94

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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/15/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	ND	08/15/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/15/94
Benzene	ug/kg wet	5.0	ND	08/15/94
Toluene	ug/kg wet	5.0	ND	08/15/94
Ethylbenzene	ug/kg wet	5.0	ND	08/15/94
Xylenes, Total	ug/kg wet	5.0	ND	08/15/94

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	5.0	ND	08/15/94
Extractable Fuels, as Bunker C	mg/kg	8.3	40	08/15/94
Date Extracted			08/11/94	

OIL AND GREASE, SILICA GEL (LUFT)

Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	13	08/17/94
Date Extracted			08/12/94	

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Phenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethyl)ether	ug/kg	330	ND	08/15/94
2-Chlorophenol	ug/kg	330	ND	08/15/94
1,3-Dichlorobenzene	ug/kg	330	ND	08/15/94
1,4-Dichlorobenzene	ug/kg	330	ND	08/15/94
Benzyl Alcohol	ug/kg	660	ND	08/15/94
1,2-Dichlorobenzene	ug/kg	330	ND	08/15/94
2-Methylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroisopropyl)ether	ug/kg	330	ND	08/15/94
4-Methylphenol	ug/kg	330	ND	08/15/94
n-Nitroso-di-n-propylamine	ug/kg	330	ND	08/15/94
Hexachloroethane	ug/kg	330	ND	08/15/94
Nitrobenzene	ug/kg	330	ND	08/15/94
Isophorone	ug/kg	330	ND	08/15/94
2-Nitrophenol	ug/kg	330	ND	08/15/94

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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2,4-Dimethylphenol	ug/kg	330	ND	08/15/94
bis(2-Chloroethoxy)methane	ug/kg	330	ND	08/15/94
2,4-Dichlorophenol	ug/kg	330	ND	08/15/94
1,2,4-Trichlorobenzene	ug/kg	330	ND	08/15/94
Naphthalene	ug/kg	330	ND	08/15/94
Benzoic Acid	ug/kg	1700	ND	08/15/94
4-Chloroaniline	ug/kg	660	ND	08/15/94
Hexachlorobutadiene	ug/kg	330	ND	08/15/94
4-Chloro-3-methylphenol	ug/kg	660	ND	08/15/94
2-Methylnaphthalene	ug/kg	330	ND	08/15/94
Hexachlorocyclopentadiene	ug/kg	330	ND	08/15/94
2,4,6-Trichlorophenol	ug/kg	330	ND	08/15/94
2,4,5-Trichlorophenol	ug/kg	330	ND	08/15/94
2-Chloronaphthalene	ug/kg	330	ND	08/15/94
2-Nitroaniline	ug/kg	1700	ND	08/15/94
Dimethylphthalate	ug/kg	330	ND	08/15/94
Acenaphthylene	ug/kg	330	ND	08/15/94
2,6-Dinitrotoluene	ug/kg	330	ND	08/15/94
3-Nitroaniline	ug/kg	1700	ND	08/15/94
Acenaphthene	ug/kg	330	ND	08/15/94
2,4-Dinitrophenol	ug/kg	1700	ND	08/15/94
4-Nitrophenol	ug/kg	1700	ND	08/15/94
Dibenzofuran	ug/kg	330	ND	08/15/94
2,4-Dinitrotoluene	ug/kg	330	ND	08/15/94
Diethylphthalate	ug/kg	330	ND	08/15/94
Fluorene	ug/kg	330	ND	08/15/94
4-Chlorophenyl-phenylether	ug/kg	330	ND	08/15/94
4-Nitroaniline	ug/kg	1700	ND	08/15/94
4,6-Dinitro-2-methylphenol	ug/kg	1700	ND	08/15/94
n-Nitrosodiphenylamine	ug/kg	330	ND	08/15/94
4-Bromophenyl-phenylether	ug/kg	330	ND	08/15/94

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number:
 Date Collected:
 Date Received:
 Client Sample ID:

70 0369304
 08/03/94
 08/04/94
 28201

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Parameter	Units	MDL	DATE ANALYZED
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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Hexachlorobenzene	ug/kg	330	ND	08/15/94
Pentachlorophenol	ug/kg	1700	ND	08/15/94
Phenanthrene	ug/kg	330	ND	08/15/94
Anthracene	ug/kg	330	ND	08/15/94
Di-n-butylphthalate	ug/kg	330	ND	08/15/94
Fluoranthene	ug/kg	330	ND	08/15/94
Pyrene	ug/kg	330	ND	08/15/94
Butylbenzylphthalate	ug/kg	330	ND	08/15/94
Benzo(a)anthracene	ug/kg	330	ND	08/15/94
3,3'-Dichlorobenzidine	ug/kg	660	ND	08/15/94
Chrysene	ug/kg	330	ND	08/15/94
bis(2-Ethylhexyl)phthalate	ug/kg	330	ND	08/15/94
Di-n-octylphthalate	ug/kg	330	ND	08/15/94
Benzo(b)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(k)fluoranthene	ug/kg	330	ND	08/15/94
Benzo(a)pyrene	ug/kg	330	ND	08/15/94
Indeno(1,2,3-cd)pyrene	ug/kg	330	ND	08/15/94
Dibenzo(a,h)anthracene	ug/kg	330	ND	08/15/94
Benzo(g,h,i)perylene	ug/kg	330	ND	08/15/94
2-Fluorophenol (surrogate)	%		91	08/15/94
Phenol-d6 (surrogate)	%		100	08/15/94
Nitrobenzene-d5 (surrogate)	%		102	08/15/94
2-Fluorobiphenyl (surrogate)	%		94	08/15/94
2,4,6-Tribromophenol (surrogate)	%		104	08/15/94
Terphenyl-d14 (surrogate)	%		87	08/15/94
Date Extracted				08/12/94

REPORT OF LABORATORY ANALYSIS

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369339
 Date Collected: 08/04/94
 Date Received: 08/08/94
 Client Sample ID: 28201+203+
 205+207

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Composite</u>	<u>DATE ANALYZED</u>
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INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Arsenic (EPA Method 7060, Furnace AAS)	mg/kg wet	0.5	3.9	08/11/94
Barium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	82	08/12/94
Cadmium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	ND	08/12/94
Chromium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	33	08/12/94
Lead (EPA Method 7421, Furnace AAS)	mg/kg wet	0.5	6.7	08/12/94
Mercury (EPA Method 7471, Cold Vapor AA)	mg/kg wet	0.02	0.05	08/11/94
Selenium (EPA Method 7740, Furnace AAS)	mg/kg wet	0.5	ND	08/11/94
Silver (EPA Method 6010/200.7, ICP)	mg/kg wet	1	ND	08/12/94

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369312
 Date Collected: 08/03/94
 Date Received: 08/04/94
 Client Sample ID: 28203

Parameter Units MDL DI EXTRACT DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Parameter	Units	MDL	DI EXTRACT	DATE ANALYZED
Phenol	ug/L	17	ND	08/17/94
bis(2-Chloroethyl)ether	ug/L	17	ND	08/17/94
2-Chlorophenol	ug/L	17	ND	08/17/94
1,3-Dichlorobenzene	ug/L	17	ND	08/17/94
1,4-Dichlorobenzene	ug/L	17	ND	08/17/94
Benzyl Alcohol	ug/L	33	ND	08/17/94
1,2-Dichlorobenzene	ug/L	17	ND	08/17/94
2-Methylphenol	ug/L	17	ND	08/17/94
bis(2-Chloroisopropyl)ether	ug/L	17	ND	08/17/94
4-Methylphenol	ug/L	17	ND	08/17/94
n-Nitroso-di-n-propylamine	ug/L	17	ND	08/17/94
Hexachloroethane	ug/L	17	ND	08/17/94
Nitrobenzene	ug/L	17	ND	08/17/94
Isophorone	ug/L	17	ND	08/17/94
2-Nitrophenol	ug/L	17	ND	08/17/94
2,4-Dimethylphenol	ug/L	17	ND	08/17/94
bis(2-Chloroethoxy)methane	ug/L	17	ND	08/17/94
2,4-Dichlorophenol	ug/L	17	ND	08/17/94
1,2,4-Trichlorobenzene	ug/L	17	ND	08/17/94
Naphthalene	ug/L	17	ND	08/17/94
Benzoic Acid	ug/L	83	ND	08/17/94
4-Chloroaniline	ug/L	33	ND	08/17/94
Hexachlorobutadiene	ug/L	17	ND	08/17/94
4-Chloro-3-methylphenol	ug/L	33	ND	08/17/94
2-Methylnaphthalene	ug/L	17	ND	08/17/94
Hexachlorocyclopentadiene	ug/L	17	ND	08/17/94
2,4,6-Trichlorophenol	ug/L	17	ND	08/17/94
2,4,5-Trichlorophenol	ug/L	17	ND	08/17/94
2-Chloronaphthalene	ug/L	17	ND	08/17/94
2-Nitroaniline	ug/L	83	ND	08/17/94
Dimethylphthalate	ug/L	17	ND	08/17/94

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369312
 Date Collected: 08/03/94
 Date Received: 08/04/94
 Client Sample ID: 28203

Parameter Units MDL DI EXTRACT DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Parameter	Units	MDL	DI EXTRACT	DATE ANALYZED
Acenaphthylene	ug/L	17	ND	08/17/94
2,6-Dinitrotoluene	ug/L	17	ND	08/17/94
3-Nitroaniline	ug/L	84	ND	08/17/94
Acenaphthene	ug/L	17	ND	08/17/94
2,4-Dinitrophenol	ug/L	83	ND	08/17/94
4-Nitrophenol	ug/L	83	ND	08/17/94
Dibenzofuran	ug/L	17	ND	08/17/94
2,4-Dinitrotoluene	ug/L	17	ND	08/17/94
Diethylphthalate	ug/L	17	ND	08/17/94
Fluorene	ug/L	17	ND	08/17/94
4-Chlorophenyl-phenylether	ug/L	17	ND	08/17/94
4-Nitroaniline	ug/L	83	ND	08/17/94
4,6-Dinitro-2-methylphenol	ug/L	83	ND	08/17/94
n-Nitrosodiphenylamine	ug/L	17	ND	08/17/94
4-Bromophenyl-phenylether	ug/L	17	ND	08/17/94
Hexachlorobenzene	ug/L	17	ND	08/17/94
Pentachlorophenol	ug/L	83	ND	08/17/94
Phenanthrene	ug/L	17	ND	08/17/94
Anthracene	ug/L	17	ND	08/17/94
Di-n-butylphthalate	ug/L	17	ND	08/17/94
Fluoranthene	ug/L	17	ND	08/17/94
Pyrene	ug/L	17	ND	08/17/94
Butylbenzylphthalate	ug/L	17	ND	08/17/94
Benzo(a)anthracene	ug/L	17	ND	08/17/94
3,3'-Dichlorobenzidine	ug/L	33	ND	08/17/94
Chrysene	ug/L	17	ND	08/17/94
bis(2-Ethylhexyl)phthalate	ug/L	17	ND	08/17/94
Di-n-octylphthalate	ug/L	17	ND	08/17/94
Benzo(b)fluoranthene	ug/L	17	ND	08/17/94
Benzo(k)fluoranthene	ug/L	17	ND	08/17/94
Benzo(a)pyrene	ug/L	17	ND	08/17/94

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369312
 Date Collected: 08/03/94
 Date Received: 08/04/94
 Client Sample ID: 28203
 Parameter

Units MDL DI EXTRACT DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Indeno(1,2,3-cd)pyrene	ug/L	17	SV	
Dibenzo(a,h)anthracene	ug/L	17	ND	08/17/94
Benzo(g,h,i)perylene	ug/L	17	ND	08/17/94
2-Fluorophenol (surrogate)	%		37	08/17/94
Phenol-d6 (surrogate)	%		30	08/17/94
Nitrobenzene-d5 (surrogate)	%		81	08/17/94
2-Fluorobiphenyl (surrogate)	%		91	08/17/94
2,4,6-Tribromophenol (surrogate)	%		128	08/17/94
Terphenyl-d14 (surrogate)	%		109	08/17/94
Date Extracted				08/17/94

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369320
 Date Collected: 08/03/94
 Date Received: 08/04/94
 Client Sample ID: 28205

Parameter Units MDL DI EXTRACT DATE ANALYZED

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Parameter	Units	MDL	DI EXTRACT	DATE ANALYZED
Phenol	ug/L	17	ND	08/17/94
bis(2-Chloroethyl)ether	ug/L	17	ND	08/17/94
2-Chlorophenol	ug/L	17	ND	08/17/94
1,3-Dichlorobenzene	ug/L	17	ND	08/17/94
1,4-Dichlorobenzene	ug/L	17	ND	08/17/94
Benzyl Alcohol	ug/L	33	ND	08/17/94
1,2-Dichlorobenzene	ug/L	17	ND	08/17/94
2-Methylphenol	ug/L	17	ND	08/17/94
bis(2-Chloroisopropyl)ether	ug/L	17	ND	08/17/94
4-Methylphenol	ug/L	17	ND	08/17/94
n-Nitroso-di-n-propylamine	ug/L	17	ND	08/17/94
Hexachloroethane	ug/L	17	ND	08/17/94
Nitrobenzene	ug/L	17	ND	08/17/94
Isophorone	ug/L	17	ND	08/17/94
2-Nitrophenol	ug/L	17	ND	08/17/94
2,4-Dimethylphenol	ug/L	17	ND	08/17/94
bis(2-Chloroethoxy)methane	ug/L	17	ND	08/17/94
2,4-Dichlorophenol	ug/L	17	ND	08/17/94
1,2,4-Trichlorobenzene	ug/L	17	ND	08/17/94
Naphthalene	ug/L	17	ND	08/17/94
Benzoic Acid	ug/L	83	ND	08/17/94
4-Chloroaniline	ug/L	33	ND	08/17/94
Hexachlorobutadiene	ug/L	17	ND	08/17/94
4-Chloro-3-methylphenol	ug/L	33	ND	08/17/94
2-Methylnaphthalene	ug/L	17	ND	08/17/94
Hexachlorocyclopentadiene	ug/L	17	ND	08/17/94
2,4,6-Trichlorophenol	ug/L	17	ND	08/17/94
2,4,5-Trichlorophenol	ug/L	17	ND	08/17/94
2-Chloronaphthalene	ug/L	17	ND	08/17/94
2-Nitroaniline	ug/L	83	ND	08/17/94
Dimethylphthalate	ug/L	17	ND	08/17/94

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August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369320
Date Collected: 08/03/94
Date Received: 08/04/94
Client Sample ID: 28205

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DI EXTRACT</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DI EXTRACT</u>	<u>DATE ANALYZED</u>
Acenaphthylene	ug/L	17	ND	08/17/94
2,6-Dinitrotoluene	ug/L	17	ND	08/17/94
3-Nitroaniline	ug/L	83	ND	08/17/94
Acenaphthene	ug/L	17	ND	08/17/94
2,4-Dinitrophenol	ug/L	83	ND	08/17/94
4-Nitrophenol	ug/L	83	ND	08/17/94
Dibenzofuran	ug/L	17	ND	08/17/94
2,4-Dinitrotoluene	ug/L	17	ND	08/17/94
Diethylphthalate	ug/L	17	ND	08/17/94
Fluorene	ug/L	17	ND	08/17/94
4-Chlorophenyl-phenylether	ug/L	17	ND	08/17/94
4-Nitroaniline	ug/L	83	ND	08/17/94
4,6-Dinitro-2-methylphenol	ug/L	83	ND	08/17/94
n-Nitrosodiphenylamine	ug/L	17	ND	08/17/94
4-Bromophenyl-phenylether	ug/L	17	ND	08/17/94
Hexachlorobenzene	ug/L	17	ND	08/17/94
Pentachlorophenol	ug/L	83	ND	08/17/94
Phenanthrene	ug/L	17	ND	08/17/94
Anthracene	ug/L	17	ND	08/17/94
Di-n-butylphthalate	ug/L	17	ND	08/17/94
Fluoranthene	ug/L	17	ND	08/17/94
Pyrene	ug/L	17	ND	08/17/94
Butylbenzylphthalate	ug/L	17	ND	08/17/94
Benzo(a)anthracene	ug/L	17	ND	08/17/94
3,3'-Dichlorobenzidine	ug/L	33	ND	08/17/94
Chrysene	ug/L	17	ND	08/17/94
bis(2-Ethylhexyl)phthalate	ug/L	17	ND	08/17/94
Di-n-octylphthalate	ug/L	17	ND	08/17/94
Benzo(b)fluoranthene	ug/L	17	ND	08/17/94
Benzo(k)fluoranthene	ug/L	17	ND	08/17/94
Benzo(a)pyrene	ug/L	17	ND	08/17/94

REPORT OF LABORATORY ANALYSIS

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August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PACE Sample Number: 70 0369320
 Date Collected: 08/03/94
 Date Received: 08/04/94
 Client Sample ID: 28205

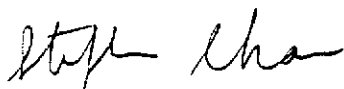
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DI EXTRACT</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Indeno(1,2,3-cd)pyrene	ug/L	17	SV	08/17/94
Dibenzo(a,h)anthracene	ug/L	17	ND	08/17/94
Benzo(g,h,i)perylene	ug/L	17	ND	08/17/94
2-Fluorophenol (surrogate)	%		45	08/17/94
Phenol-d6 (surrogate)	%		37	08/17/94
Nitrobenzene-d5 (surrogate)	%		74	08/17/94
2-Fluorobiphenyl (surrogate)	%		80	08/17/94
2,4,6-Tribromophenol (surrogate)	%		98	08/17/94
Terphenyl-d14 (surrogate)	%		57	08/17/94
Date Extracted				08/17/94

These data have been reviewed and are approved for release.



Darrell C. Cain
 Regional Director



REPORT OF LABORATORY ANALYSIS

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FOOTNOTES
for pages 1 through 40

August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HI	Sample was diluted due to high levels of hydrocarbons present.
HP	Hydrocarbons present do not match profile of laboratory standard.
LB	Low boiling point components are present in sample.
MDL	Method Detection Limit
ND	Not detected at or above the MDL.
SR	Surrogate standards were not recovered due to sample dilution.
SV	Elevated detection limits due to limited sample volume.

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Arsenic (EPA Method 7060, Furnace AAS)
 Batch: 70 32822
 Samples: 70 0369339

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	700369339		RPD
			Method Blank	Duplicate of	
Arsenic (EPA Method 7060, Furnace AAS)	mg/kg wet	0.5	28201+203+ 205+207 Composite ND	70 0369339 3.3	17%

SPIKE:

Parameter	Units	MDL	700369339		Spike Recv
			Composite	Spike	
Arsenic (EPA Method 7060, Furnace AAS)	mg/kg wet	0.5	28201+203+ 205+207 Composite 3.9	3.8	76%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
			4.0	85%	80%	6%
Arsenic (EPA Method 7060, Furnace AAS)	mg/kg wet	0.5				



REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Arsenic (EPA Method 7060, Furnace AAS)
Batch: 70 32874
Samples: 70 0369177

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	700369177 Ground Water	Duplicate of 70 0369177	RPD
Arsenic (EPA Method 7060, Furnace AAS)	mg/L	0.005	ND	0.018	0.018	0%

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700369177 Ground Water	Spike	Spike Recv	Dupl Recv	RPD
Arsenic (EPA Method 7060, Furnace AAS)	mg/L	0.005	0.018	0.040	115%	113%	2%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Arsenic (EPA Method 7060, Furnace AAS)	mg/L	0.005	0.040	103%	105%	2%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Copper (EPA Method 6010/200.7, ICP)
 Batch: 70 32844
 Samples: 70 0369177

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	700365325	Duplicate of 70 0365325	RPD
Antimony (EPA Method 6010/200.7, ICP)	mg/L	0.06	ND			
Barium (EPA Method 6010/200.7, ICP)	mg/L	0.01	ND			
Beryllium (EPA Method 6010/200.7, ICP)	mg/L	0.007	ND			
Cadmium (EPA Method 6010/200.7, ICP)	mg/L	0.005	ND			
Chromium (EPA Method 6010/200.7, ICP)	mg/L	0.01	ND			
Cobalt (EPA Method 6010/200.7, ICP)	mg/L	0.01	ND			
Copper (EPA Method 6010/200.7, ICP)	mg/L	0.01	ND	0.01	0.01	0%
Molybdenum (EPA Method 6010/200.7, ICP)	mg/L	0.02	ND			
Nickel (EPA Method 6010/200.7, ICP)	mg/L	0.02	ND			
Silver (EPA Method 6010/200.7, ICP)	mg/L	0.01	ND			
Zinc (EPA Method 6010/200.7, ICP)	mg/L	0.01	ND	35	35	0%

SPIKE:

Parameter	Units	MDL	700365325	Spike	Spike Recv
Copper (EPA Method 6010/200.7, ICP)	mg/L	0.01	0.01	0.25	91%
Zinc (EPA Method 6010/200.7, ICP)	mg/L	0.01	35	0.50	91%

LABORATORY CONTROL SAMPLE:

Parameter	Units	MDL	Reference Value	Recv
Antimony (EPA Method 6010/200.7, ICP)	mg/L	0.06	0.50	98%
Barium (EPA Method 6010/200.7, ICP)	mg/L	0.01	2.00	98%
Beryllium (EPA Method 6010/200.7, ICP)	mg/L	0.007	0.050	101%
Cadmium (EPA Method 6010/200.7, ICP)	mg/L	0.005	0.05	92%
Chromium (EPA Method 6010/200.7, ICP)	mg/L	0.01	0.20	98%
Cobalt (EPA Method 6010/200.7, ICP)	mg/L	0.01	0.50	101%
Copper (EPA Method 6010/200.7, ICP)	mg/L	0.01	0.25	96%
Molybdenum (EPA Method 6010/200.7, ICP)	mg/L	0.02	1.0	96%
Silver (EPA Method 6010/200.7, ICP)	mg/L	0.01	0.05	95%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Lead (EPA Method 6010/200.7, ICP)
 Batch: 70 32914
 Samples: 70 0369339

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Barium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	ND
Cadmium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	ND
Chromium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	ND
Lead (EPA Method 6010/200.7, ICP)	mg/kg wet	10	ND
Nickel (EPA Method 6010/200.7, ICP)	mg/kg wet	2	ND
Silver (EPA Method 6010/200.7, ICP)	mg/kg wet	1	ND

LABORATORY CONTROL SAMPLE:

Parameter	Units	MDL	Reference Value	Recv
Barium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	200	93%
Cadmium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	5.0	88%
Chromium (EPA Method 6010/200.7, ICP)	mg/kg wet	1	20	94%
Lead (EPA Method 6010/200.7, ICP)	mg/kg wet	10	50	94%
Nickel (EPA Method 6010/200.7, ICP)	mg/kg wet	2	50	94%
Silver (EPA Method 6010/200.7, ICP)	mg/kg wet	1	5.0	81%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Lead (EPA Method 7421, Furnace AAS)
 Batch: 70 32856
 Samples: 70 0369177

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	700369177 Ground Water	Duplicate of 70 0369177	RPD
Lead (EPA Method 7421, Furnace AAS)	mg/L	0.001	ND	0.028	0.027	4%

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700369177 Ground Water	Spike	Spike Recv	Dupl Recv	RPD
Lead (EPA Method 7421, Furnace AAS)	mg/L	0.001	0.028	0.020	95%	110%	15%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Lead (EPA Method 7421, Furnace AAS)	mg/L	0.001	0.020	115%	115%	0%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Lead (EPA Method 7421, Furnace AAS)
 Batch: 70 32857
 Samples: 70 0369339

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	700369339			RPD
			Method Blank	28201+203+205+207 Composite	Duplicate of 70 0369339	
Lead (EPA Method 7421, Furnace AAS)	mg/kg wet	0.5	ND	6.7	6.6	2%

SPIKE:

Parameter	Units	MDL	700369339		
			28201+203+205+207 Composite	Spike	Spike Recv
Lead (EPA Method 7421, Furnace AAS)	mg/kg wet	0.5	6.7	1.9	84%

LABORATORY CONTROL SAMPLE:

Parameter	Units	MDL	Reference	
			Value	Recv
Lead (EPA Method 7421, Furnace AAS)	mg/kg wet	0.5	2.0	120%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Mercury (EPA Method 7470, Cold Vapor AA)
 Batch: 70 33027
 Samples: 70 0369177

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	700370906	Duplicate of 70 0370906	RPD
Mercury (EPA Method 7470, Cold Vapor AA)	mg/L	0.0002	ND	ND	ND	NC

SPIKE:

Parameter	Units	MDL	700370906	Spike	Spike Recv
Mercury (EPA Method 7470, Cold Vapor AA)	mg/L	0.0002	ND	0.010	98%

LABORATORY CONTROL SAMPLE:

Parameter	Units	MDL	Reference Value	Recv
Mercury (EPA Method 7470, Cold Vapor AA)	mg/L	0.0002	0.010	96%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Mercury (EPA Method 7471, Cold Vapor AA)
 Batch: 70 32805
 Samples: 70 0369339

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	700368367	Duplicate of 70 0368367	RPD
Mercury (EPA Method 7471, Cold Vapor AA)	mg/kg wet	0.02	ND	3.2	3.4	6%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Mercury (EPA Method 7471, Cold Vapor AA)	mg/kg wet	0.02	1.00	91%	97%	5%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Selenium (EPA Method 7740, Furnace AAS)
 Batch: 70 32823
 Samples: 70 0369339

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method	700369339	RPD
Selenium (EPA Method 7740, Furnace AAS)	mg/kg wet	0.5	Blank	28201+203+ Duplicate 205+207 of Composite 70 0369339	NC
			ND	ND	NC

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Selenium (EPA Method 7740, Furnace AAS)	mg/kg wet	0.5	1.0	94%	94%	0%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

Selenium (EPA Method 7740, Furnace AAS)
 Batch: 70 32863
 Samples: 70 0369177

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	700369177 Ground Water	Duplicate of 70 0369177	RPD
Selenium (EPA Method 7740, Furnace AAS)	mg/L	0.005	ND	ND	ND	NC

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupi Recv	RPD
Selenium (EPA Method 7740, Furnace AAS)	mg/L	0.005	0.0100	106%	108%	2%

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QUALITY CONTROL DATA

August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE FUELS EPA 3550/8015

Batch: 70 32915

Samples: 70 0369240, 70 0369258, 70 0369266, 70 0369274, 70 0369282
70 0369290, 70 0369304

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
Extractable Fuels, as Diesel	mg/kg	5.0	ND

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE FUELS EPA 3550/8015
 Batch: 70 32955
 Samples: 70 0369231

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Extractable Fuels, as Diesel	mg/kg	5.0	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Extractable Fuels, as Diesel	mg/kg	5.0	33.3	59%	55%	10%



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QUALITY CONTROL DATA

August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE FUELS EPA 3510/8015
Batch: 70 32868
Samples: 70 0369177

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
Extractable Fuels, as Diesel	mg/L	0.05	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference Value</u>	<u>Recv</u>	<u>Dupl Recv</u>	<u>RPD</u>
Extractable Fuels, as Diesel	mg/L	0.05	1.00	82%	85%	4%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Batch: 70 32943

Samples: 70 0369231, 70 0369240, 70 0369258, 70 0369266, 70 0369274
 70 0369282, 70 0369290, 70 0369304

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Phenol	ug/kg	330	ND
bis(2-Chloroethyl)ether	ug/kg	330	ND
2-Chlorophenol	ug/kg	330	ND
1,3-Dichlorobenzene	ug/kg	330	ND
1,4-Dichlorobenzene	ug/kg	330	ND
Benzyl Alcohol	ug/kg	660	ND
1,2-Dichlorobenzene	ug/kg	330	ND
2-Methylphenol	ug/kg	330	ND
bis(2-Chloroisopropyl)ether	ug/kg	330	ND
4-Methylphenol	ug/kg	330	ND
n-Nitroso-di-n-propylamine	ug/kg	330	ND
Hexachloroethane	ug/kg	330	ND
Nitrobenzene	ug/kg	330	ND
Isophorone	ug/kg	330	ND
2-Nitrophenol	ug/kg	330	ND
2,4-Dimethylphenol	ug/kg	330	ND
bis(2-Chloroethoxy)methane	ug/kg	330	ND
2,4-Dichlorophenol	ug/kg	330	ND
1,2,4-Trichlorobenzene	ug/kg	330	ND
Naphthalene	ug/kg	330	ND
Benzoic Acid	ug/kg	1700	ND
4-Chloroaniline	ug/kg	660	ND
Hexachlorobutadiene	ug/kg	330	ND
4-Chloro-3-methylphenol	ug/kg	660	ND
2-Methylnaphthalene	ug/kg	330	ND
Hexachlorocyclopentadiene	ug/kg	330	ND
2,4,6-Trichlorophenol	ug/kg	330	ND
2,4,5-Trichlorophenol	ug/kg	330	ND
2-Chloronaphthalene	ug/kg	330	ND
2-Nitroaniline	ug/kg	1700	ND
Dimethylphthalate	ug/kg	330	ND

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Batch: 70 32943

Samples: 70 0369231, 70 0369240, 70 0369258, 70 0369266, 70 0369274
 70 0369282, 70 0369290, 70 0369304

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Acenaphthylene	ug/kg	330	ND
2,6-Dinitrotoluene	ug/kg	330	ND
3-Nitroaniline	ug/kg	1700	ND
Acenaphthene	ug/kg	330	ND
2,4-Dinitrophenol	ug/kg	1700	ND
4-Nitrophenol	ug/kg	1700	ND
Dibenzofuran	ug/kg	330	ND
2,4-Dinitrotoluene	ug/kg	330	ND
Diethylphthalate	ug/kg	330	ND
Fluorene	ug/kg	330	ND
4-Chlorophenyl-phenylether	ug/kg	330	ND
4-Nitroaniline	ug/kg	1700	ND
4,6-Dinitro-2-methylphenol	ug/kg	1700	ND
n-Nitrosodiphenylamine	ug/kg	330	ND
4-Bromophenyl-phenylether	ug/kg	330	ND
Hexachlorobenzene	ug/kg	330	ND
Pentachlorophenol	ug/kg	1700	ND
Phenanthrene	ug/kg	330	ND
Anthracene	ug/kg	330	ND
Di-n-butylphthalate	ug/kg	330	ND
Fluoranthene	ug/kg	330	ND
Pyrene	ug/kg	330	ND
Butylbenzylphthalate	ug/kg	330	ND
Benzo(a)anthracene	ug/kg	330	ND
3,3'-Dichlorobenzidine	ug/kg	660	ND
Chrysene	ug/kg	330	ND
bis(2-Ethylhexyl)phthalate	ug/kg	330	ND
Di-n-octylphthalate	ug/kg	330	ND
Benzo(b)fluoranthene	ug/kg	330	ND
Benzo(k)fluoranthene	ug/kg	330	ND
Benzo(a)pyrene	ug/kg	330	ND

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Batch: 70 32943

Samples: 70 0369231, 70 0369240, 70 0369258, 70 0369266, 70 0369274
 70 0369282, 70 0369290, 70 0369304

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Indeno(1,2,3-cd)pyrene	ug/kg	330	ND
Dibenzo(a,h)anthracene	ug/kg	330	ND
Benzo(g,h,i)perylene	ug/kg	330	ND
2-Fluorophenol (surrogate)	%		91
Phenol-d6 (surrogate)	%		99
Nitrobenzene-d5 (surrogate)	%		102
2-Fluorobiphenyl (surrogate)	%		91
2,4,6-Tribromophenol (surrogate)	%		100
Terphenyl-d14 (surrogate)	%		72

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Phenol	ug/kg	330	5000	90%	88%	2%
2-Chlorophenol	ug/kg	330	5000	97%	95%	2%
1,4-Dichlorobenzene	ug/kg	330	3330	91%	88%	3%
n-Nitroso-di-n-propylamine	ug/kg	330	3330	107%	106%	1%
1,2,4-Trichlorobenzene	ug/kg	330	3330	92%	88%	4%
4-Chloro-3-methylphenol	ug/kg	660	5000	101%	100%	1%
Acenaphthene	ug/kg	330	3330	98%	98%	0%
4-Nitrophenol	ug/kg	1700	5000	147%	137%	7%
2,4-Dinitrotoluene	ug/kg	330	3330	92%	84%	9%
Pentachlorophenol	ug/kg	1700	5000	104%	103%	1%
Pyrene	ug/kg	330	3330	83%	83%	0%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)
 Batch: 70 32985
 Samples: 70 0369312, 70 0369320

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Phenol	ug/L	10	ND
bis(2-Chloroethyl)ether	ug/L	10	ND
2-Chlorophenol	ug/L	10	ND
1,3-Dichlorobenzene	ug/L	10	ND
1,4-Dichlorobenzene	ug/L	10	ND
Benzyl Alcohol	ug/L	20	ND
1,2-Dichlorobenzene	ug/L	10	ND
2-Methylphenol	ug/L	10	ND
bis(2-Chloroisopropyl)ether	ug/L	10	ND
4-Methylphenol	ug/L	10	ND
n-Nitroso-di-n-propylamine	ug/L	10	ND
Hexachloroethane	ug/L	10	ND
Nitrobenzene	ug/L	10	ND
Isophorone	ug/L	10	ND
2-Nitrophenol	ug/L	10	ND
2,4-Dimethylphenol	ug/L	10	ND
bis(2-Chloroethoxy)methane	ug/L	10	ND
2,4-Dichlorophenol	ug/L	10	ND
1,2,4-Trichlorobenzene	ug/L	10	ND
Naphthalene	ug/L	10	ND
Benzoic Acid	ug/L	50	ND
4-Chloroaniline	ug/L	20	ND
Hexachlorobutadiene	ug/L	10	ND
4-Chloro-3-methylphenol	ug/L	20	ND
2-Methylnaphthalene	ug/L	10	ND
Hexachlorocyclopentadiene	ug/L	10	ND
2,4,6-Trichlorophenol	ug/L	10	ND
2,4,5-Trichlorophenol	ug/L	10	ND
2-Chloronaphthalene	ug/L	10	ND
2-Nitroaniline	ug/L	50	ND
Dimethylphthalate	ug/L	10	ND
Acenaphthylene	ug/L	10	ND

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Batch: 70 32985

Samples: 70 0369312, 70 0369320

METHOD BLANK:

Parameter	Units	MDL	Method Blank
2,6-Dinitrotoluene	ug/L	10	ND
3-Nitroaniline	ug/L	50	ND
Acenaphthene	ug/L	10	ND
2,4-Dinitrophenol	ug/L	50	ND
4-Nitrophenol	ug/L	50	ND
Dibenzofuran	ug/L	10	ND
2,4-Dinitrotoluene	ug/L	10	ND
Diethylphthalate	ug/L	10	ND
Fluorene	ug/L	10	ND
4-Chlorophenyl-phenylether	ug/L	10	ND
4-Nitroaniline	ug/L	50	ND
4,6-Dinitro-2-methylphenol	ug/L	50	ND
n-Nitrosodiphenylamine	ug/L	10	ND
4-Bromophenyl-phenylether	ug/L	10	ND
Hexachlorobenzene	ug/L	10	ND
Pentachlorophenol	ug/L	50	ND
Phenanthrene	ug/L	10	ND
Anthracene	ug/L	10	ND
Di-n-butylphthalate	ug/L	10	ND
Fluoranthene	ug/L	10	ND
Pyrene	ug/L	10	ND
Butylbenzylphthalate	ug/L	10	ND
Benzo(a)anthracene	ug/L	10	ND
3,3'-Dichlorobenzidine	ug/L	20	ND
Chrysene	ug/L	10	ND
bis(2-Ethylhexyl)phthalate	ug/L	10	ND
Di-n-octylphthalate	ug/L	10	ND
Benzo(b)fluoranthene	ug/L	10	ND
Benzo(k)fluoranthene	ug/L	10	ND
Benzo(a)pyrene	ug/L	10	ND
Indeno(1,2,3-cd)pyrene	ug/L	10	ND
Dibenzo(a,h)anthracene	ug/L	10	ND

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QUALITY CONTROL DATA

August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)
Batch: 70 32985
Samples: 70 0369312, 70 0369320

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Benzo(g,h,i)perylene	ug/L	10	ND
2-Fluorophenol (surrogate)	%		41
Phenol-d6 (surrogate)	%		31
Nitrobenzene-d5 (surrogate)	%		84
2-Fluorobiphenyl (surrogate)	%		88
2,4,6-Tribromophenol (surrogate)	%		106
Terphenyl-d14 (surrogate)	%		68

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Phenol	ug/L	10	150	19%	18%	5%
2-Chlorophenol	ug/L	10	150	63%	57%	10%
1,4-Dichlorobenzene	ug/L	10	100	58%	56%	4%
n-Nitroso-di-n-propylamine	ug/L	10	100	78%	73%	7%
1,2,4-Trichlorobenzene	ug/L	10	100	65%	64%	2%
4-Chloro-3-methylphenol	ug/L	20	150	74%	73%	1%
Acenaphthene	ug/L	10	100	81%	77%	5%
4-Nitrophenol	ug/L	50	150	14%	15%	7%
2,4-Dinitrotoluene	ug/L	10	100	76%	77%	1%
Pentachlorophenol	ug/L	50	150	101%	98%	3%
Pyrene	ug/L	10	100	71%	71%	0%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)
 Batch: 70 33004
 Samples: 70 0369177

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Phenol	ug/L	10	ND
bis(2-Chloroethyl)ether	ug/L	10	ND
2-Chlorophenol	ug/L	10	ND
1,3-Dichlorobenzene	ug/L	10	ND
1,4-Dichlorobenzene	ug/L	10	ND
Benzyl Alcohol	ug/L	20	ND
1,2-Dichlorobenzene	ug/L	10	ND
2-Methylphenol	ug/L	10	ND
bis(2-Chloroisopropyl)ether	ug/L	10	ND
4-Methylphenol	ug/L	10	ND
n-Nitroso-di-n-propylamine	ug/L	10	ND
Hexachloroethane	ug/L	10	ND
Nitrobenzene	ug/L	10	ND
Isophorone	ug/L	10	ND
2-Nitrophenol	ug/L	10	ND
2,4-Dimethylphenol	ug/L	10	ND
bis(2-Chloroethoxy)methane	ug/L	10	ND
2,4-Dichlorophenol	ug/L	10	ND
1,2,4-Trichlorobenzene	ug/L	10	ND
Naphthalene	ug/L	10	ND
Benzoic Acid	ug/L	50	ND
4-Chloroaniline	ug/L	20	ND
Hexachlorobutadiene	ug/L	10	ND
4-Chloro-3-methylphenol	ug/L	20	ND
2-Methylnaphthalene	ug/L	10	ND
Hexachlorocyclopentadiene	ug/L	10	ND
2,4,6-Trichlorophenol	ug/L	10	ND
2,4,5-Trichlorophenol	ug/L	10	ND
2-Chloronaphthalene	ug/L	10	ND
2-Nitroaniline	ug/L	50	ND
Dimethylphthalate	ug/L	10	ND
Acenaphthylene	ug/L	10	ND

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QUALITY CONTROL DATA

August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)
Batch: 70 33004
Samples: 70 0369177

METHOD BLANK:

Parameter	Units	MDL	Method Blank
2,6-Dinitrotoluene	ug/L	10	ND
3-Nitroaniline	ug/L	50	ND
Acenaphthene	ug/L	10	ND
2,4-Dinitrophenol	ug/L	50	ND
4-Nitrophenol	ug/L	50	ND
Dibenzofuran	ug/L	10	ND
2,4-Dinitrotoluene	ug/L	10	ND
Diethylphthalate	ug/L	10	ND
Fluorene	ug/L	10	ND
4-Chlorophenyl-phenylether	ug/L	10	ND
4-Nitroaniline	ug/L	50	ND
4,6-Dinitro-2-methylphenol	ug/L	50	ND
n-Nitrosodiphenylamine	ug/L	10	ND
4-Bromophenyl-phenylether	ug/L	10	ND
Hexachlorobenzene	ug/L	10	ND
Pentachlorophenol	ug/L	50	ND
Phenanthrene	ug/L	10	ND
Anthracene	ug/L	10	ND
Di-n-butylphthalate	ug/L	10	ND
Fluoranthene	ug/L	10	ND
Pyrene	ug/L	10	ND
Butylbenzylphthalate	ug/L	10	ND
Benzo(a)anthracene	ug/L	10	ND
3,3'-Dichlorobenzidine	ug/L	20	ND
Chrysene	ug/L	10	ND
bis(2-Ethylhexyl)phthalate	ug/L	10	ND
Di-n-octylphthalate	ug/L	10	ND
Benzo(b)fluoranthene	ug/L	10	ND
Benzo(k)fluoranthene	ug/L	10	ND
Benzo(a)pyrene	ug/L	10	ND
Indeno(1,2,3-cd)pyrene	ug/L	10	ND
Dibenzo(a,h)anthracene	ug/L	10	ND

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)
 Batch: 70 33004
 Samples: 70 0369177

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Benzo(g,h,i)perylene	ug/L	10	ND
2-Fluorophenol (surrogate)	%		70
Phenol-d6 (surrogate)	%		79
Nitrobenzene-d5 (surrogate)	%		74
2-Fluorobiphenyl (surrogate)	%		64
2,4,6-Tribromophenol (surrogate)	%		101
Terphenyl-d14 (surrogate)	%		51

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Phenol	ug/L	10	150	67%	75%	11%
2-Chlorophenol	ug/L	10	150	66%	73%	10%
1,4-Dichlorobenzene	ug/L	10	100	76%	76%	0%
n-Nitroso-di-n-propylamine	ug/L	10	100	122%	126%	3%
1,2,4-Trichlorobenzene	ug/L	10	100	78%	79%	1%
4-Chloro-3-methylphenol	ug/L	20	150	76%	86%	12%
Acenaphthene	ug/L	10	100	82%	83%	1%
4-Nitrophenol	ug/L	50	150	97%	116%	18%
2,4-Dinitrotoluene	ug/L	10	100	96%	99%	3%
Pentachlorophenol	ug/L	50	150	90%	118%	27%
Pyrene	ug/L	10	100	82%	82%	0%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020
 Batch: 70 32872
 Samples: 70 0369177

METHOD BLANK:

Parameter	Units	MDL	Method Blank
VOLATILE HALOCARBONS BY EPA 8010			
Dichlorodifluoromethane	ug/L	2.0	ND
Chloromethane	ug/L	2.0	ND
Vinyl Chloride	ug/L	2.0	ND
Bromomethane	ug/L	2.0	ND
Chloroethane	ug/L	2.0	ND
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND
1,1-Dichloroethene	ug/L	0.5	ND
Methylene Chloride	ug/L	2.0	ND
trans-1,2-Dichloroethene	ug/L	0.5	ND
1,1-Dichloroethane	ug/L	0.5	ND
cis-1,2-Dichloroethene	ug/L	0.5	ND
Chloroform	ug/L	0.5	ND
1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND
Carbon Tetrachloride	ug/L	0.5	ND
1,2-Dichloroethane (EDC)	ug/L	0.5	ND
Trichloroethene (TCE)	ug/L	0.5	ND
1,2-Dichloropropane	ug/L	0.5	ND
Bromodichloromethane	ug/L	0.5	ND
Dibromomethane	ug/L	0.5	ND
2-Chloroethylvinyl ether	ug/L	0.5	ND
cis-1,3-Dichloropropene	ug/L	0.5	ND
trans-1,3-Dichloropropene	ug/L	0.5	ND
1,1,2-Trichloroethane	ug/L	0.5	ND
Tetrachloroethene	ug/L	0.5	ND
Dibromochloromethane	ug/L	0.5	ND
Chlorobenzene	ug/L	0.5	ND
1,1,1,2-Tetrachloroethane	ug/L	0.5	ND
Bromoform	ug/L	0.5	ND
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND
1,2,3-Trichloropropane	ug/L	0.5	ND
Bromobenzene	ug/L	0.5	ND

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020
 Batch: 70 32872
 Samples: 70 0369177

METHOD BLANK:

Parameter	Units	MDL	Method Blank
1,3-Dichlorobenzene	ug/L	0.5	ND
1,4-Dichlorobenzene	ug/L	0.5	ND
Benzyl Chloride	ug/L	0.5	ND
1,2-Dichlorobenzene	ug/L	0.5	ND
Bromochloromethane (Surrogate Recovery)	%		89
1,4-Dichlorobutane (Surrogate Recovery)	%		113

VOLATILE AROMATICS BY EPA 8020

Parameter	Units	MDL	
Benzene	ug/L	0.3	ND
Toluene	ug/L	0.3	ND
Chlorobenzene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND
1,3-Dichlorobenzene	ug/L	0.5	ND
1,4-Dichlorobenzene	ug/L	0.5	ND
1,2-Dichlorobenzene	ug/L	0.5	ND
a,a,a-Trifluorotoluene (Surro. Recovery)	%		94

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700369010	Spike	Spike		RPD
					Recv	Dupl	
1,1-Dichloroethane	ug/L	0.5	ND	20	146%	131%	11%
Trichloroethene (TCE)	ug/L	0.5	ND	20	98%	87%	12%
1,1,2-Trichloroethane	ug/L	0.5	ND	20	113%	98%	14%
Tetrachloroethene	ug/L	0.5	ND	20	104%	89%	16%
Benzene	ug/L	0.3	ND	20	109%	87%	22%
Toluene	ug/L	0.3	1.0	20	103%	80%	25%
Xylenes, Total	ug/L	0.5	2.0	60	108%	82%	27%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020
 Batch: 70 32872
 Samples: 70 0369177

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
1,1-Dichloroethane	ug/L	0.5	20	132%	130%	2%
Trichloroethene (TCE)	ug/L	0.5	20	91%	85%	7%
1,1,2-Trichloroethane	ug/L	0.5	20	110%	101%	9%
Tetrachloroethene	ug/L	0.5	20	95%	87%	9%
Benzene	ug/L	0.3	20	97%	89%	9%
Toluene	ug/L	0.3	20	96%	86%	11%
Xylenes, Total	ug/L	0.5	60	98%	87%	12%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020
 Batch: 70 32875
 Samples: 70 0369240

METHOD BLANK:

Parameter	Units	MDL	Method Blank
VOLATILE HALOCARBONS BY EPA 8010			
Dichlorodifluoromethane	ug/kg	20	ND
Chloromethane	ug/kg	20	ND
Vinyl Chloride	ug/kg	20	ND
Bromomethane	ug/kg	20	ND
Chloroethane	ug/kg	20	ND
Trichlorofluoromethane	ug/kg	20	ND
1,1-Dichloroethene	ug/kg	5.0	ND
Methylene Chloride	ug/kg	20	ND
trans-1,2-Dichloroethene	ug/kg	5.0	ND
1,1-Dichloroethane	ug/kg	5.0	ND
cis-1,2-Dichloroethene	ug/kg	5.0	ND
Chloroform	ug/kg	5.0	ND
1,1,1-Trichloroethane (TCA)	ug/kg	5.0	ND
Carbon Tetrachloride	ug/kg	5.0	ND
1,2-Dichloroethane (EDC)	ug/kg	5.0	ND
Trichloroethene (TCE)	ug/kg	5.0	ND
1,2-Dichloropropane	ug/kg	5.0	ND
Bromodichloromethane	ug/kg	5.0	ND
Dibromomethane	ug/kg	5.0	ND
2-Chloroethylvinyl ether	ug/kg	5.0	ND
cis-1,3-Dichloropropene	ug/kg	5.0	ND
trans-1,3-Dichloropropene	ug/kg	5.0	ND
1,1,2-Trichloroethane	ug/kg	5.0	ND
Tetrachloroethene	ug/kg	5.0	ND
Dibromochloromethane	ug/kg	5.0	ND
Chlorobenzene	ug/kg	5.0	ND
1,1,1,2-Tetrachloroethane	ug/kg	5.0	ND
Bromoform	ug/kg	5.0	ND
1,1,2,2-Tetrachloroethane	ug/kg	5.0	ND
1,2,3-Trichloropropane	ug/kg	5.0	ND
Bromobenzene	ug/kg	5.0	ND

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020
 Batch: 70 32875
 Samples: 70 0369240

METHOD BLANK:

Parameter	Units	MDL	Method Blank
1,3-Dichlorobenzene	ug/kg	5.0	ND
1,4-Dichlorobenzene	ug/kg	5.0	ND
Benzyl Chloride	ug/kg	5.0	ND
1,2-Dichlorobenzene	ug/kg	5.0	ND
Bromochloromethane (Surrogate Recovery) %			113
1,4-Dichlorobutane (Surrogate Recovery) %			156

VOLATILE AROMATICS BY EPA 8020

Parameter	Units	MDL	Method Blank
Benzene	ug/kg	1.0	ND
Toluene	ug/kg	1.0	ND
Chlorobenzene	ug/kg	5.0	ND
Ethylbenzene	ug/kg	1.0	ND
Xylenes, total	ug/kg	1.0	ND
1,3-Dichlorobenzene	ug/kg	5.0	ND
1,4-Dichlorobenzene	ug/kg	5.0	ND
1,2-Dichlorobenzene	ug/kg	5.0	ND
a,a,a-Trifluorotoluene (Surro. Recovery) %			93

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700365597	Spike	Spike		
					Recv	Dupl	RPD
1,1-Dichloroethane	ug/kg	5.0	ND	20	138%	156%	12%
Trichloroethene (TCE)	ug/kg	5.0	ND	20	134%	155%	15%
1,1,2-Trichloroethane	ug/kg	5.0	ND	20	113%	120%	6%
Tetrachloroethene	ug/kg	5.0	ND	20	109%	117%	7%
Benzene	ug/kg	1.0	ND	20	106%	120%	12%
Toluene	ug/kg	1.0	1.0	20	98%	111%	12%
Xylenes, total	ug/kg	1.0	1.3	60	103%	117%	13%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020
 Batch: 70 32875
 Samples: 70 0369240

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference	Dupl		RPD
			Value	Recv	Recv	
1,1-Dichloroethane	ug/kg	5.0	20	161%	157%	3%
Trichloroethene (TCE)	ug/kg	5.0	20	121%	117%	3%
1,1,2-Trichloroethane	ug/kg	5.0	20	108%	108%	0%
Tetrachloroethene	ug/kg	5.0	20	117%	111%	5%
Benzene	ug/kg	1.0	20	124%	131%	5%
Toluene	ug/kg	1.0	20	118%	129%	9%
Xylenes, total	ug/kg	1.0	60	121%	121%	0%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020

Batch: 70 32961
 Samples: 70 0369282

METHOD BLANK:

Parameter	Units	MDL	Method Blank
VOLATILE HALOCARBONS BY EPA 8010			
Dichlorodifluoromethane	ug/kg	20	ND
Chloromethane	ug/kg	20	ND
Vinyl Chloride	ug/kg	20	ND
Bromomethane	ug/kg	20	ND
Chloroethane	ug/kg	20	ND
Trichlorofluoromethane	ug/kg	20	ND
1,1-Dichloroethene	ug/kg	5.0	ND
Methylene Chloride	ug/kg	20	ND
trans-1,2-Dichloroethene	ug/kg	5.0	ND
1,1-Dichloroethane	ug/kg	5.0	ND
cis-1,2-Dichloroethene	ug/kg	5.0	ND
Chloroform	ug/kg	5.0	ND
1,1,1-Trichloroethane (TCA)	ug/kg	5.0	ND
Carbon Tetrachloride	ug/kg	5.0	ND
1,2-Dichloroethane (EDC)	ug/kg	5.0	ND
Trichloroethene (TCE)	ug/kg	5.0	ND
1,2-Dichloropropane	ug/kg	5.0	ND
Bromodichloromethane	ug/kg	5.0	ND
Dibromomethane	ug/kg	5.0	ND
2-Chloroethylvinyl ether	ug/kg	5.0	ND
cis-1,3-Dichloropropene	ug/kg	5.0	ND
trans-1,3-Dichloropropene	ug/kg	5.0	ND
1,1,2-Trichloroethane	ug/kg	5.0	ND
Tetrachloroethene	ug/kg	5.0	ND
Dibromochloromethane	ug/kg	5.0	ND
Chlorobenzene	ug/kg	5.0	ND
1,1,1,2-Tetrachloroethane	ug/kg	5.0	ND
Bromoform	ug/kg	5.0	ND
1,1,2,2-Tetrachloroethane	ug/kg	5.0	ND
1,2,3-Trichloropropane	ug/kg	5.0	ND
Bromobenzene	ug/kg	5.0	ND

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QUALITY CONTROL DATA

August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020

Batch: 70 32961

Samples: 70 0369282

METHOD BLANK:

Parameter	Units	MDL	Method Blank
1,3-Dichlorobenzene	ug/kg	5.0	ND
1,4-Dichlorobenzene	ug/kg	5.0	ND
Benzyl Chloride	ug/kg	5.0	ND
1,2-Dichlorobenzene	ug/kg	5.0	ND
Bromochloromethane (Surrogate Recovery)	%		91
1,4-Dichlorobutane (Surrogate Recovery)	%		102

VOLATILE AROMATICS BY EPA 8020

Parameter	Units	MDL	Method Blank
Benzene	ug/kg	1.0	ND
Toluene	ug/kg	1.0	ND
Chlorobenzene	ug/kg	5.0	ND
Ethylbenzene	ug/kg	1.0	ND
Xylenes, total	ug/kg	1.0	ND
1,3-Dichlorobenzene	ug/kg	5.0	ND
1,4-Dichlorobenzene	ug/kg	5.0	ND
1,2-Dichlorobenzene	ug/kg	5.0	ND
a,a,a-Trifluorotoluene (Surro. Recovery)	%		92

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700365597	Spike	Spike		
					Spike Recv	Dupl Recv	RPD
1,1-Dichloroethane	ug/kg	5.0	ND	20	138%	156%	12%
Trichloroethene (TCE)	ug/kg	5.0	ND	20	134%	155%	15%
1,1,2-Trichloroethane	ug/kg	5.0	ND	20	113%	120%	6%
Tetrachloroethene	ug/kg	5.0	ND	20	109%	117%	7%
Benzene	ug/kg	1.0	ND	20	106%	120%	12%
Toluene	ug/kg	1.0	1.0	20	98%	111%	12%
Xylenes, total	ug/kg	1.0	1.3	60	103%	117%	13%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

HALOGENATED VOLATILE ORGANICS 8010/8020
 Batch: 70 32961
 Samples: 70 0369282

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference	Dupl		RPD
			Value	Recv	Recv	
1,1-Dichloroethane	ug/kg	5.0	20	161%	157%	3%
Trichloroethene (TCE)	ug/kg	5.0	20	121%	117%	3%
1,1,2-Trichloroethane	ug/kg	5.0	20	108%	108%	0%
Tetrachloroethene	ug/kg	5.0	20	117%	111%	5%
Benzene	ug/kg	1.0	20	124%	131%	5%
Toluene	ug/kg	1.0	20	118%	129%	9%
Xylenes, total	ug/kg	1.0	60	121%	121%	0%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

OIL AND GREASE, SILICA GEL (LUFT)
 Batch: 70 32791
 Samples: 70 0369177

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Oil and Grease, Gravimetric (SM5520)	mg/L	5.0	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dup1 Recv	RPD
Oil and Grease, Gravimetric (SM5520)	mg/L	5.0	20	85%	85%	0%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

OIL AND GREASE, SILICA GEL (LUFT)

Batch: 70 33008

Samples: 70 0369231, 70 0369240, 70 0369258, 70 0369266, 70 0369274
 70 0369282, 70 0369290, 70 0369304

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	ND

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700369231	Spike	Spike Recv	Spike Dupl Recv	RPD
Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	28210	667	78%	57%	31%
			ND				

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Oil and Grease, Gravimetric (SM5520)	mg/kg wet	50	667	67%	69%	3%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PURGEABLE FUELS AND AROMATICS
 Batch: 70 32806
 Samples: 70 0369177

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700366852	Spike	Spike		RPD
					Spike Recv	Dupl Recv	
Benzene	ug/L	0.5	ND	100	100%	101%	1%
Toluene	ug/L	0.5	ND	100	97%	99%	2%
Ethylbenzene	ug/L	0.5	ND	100	94%	95%	1%
Xylenes, Total	ug/L	0.5	ND	300	96%	97%	1%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Dupl		RPD
				Recv	Recv	
Benzene	ug/L	0.5	100	107%	102%	5%
Toluene	ug/L	0.5	100	107%	101%	6%
Ethylbenzene	ug/L	0.5	100	106%	100%	6%
Xylenes, Total	ug/L	0.5	300	108%	101%	7%

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PURGEABLE FUELS AND AROMATICS

Batch: 70 32908
 Samples: 70 0369231, 70 0369240, 70 0369258

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/kg wet	5.0	ND
Toluene	ug/kg wet	5.0	ND
Ethylbenzene	ug/kg wet	5.0	ND
Xylenes, Total	ug/kg wet	5.0	ND

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700367840	Spike	Spike Recv	Dupl Recv	RPD
Benzene	ug/kg wet	5.0	ND	100	31%	94%	15%
Toluene	ug/kg wet	5.0	ND	100	80%	90%	12%
Ethylbenzene	ug/kg wet	5.0	ND	100	98%	97%	1%
Xylenes, Total	ug/kg wet	5.0	ND	300	92%	93%	1%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Benzene	ug/kg wet	5.0	100	110%	113%	3%
Toluene	ug/kg wet	5.0	100	110%	111%	1%
Ethylbenzene	ug/kg wet	5.0	100	104%	104%	0%
Xylenes, Total	ug/kg wet	5.0	300	107%	107%	0%

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

August 19, 1994
 PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

PURGEABLE FUELS AND AROMATICS

Batch: 70 32909
 Samples: 70 0369266, 70 0369274, 70 0369282, 70 0369290, 70 0369304

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/kg wet	1000	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/kg wet	5.0	ND
Toluene	ug/kg wet	5.0	ND
Ethylbenzene	ug/kg wet	5.0	ND
Xylenes, Total	ug/kg wet	5.0	ND

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700367840	Spike	Spike Recv	Spike Dupl Recv	RPD
Benzene	ug/kg wet	5.0	ND	100	81%	94%	15%
Toluene	ug/kg wet	5.0	ND	100	80%	90%	12%
Ethylbenzene	ug/kg wet	5.0	ND	100	98%	97%	1%
Xylenes, Total	ug/kg wet	5.0	ND	300	92%	93%	1%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Benzene	ug/kg wet	5.0	100	110%	113%	3%
Toluene	ug/kg wet	5.0	100	110%	111%	1%
Ethylbenzene	ug/kg wet	5.0	100	104%	104%	0%
Xylenes, Total	ug/kg wet	5.0	300	107%	107%	0%



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FOOTNOTES
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August 19, 1994
PACE Project Number: 440804529

Client Reference: Emeryville-UST Removal 0570680

MDL Method Detection Limit
NC No calculation due to value below detection limit.
ND Not detected at or above the MDL.
RPD Relative Percent Difference

Industrial Compliance
 9719 Lincoln Village Dr. Suite 310
 Sacramento, CA 95827

August 17, 1994
 PACE Project Number: 440810517

Attn: Mr. Ron Derrick

Client Reference: Emeryville-AKA Proj.#440804.529

PACE Sample Number: 70 0370809
 Date Collected: 08/04/94
 Date Received: 08/10/94
 Client Sample ID: 28213+214+

299 Comp.
Parameter Units MDL Extract DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Arsenic (EPA Method 7060, Furnace AAS)	mg/L	0.005	0.006	08/16/94
Lead (EPA Method 7421, Furnace AAS)	mg/L	0.001	1.1	08/16/94

These data have been reviewed and are approved for release.



Darrell C. Cain
 Regional Director

Mr. Ron Derrick
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FOOTNOTES
for page 1

August 17, 1994
PACE Project Number: 440810517

Client Reference: Emeryville-AKA Proj.#440804.529

MDL Method Detection Limit



REPORT OF LABORATORY ANALYSIS

Mr. Ron Derrick
Page 3

QUALITY CONTROL DATA

August 17, 1994
PACE Project Number: 440810517

Client Reference: Emeryville-AKA Proj.#440804.529

Arsenic (EPA Method 7060, Furnace AAS)
Batch: 70 32969
Samples: 70 0370809

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
Arsenic (EPA Method 7060, Furnace AAS)	mg/L	0.005	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference Value</u>	<u>Recv</u>	<u>Dupl Recv</u>	<u>RPD</u>
Arsenic (EPA Method 7060, Furnace AAS)	mg/L	0.005	0.040	105%	100%	5%

REPORT OF LABORATORY ANALYSIS

Mr. Ron Derrick
 Page 4

QUALITY CONTROL DATA

August 17, 1994
 PACE Project Number: 440810517

Client Reference: Emeryville-AKA Proj.#440804.529

Lead (EPA Method 7421, Furnace AAS)
 Batch: 70 32954
 Samples: 70 0370809

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	700371198	Duplicate of 70 0371198	RPD
Lead (EPA Method 7421, Furnace AAS)	mg/L	0.001	ND	0.70	0.71	1%

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700371198	Spike	Spike Recv	Spike Dupl Recv	RPD
Lead (EPA Method 7421, Furnace AAS)	mg/L	0.001	0.70	0.020	100%	100%	0%

Mr. Ron Derrick
Page 5

FOOTNOTES
for pages 3 through 4

August 17, 1994
PACE Project Number: 440810517

Client Reference: Emeryville-AKA Proj.#440804.529

MDL Method Detection Limit
ND Not detected at or above the MDL.
RPD Relative Percent Difference



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CHAIN-OF-CUSTODY RECORD

440804.529

No. 14116

Industrial Compliance • 9719 Lincoln Village Drive, Ste. 310 • Sacramento, CA 95827 • Phone 916-369-8971 • FAX 916-369-8370

PROJECT NAME		PROJECT LOCATION		NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)						REMARKS					
PROJ. NO.	PROJECT CONTACT	PROJECT TELEPHONE NO.	<div style="display: flex; justify-content: space-around; font-size: small;"> SOIL/SLURRY DIESEL PTIC 5520 OSL HEAVY METALS LEAD/PAH SOIL/SLURRY WET DI </div>													
CLIENT'S REPRESENTATIVE		PROJECT MANAGER/SUPERVISOR														
ITEM NO.	SAMPLE NUMBER	DATE							TIME	COMP		GRAB	SAMPLE LOCATION (INCLUDE MATRIX AND POINT OF SAMPLE)			
Emeryville - UST Renewal		Emeryville		1	<div style="display: flex; justify-content: space-around; font-size: small;"> SOIL/SLURRY DIESEL PTIC 5520 OSL HEAVY METALS LEAD/PAH SOIL/SLURRY WET DI </div>						will call analysis					
1	28210	8/3	1405									✓	T2-SIDEWALL @ 7'	36923.1	X X X X	
2	28205	8/3	1410									✓	T2T4-SIDEWALL @ 7'	36924.0	X X X X X Y	LEAD/PAH 36920
3	28206	8/3	1415									✓	T4-SIDEWALL @ 7'	36925.8	X Y Y Y	
4	28207	8/3	1417									✓	T3T4-SIDEWALL @ 7'	36926.6	X Y Y Y	
5	28209	8/3	1421									✓	T3-SIDEWALL @ 7'	36927.4	Y Y Y Y	
6	28203	8/3	1425									✓	T1T3-SIDEWALL @ 7'	36928.2	Y Y Y Y X X	LEAD/PAH 36981.2
7	28204	8/3	1430									✓	T1-SIDEWALL @ 7'	36929.0	X Y Y Y	
8	28201	8/3	1435									✓	T1T2-SIDEWALL @ 7'	36930.1	Y Y Y Y	
9	28215	8/3	1450									✓	GROUNDWATER - SOUTH END OF PIT	36931.1	X X X X X	
10	28216	8/3	1455	✓	GROUNDWATER - SOUTH END OF PIT	X X X X X										

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS
1	1-8	<i>[Signature]</i>	<i>[Signature]</i>	8/4/99	1235	5 day TAT
2			<i>[Signature]</i>	8/11/99	1412	35 15/2 E/H M/B
3						
4						

SAMPLER'S NAME: Steve Towle
 SAMPLER'S SIGNATURE: *[Signature]*



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CHAIN-OF-CUSTODY RECORD

440809.529

No. 14117

Industrial Compliance • 9719 Lincoln Village Drive, Ste. 310 • Sacramento, CA 95827 • Phone 916-369-8971 • FAX 916-369-8370

PROJECT NAME		PROJECT LOCATION				NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)										REMARKS
PROJ. NO.	PROJECT CONTACT	PROJECT TELEPHONE NO.															
CLIENT'S REPRESENTATIVE		PROJECT MANAGER/SUPERVISOR															
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB		SAMPLE LOCATION (INCLUDE MATRIX AND POINT OF SAMPLE)										
Emeryville - UST Removal		Emeryville				1 1 1	[Diagonal lines]										will call analysis
05100680	Ron Derrick	(916) 369-8971															
Randy Smith		Ron Derrick															
1	28213	8/4	0730	✓													
2	28214	8/4	0730	✓		stockpile 36921.5											
3	28299	8/4	0730	✓		stockpile 36922.3											
4						28201 + 203 + 205 + 207 Composite. 36933.9											
5																	
6																	
7																	
8																	
9																	
10																	

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS
1	1-3	[Signature]	[Signature]	8/4/00	12:35	5 day TAT
2			[Signature]	8/4/00	12:35	
3						
4						

SAMPLER'S NAME: Steve Toude
 SAMPLER'S SIGNATURE: [Signature]

44109108
CHAIN-OF-CUSTODY RECORD

44030132
No. **14117**

Industrial Compliance • 9719 Lincoln Village Drive, Ste. 310 • Sacramento, CA 95827 • Phone 916-369-8971 • FAX 916-369-8370

PROJECT NAME <i>Empireville - UST Removal</i>		PROJECT LOCATION <i>EMPIREVILLE</i>				NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)					REMARKS
PROJ. NO. <i>05100680</i>	PROJECT CONTACT <i>RON DERRICK</i>			PROJECT TELEPHONE NO. <i>(416) 369-8971</i>			TCLP - Metals As, Pb					
CLIENT'S REPRESENTATIVE <i>Randy Smith</i>				PROJECT MANAGER/SUPERVISOR <i>RON DERRICK</i>								
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB							
1	28213	8/4	0730	✓		<i>Stockpile Akaⁿ 36920.7</i>					1	will call analysis
2	28214	8/4	0730	✓		<i>Stockpile Akaⁿ 36921.5</i>					1	
3	28299	8/4	0730	✓		<i>Stockpile Akaⁿ 36922.3</i>					1	
4						<i>28201 + 28203 + 28205 + 28207 Composite 36933.9</i>					1	

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS
	1-3	<i>[Signature]</i>	<i>[Signature]</i>	8/4/04	10:35	5 day TAT
	2		<i>[Signature]</i>	8/4/04	11:25	
	3					
4						SAMPLER'S NAME <i>Steve Towle</i>

SAMPLER'S SIGNATURE
[Signature]



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CHAIN-OF-CUSTODY RECORD

440805.516
ADD TO 440804.513

No. 14118

Industrial Compliance • 9719 Lincoln Village Drive, Ste. 310 • Sacramento, CA 95827 • Phone 916-369-8971 • FAX 916-369-8370

PROJECT NAME Emeryville					PROJECT LOCATION Emeryville					NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)					REMARKS	
PROJ. NO. 05100680		PROJECT CONTACT RON PERKINS			PROJECT TELEPHONE NO. (916) 369-8971						<i>8516/5020 Diesel</i> <i>8520 Metals</i> <i>8520/5020</i>						
CLIENT'S REPRESENTATIVE RANDY SMITH					PROJECT MANAGER/SUPERVISOR												
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE LOCATION (INCLUDE MATRIX AND POINT OF SAMPLE)											
1	28217	8/4	1345		✓	GROUND WATER - SOUTH END					1	X	X	X	X	X	will call analysis ↓ ↓
2	28218	8/4	1345		✓	GROUND WATER - SOUTH END					1	X	X	X	X		
3	28219	8/4	1345		✓	GROUND WATER - SOUTH END					1	X	X	X	X		
4																	
5																	
6																	
7																	
8																	
9																	
10																	

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS
1	1-3	<i>[Signature]</i>	<i>[Signature]</i>	84	1:00	5 day TAT
2	1-3	<i>[Signature]</i>	<i>[Signature]</i>	85	3:10	
3		<i>[Signature]</i>	<i>[Signature]</i>	85	4:55	
4						
		SAMPLER'S NAME		SAMPLER'S SIGNATURE		
		Steve Toule		<i>[Signature]</i>		



Industrial Compliance

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CHAIN-OF-CUSTODY RECORD

490805.518

No. 13720

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PROJECT NAME <i>EMERYVILLE BUREAU DRIVE</i>						PROJECT LOCATION <i>EMERYVILLE</i>						NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)								
PROJ. NO. <i>0514660</i>			PROJECT CONTACT <i>ROD DENNICK</i>			PROJECT TELEPHONE NO. <i>916 369 8971</i>			CLIENT'S REPRESENTATIVE										PROJECT MANAGER/SUPERVISOR		
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE LOCATION (INCLUDE MATRIX AND POINT OF SAMPLE)													REMARKS		
1	A	8-5	10:40			GROUND WATER - SOUTH END													WILL CALL FOR ANALYSIS		
2	B	8-5	10:40			GROUND WATER - SOUTH END															
3	C	8-5	10:40			GROUND WATER - SOUTH END															
4	D	8-5	10:40			GROUND WATER SOUTH END															
5																					
6																					
7																					
8																					
9																					
10																					

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS
1	1-4	<i>[Signature]</i>	<i>[Signature]</i>	8/5/94	3:10	5-DAY TAT
2		<i>[Signature]</i>	<i>[Signature]</i>	8/5/94	4:50	
3						
4						
SAMPLER'S NAME <i>[Signature]</i>						SAMPLER'S SIGNATURE <i>[Signature]</i>

TABLE 1
GROUND-WATER ELEVATION DATA
JANUARY 1994

Well Number	Date	Well Elevation (feet Mean Sea Level)	Measured Depth to Ground Water (feet)	Ground-Water Elevation* (feet) (MLLM Datum)
LF-1	05-Jan-94	16.92	NM	NM
LF-2	05-Jan-94	12.24	4.19	3.22 **
LF-3	05-Jan-94	11.98	5.09	5.39
LF-4	05-Jan-94	13.05	NM	NM
LF-5	05-Jan-94	10.25	3.65	6.60
LF-6	Sealed August 2, 1990			
LF-7	05-Jan-94	11.08	4.36	6.72
LF-8	05-Jan-94	12.75	6.72	6.03
LF-9	05-Jan-94	10.44	NM	NM
LF-10	05-Jan-94	10.32	3.72	6.60
LF-11	05-Jan-94	10.08	3.42	6.66
LF-12	05-Jan-94	14.97	6.98	7.99
LF-13	05-Jan-94	14.76	6.62	3.14
LF-14	05-Jan-94	10.03	NM	NM
LF-15	05-Jan-94	9.30	NM	NM
LF-16	05-Jan-94	10.10	NM	NM
LF-31	05-Jan-94	17.11	NM	NM
LF-32	05-Jan-94	9.72	3.05	6.67
LF-33	05-Jan-94	10.35	3.68	6.67
LF-34	05-Jan-94	14.34	6.62	7.92
Surface Water of Temescal Creek				
	05-Jan-94	10.98	NM	NM

Data entered by MEX/9 Mar 94 Data proofed by LHO

Notes:

* Well elevations for LF-31, LF-32, LF-33, LF-34, and LF-5 were resurveyed by Nolte Associates of San Jose, California on August 6, 1991.

** The ground-water elevation in well LF-2 has been corrected to account for the presence of the lower density fluids on top of the water table using the following calculation:

$$\begin{array}{r} \text{Ground-water} \\ \text{Elevation} \\ \text{(ft msl)} \end{array} = \begin{array}{r} \text{Well Elevation} \\ + \\ \text{(ft msl)} \end{array} \left[\begin{array}{r} \text{Product} \\ \text{Thickness} \\ \text{(ft)} \end{array} \times \begin{array}{r} \text{Specific} \\ \text{gravity} \\ \text{of product} \end{array} - \begin{array}{r} \text{Depth} \\ \text{to Water} \\ \text{(ft)} \end{array} \right]$$

The specific gravity of the product was estimated to be approximately 0.87.

TABLE 2
 HISTORICAL WATER-QUALITY DATA SUMMARY
 VOLATILE ORGANIC COMPOUNDS, EPA METHOD 8240
 (All concentrations expressed in parts per million (ppm))

Well Number	Date Sampled	Lab I.D. Number	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexanone	Toluene	1,1,1- TCA	1,2-DCA	PCE	TCE	Chloro-benzene	Total Quantified Conc.	Notes
LF-13	06-Dec-89	B&C 12-174-7	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	0.029	<0.001	<0.001	<0.001	<0.001	0.031	
LF-13	18-Jul-90	B&C 07-444-4	<0.010	<0.001	<0.001	<0.020	0.001	<0.001	0.002	0.056	<0.001	<0.001	<0.001	<0.001	0.060	
LF-13	19-Dec-90	B&C 12-474-4	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	0.042	0.002	0.002	<0.001	<0.001	0.046	#3
LF-13	19-Jun-91	ANA 9106245-03	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	0.032	<0.005	<0.005	<0.005	<0.005	0.032	
LF-13	08-Jul-92	ANA 9207088-02	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	0.010	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-13	30-Dec-92	ANA 9212380-03	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-13	08-Jun-93	ANA 9306128-06	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	0.008	
LF-13	05-Jan-94	AEN 9401041-03	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	0.004	<0.003	<0.003	<0.003	<0.003	0.004	
LF-14	04-Sep-90	B&C 07-444-4	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-14	21-Dec-90	B&C 12-505-7	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-14	20-Jun-91	ANA 9106251-08	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-14	09-Jul-92	ANA 9207119-07	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-14	31-Dec-92	ANA 9212395-04	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-14	09-Jun-93	ANA 9306138-08	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-15	04-Sep-90	B&C 07-444-5	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-15	21-Dec-90	B&C 12-505-6	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-15	20-Jun-91	ANA 9106251-09	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-15	08-Jul-92	ANA 9207088-09	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-15	30-Dec-92	ANA 9212380-08	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-15	09-Jun-93	ANA 9306138-01	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-16	04-Sep-90	B&C 07-444-6	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-16	20-Dec-90	B&C 12-505-5	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-16	20-Jun-91	ANA 9106251-10	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-16	09-Jul-92	ANA 9207119-01	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-16	30-Dec-92	ANA 9212380-07	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-16	09-Jun-93	ANA 9306138-02	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-B1	07-Dec-89	B&C 12-212-6	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.051	<0.001	<0.001	<0.001	0.051	
LF-B1	18-Jul-90	B&C 07-444-9	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.002	<0.001	0.170	0.001	<0.001	<0.001	0.171	
LF-B1	20-Dec-90	B&C 12-505-4	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.130	<0.001	<0.001	<0.001	0.130	
LF-B1	20-Jun-91	ANA 9106251-05	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.180	<0.005	<0.005	<0.005	0.180	
LF-B1	08-Jul-92	ANA 9207088-04	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.150	<0.005	<0.005	<0.005	0.150	
LF-B1	30-Dec-92	ANA 9212380-06	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.140	<0.005	<0.005	<0.005	0.140	
LF-B1	08-Jun-93	ANA 9306128-07	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.160	<0.005	<0.005	<0.005	0.160	
LF-B2	06-Dec-89	B&C 12-174-5	<0.010	<0.001	<0.001	<0.020	0.013	<0.001	<0.001	<0.001	0.007	<0.001	<0.001	<0.001	0.020	
LF-B2	18-Jul-90	B&C 07-444-6	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	0.007	<0.001	<0.001	<0.001	0.009	
LF-B2	18-Jul-90	B&C 07-444-7	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	0.007	<0.001	<0.001	<0.001	0.009	
LF-B2	19-Dec-90	B&C 12-474-6	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.004	0.002	<0.001	<0.001	0.006	
LF-B2	20-Jun-91	ANA 9106251-04	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.150	<0.005	<0.005	<0.005	0.150	
LF-B2	08-Jul-92	ANA 9207088-05	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.006	
LF-B2	08-Jun-93	ANA 9306128-03	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.006	
LF-B3	07-Dec-89	B&C 12-212-8	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.100	<0.001	<0.001	<0.001	0.101	#1
LF-B3	07-Dec-89	B&C 12-212-10	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.073	<0.001	<0.001	<0.001	0.073	
LF-B3	18-Jul-90	B&C 07-444-8	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	0.086	<0.001	<0.001	<0.001	0.088	
LF-B3	20-Dec-90	B&C 12-505-3	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.084	<0.001	<0.001	<0.001	0.084	
LF-B3	19-Jun-91	ANA 9106245-05	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.110	<0.005	<0.005	<0.005	0.110	

TABLE 2
 HISTORICAL WATER QUALITY DATA SUMMARY
 VOLATILE ORGANIC COMPOUNDS, EPA METHOD 8240
 (All concentrations expressed in parts per million (ppm))

Well Number	Date Sampled	Lab I.D. Number	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexanone	Toluene	1,1,1-TCA	1,2-DCA	PCE	TCE	Chloro-Benzene	Total Quantified Conc.	Notes
Trip Blank	03-Jan-94	AEN 9401042-04	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.000	
LF-10-FB	06-Jan-94	AEN 9401041-06	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.000	

Data entered by HEK/11 Feb; 9 Mar 94 Data proofed by KG 1-10-94 QA/QC by ESY/...

Explanation of Symbols and Abbreviations:

Signifies that there is a note of explanation for laboratory results.
 B&C: Brown and Caldwell Laboratory, Emeryville, California.
 ANA: Anametrix Laboratory of San Jose, California

DUP = Duplicate Sample

1,1,1-TCA = 1,1,1-Trichloroethane
 1,2-DCA = 1,2-Dichloroethane
 PCE = Tetrachloroethene
 TCE = Trichloroethene

NOTES:

- #1 LF-B3 6/02/89 - Vinyl Acetate reported at 0.001 ppm, Styrene reported at 0.001 ppm, and Methyl Isobutyl Ketone reported at 0.001 ppm.
- #2 LF-1 7/20/90 - cis-Dichloroethene reported at 0.001 ppm.
- #3 LF-13 12/19/90 - 1,1-Dichloroethene reported at 0.002 ppm.
- #4 LF-4 DUP 06/21/91 - cis-1,2-Dichloroethene reported at 0.020 ppm.

TABLE 3
 HISTORICAL WATER-QUALITY DATA SUMMARY
 TOTAL PETROLEUM HYDROCARBONS AS DIESEL
 (Results reported in parts per million (ppm))

Well Number	Date Sampled	Lab	Lab I.D. Number	Total Petroleum Hydrocarbons As Diesel	Notes
LF-1	21-Jun-91	ANA	9106274-08	<0.050	
LF-1	09-Jul-92	ANA	9207119-16	0.110	
LF-1	09-Jun-93	ANA	9306148-05	0.083	
LF-2	20-Jul-90	B&C	07-506-5		
LF-3	21-Jun-91	ANA	9106274-07	2.000	
LF-3	09-Jul-92	ANA	9207119-13	3.000	
DUP	09-Jul-92	ANA	9207119-14	3.300	
LF-3	10-Jun-93	ANA	9306148-03	100	#2
DUP	10-Jun-93	ANA	9306148-04	110	#2
LF-4	21-Jun-91	ANA	9106274-02	0.780	
LF-4-0	21-Jun-91	ANA	9106274-03	0.510	
LF-4	09-Jul-92	ANA	9207119-10	1.200	
LF-4	09-Jun-93	ANA	9306138-11	1.200	#2
LF-5	06-Aug-91	ANA	9108069-05	4.700	
LF-5	09-Jul-92	ANA	9207119-11	3.330	
LF-5	09-Jun-93	ANA	9306138-12	2.000	#2
LF-7	20-Jun-91	ANA	9106251-06	<0.050	
LF-7	09-Jul-92	ANA	9207119-03	0.300	
DUP	09-Jul-92	ANA	9207119-04	0.480	
LF-7	09-Jun-93	ANA	9306138-04	0.340	
DUP	09-Jun-93	ANA	9306138-05	0.320	
LF-7	06-Jan-94	ANA	9401042-03	0.540	
LF-8	20-Jun-91	ANA	9106251-07	<0.050	
LF-8	09-Jul-92	ANA	9207119-05	0.250	
LF-8	30-Dec-92	ANA	9212380-09	0.150	
LF-8	09-Jun-93	ANA	9306138-09	0.330	
LF-8	06-Jan-94	ANA	9401042-02	1.700	
LF-9	21-Jun-91	ANA	9106274-05	0.200	
LF-9	09-Jul-92	ANA	9207119-09	0.300	
LF-9	30-Dec-92	ANA	9212380-10	0.300	
LF-9	09-Jun-93	ANA	9306138-10	0.560	
LF-10	21-Jun-91	ANA	9106274-06	0.270	
LF-10	09-Jul-92	ANA	9207119-12	0.420	
LF-10	31-Dec-92	ANA	9212395-05	0.330	#1
DUP	31-Dec-92	ANA	9212395-06	0.370	#1
LF-10	10-Jun-93	ANA	9306148-02	0.470	
LF-10	06-Jan-94	AEN	9401041-07	1.500	
DUP	06-Jan-94	AEN	9401042-01	1.200	
LF-11	19-Jul-90	B&C	07-485-3		
LF-11	20-Jun-91	ANA	9106251-03	0.130	
LF-11-0	20-Jun-91	ANA	9106251-04	0.120	
LF-11	09-Jul-92	ANA	9207119-06	0.260	
LF-11	31-Dec-92	ANA	9212395-03	0.310	#1
LF-11	09-Jun-93	ANA	9306138-07	0.270	
LF-11	05-Jan-94	AEN	9401041-04	0.800	
LF-12	19-Jun-91	ANA	9106245-04	<0.050	
LF-12	08-Jul-92	ANA	9207088-03	<0.050	
LF-12	30-Dec-92	ANA	9212380-04	<0.050	
LF-12	08-Jun-93	ANA	9306128-01	0.099	
LF-12	06-Jan-94	AEN	9401041-05	<0.050	
LF-13	19-Jun-91	ANA	9106245-02	<0.050	
LF-13	08-Jul-92	ANA	9207088-02	<0.050	

TABLE 3
 HISTORICAL WATER-QUALITY DATA SUMMARY
 TOTAL PETROLEUM HYDROCARBONS AS DIESEL
 (Results reported in parts per million (ppm))

Well Number	Date Sampled	Lap	Lap I.D. Number	Total Petroleum Hydrocarbons As Diesel	Notes
LF-13	30-Dec-92	ANA	9212380-03	<0.050	
LF-13	08-Jun-93	ANA	9306128-06	0.052	
LF-13	05-Jan-94	AEN	9401041-03	<0.050	
LF-14	20-Jun-91	ANA	9106251-08	<0.050	
LF-14	09-Jul-92	ANA	9207119-07	0.180	#1
LF-14	31-Dec-92	ANA	9212395-04	0.190	
LF-14	09-Jun-93	ANA	9306138-09	0.240	
LF-15	20-Jun-91	ANA	9106251-09	<0.050	
LF-15	08-Jul-92	ANA	9207088-09	<0.050	
LF-15	30-Dec-92	ANA	9212380-08	<0.050	
LF-15	09-Jun-93	ANA	9306138-01	0.098	
LF-16	20-Jun-91	ANA	9106251-10	<0.050	
LF-16	09-Jul-92	ANA	9207119-01	0.075	
LF-16	30-Dec-92	ANA	9212380-07	<0.050	
LF-16	09-Jun-93	ANA	9306138-02	0.083	
LF-31	20-Jun-91	ANA	9106251-05	<0.050	
LF-31	08-Jul-92	ANA	9207088-04	<0.050	
LF-31	30-Dec-92	ANA	9212380-06	<0.050	
LF-31	08-Jun-93	ANA	9306128-03	0.061	
LF-32	21-Jun-91	ANA	9106274-04	<0.050	
LF-32	08-Jul-92	ANA	9207088-05	<0.050	
LF-32	08-Jun-93	ANA	9306128-05	<0.050	
LF-33	19-Jun-91	ANA	9106245-05	<0.050	
LF-33	08-Jul-92	ANA	9207088-08	<0.050	
LF-33	30-Dec-92	ANA	9212380-05	<0.050	
LF-33	08-Jun-93	ANA	9306128-05	0.060	
LF-33	05-Jan-94	AEN	9401041-02	<0.050	
LF-34	19-Jun-91	ANA	9106245-01	<0.050	
LF-34	08-Jul-92	ANA	9106245-01	<0.050	
LF-34	30-Dec-92	ANA	9212380-02	<0.050	
LF-34	08-Jun-93	ANA	9306128-02	0.066	
LF-34	05-Jan-94	AEN	9401041-01	<0.050	

Data entered by MEK/11 Feb, 9 Mar 94 Data proofed by MEK QA/QC by MEK

Notes:

3&C = 3C Analytical Laboratory, Emeryville, California
 AEN = American Environmental Network, Pleasant Hill, California
 ANA = Anamatrix Laboratory, San Jose, California

Samples analyzed by 3&C using Modified EPA Method 8015 for total fuel hydrocarbons.

Samples analyzed by ANA and AEN using EPA Method 3510 for total petroleum hydrocarbons as diesel.

#1 - The concentrations reported as diesel by Anamatrix for samples LF-10, LF-10DUP, LF-11, and LF-14 are primarily caused by the presence of a heavier petroleum product, possibly motor oil.

#2 - The concentrations reported as diesel by Anamatrix for samples LF-3, LF-3DUP, LF-4, and LF-5 are primarily due to the presence of a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline.

TABLE 4
 HISTORICAL WATER-QUALITY DATA SUMMARY
 TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
 (Results reported in parts per million (ppm))

Well Number	Date Sampled	Lab	Lab I.I. Number	Total Petroleum Hydrocarbons As Gasoline	Notes
LF-1	09-Jul-92	ANA	9207119-16	<0.050	
LF-1	10-Jun-93	ANA	9306148-04	<0.050	
LF-3	09-Jul-92	ANA	9207119-13	190.000	
DUP	09-Jul-92	ANA	9207119-14	180.000	
LF-3	10-Jun-93	ANA	9306148-02	150.000	
DUP	10-Jun-93	ANA	9306148-03	150.000	
LF-4	09-Jul-92	ANA	9207119-10	14.000	
LF-4	09-Jun-93	ANA	9306138-11	2.200	
LF-5	09-Jul-92	ANA	9207119-11	59.000	
LF-5	09-Jun-93	ANA	9306138-12	95.000	
LF-7	09-Jul-92	ANA	9207119-03	0.140	
DUP	09-Jul-92	ANA	9207119-04	0.130	
LF-7	09-Jun-93	ANA	9306138-04	0.110	
DUP	09-Jun-93	ANA	9306138-05	0.100	
LF-7	06-Jan-94	ANA	9401042-03	0.500	
LF-8	09-Jul-92	ANA	9207119-05	<0.050	
LF-8	30-Dec-92	ANA	9212380-09	0.120	#2
LF-8	09-Jun-93	ANA	9306138-09	<0.050	#2
LF-8	06-Jan-94	ANA	9401042-02	<0.050	
LF-9	09-Jul-92	ANA	9207119-09	0.620	
LF-9	30-Dec-92	ANA	9212380-10	0.510	#2
LF-9	09-Jun-93	ANA	9306138-10	0.430	#2
LF-10	09-Jul-92	ANA	9207119-12	0.700	
LF-10	31-Dec-92	ANA	9212395-05	0.190	
DUP	31-Dec-92	ANA	9212395-06	0.180	
LF-10	10-Jun-93	ANA	9306148-01	0.180	
LF-10	06-Jan-94	AEN	9401041-07	0.200	
DUP	06-Jan-94	ANA	9401042-01	0.200	#2
LF-11	09-Jul-92	ANA	9207119-06	<0.050	
LF-11	31-Dec-92	ANA	9212395-03	0.058	
LF-11	09-Jun-93	ANA	9306138-07	<0.050	
LF-11	05-Jan-94	AEN	9401041-04	0.060	
LF-12	08-Jul-92	ANA	9207088-03	<0.050	
LF-12	30-Dec-92	ANA	9212380-04	<0.050	
LF-12	08-Jun-93	ANA	9306128-01	<0.050	
LF-12	06-Jan-94	AEN	9401041-05	<0.050	
LF-13	08-Jul-92	ANA	9207088-02	<0.050	
LF-13	30-Dec-92	ANA	9212380-03	<0.050	
LF-13	08-Jun-93	ANA	9306128-06	<0.050	
LF-13	05-Jan-94	AEN	9401041-03	<0.050	
LF-14	09-Jul-92	ANA	9207119-07	<0.050	
LF-14	31-Dec-92	ANA	9212395-04	0.068	
LF-14	09-Jun-93	ANA	9306138-08	<0.050	
LF-15	08-Jul-92	ANA	9207088-09	<0.050	
LF-15	30-Dec-92	ANA	9212380-08	<0.050	
LF-15	09-Jun-93	ANA	9306138-01	<0.050	
LF-16	09-Jul-92	ANA	9207119-01	<0.050	
LF-16	30-Dec-92	ANA	9212380-07	0.050	
LF-16	09-Jun-93	ANA	9306138-02	<0.050	
LF-81	08-Jul-92	ANA	9207088-04	0.180	
LF-81	30-Dec-92	ANA	9212380-06	0.200	#1

TABLE 4
 HISTORICAL WATER-QUALITY DATA SUMMARY
 TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
 (Results reported in parts per million (ppm))

Well Number	Date Sampled	Lap	Lap I.D. Number	Total Petroleum Hydrocarbons As Gasoline	Notes
LF-31	08-Jun-93	ANA	9306128-07	0.130	#1
LF-32	08-Jul-92	ANA	9207088-05	<0.050	
LF-32	08-Jun-93	ANA	9306128-03	<0.050	
LF-33	08-Jul-92	ANA	9207088-08	0.140	
LF-33	30-Dec-92	ANA	9212380-05	0.150	#1
LF-33	08-Jun-93	ANA	9306128-05	0.090	#1
LF-33	05-Jan-94	AEN	9401041-02	<0.050	
LF-34	08-Jul-92	ANA	9106245-01	<0.050	
LF-34	30-Dec-92	ANA	9212380-02	0.160	#1
LF-34	08-Jun-93	ANA	9306128-02	<0.050	#1
LF-34	05-Jan-94	AEN	9401041-01	<0.050	
Blanks					
LF-10-#3	06-Jan-94	AEN	9401041-06	<0.050	

Data entered by MEK/11 Rep: 9 Mar 94 Data proofed by LAG 5-10-94 QA/QC by MEK

ANA = Anametrix Laboratory, San Jose, California
 AEN = American Environmental Network, Pleasant Hill, California

Samples analyzed using EPA Method 8030 for total petroleum hydrocarbons as gasoline.

#1 = The concentrations reported as gasoline by Anametrix for samples LF-31, LF-33, and LF-34 are primarily caused by the presence of discrete hydrocarbon peak not indicative of gasoline.

#2 = The concentration reported by Anametrix as gasoline for sample LF-3 and LF-9 are primarily caused by the presence of a heavier petroleum hydrocarbon peak not indicative of gasoline.

TABLE 5
 HISTORICAL WATER QUALITY DATA SUMMARY
 INORGANIC COMPOUNDS
 (All concentrations expressed in parts per million (ppm))

Well Number	Date Sampled	Lab	Lab I.D. No.	Type of Analysis	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-1	01-Jun-89	B&C	89060194	200/7000	200.000	NA	<0.0400	<0.300				
LF-1	07-Dec-89	B&C	12-212-1	200/7000	190.000	NA	<0.0400	<0.300				
LF-1	20-Jul-90	B&C	07-506-7	200/7000	120.000	0.060	<0.0500	<0.200				
LF-1	20-Jun-91	ANA	9106274-08	200/7000	58.000	NA	<0.005	<0.004				
LF-1	09-Jul-92	ANA	9207119-16	200/7000	53.200	<0.100	0.058	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-1	10-Jun-93	ANA	9306148-05	6000/7000	39.800	<0.100	<0.030	0.0039	<0.010	<0.0002	<0.050	<0.010
LF-3	02-Jun-89	B&C	89060502	200/7000	27.000	NA	<0.0400	<0.300				
LF-3	07-Dec-89	B&C	12-212-2	200/7000	30.000	NA	<0.0400	<0.300				
LF-3	20-Jul-90	B&C	07-506-6	200/7000	21.000	0.420	<0.0500	<0.200				
LF-3	20-Jun-91	ANA	9106274-07	200/7000	60.400	NA	<0.005	<0.004				
LF-3	09-Jul-92	ANA	9207119-13	200/7000	70.800	0.473	0.0205	<0.040	<0.010	<0.00027	<0.005	<0.010
DUP	09-Jul-92	ANA	9207119-14	200/7000	66.600	0.452	0.0361	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-3	10-Jun-93	ANA	9306148-03	6000/7000	142.000	0.625	<0.100	<0.003	<0.010	<0.0002	<0.050	<0.010
DUP	10-Jun-93	ANA	9306148-04	6000/7000	141.000	0.635	<0.100	<0.003	<0.010	<0.0002	<0.050	<0.010
LF-4	02-Jun-89	B&C	89060503	200/7000	0.530	NA	<0.0400	<0.300				
Duplicate	02-Jun-89	B&C	89060504	200/7000	0.580	NA	<0.0400	<0.300				
LF-4	06-Dec-89	B&C	12-174-1	200/7000	0.420	NA	<0.0400	<0.300				
Duplicate	06-Dec-89	B&C	12-174-6	200/7000	0.550	NA	<0.0400	<0.300				
LF-4	20-Jul-90	B&C	07-506-3	200/7000	0.190	0.160	<0.0500	<0.200				
LF-4	20-Jun-91	ANA	9106274-02	200/7000	0.510	NA	<0.005	0.015				
LF-4-DUP	20-Jun-91	ANA	9106274-03	200/7000	0.493	NA	<0.005	0.010				
LF-4	09-Jul-92	ANA	9207119-10	200/7000	0.367	0.119	<0.005	<0.040	<0.010	<0.00027	<0.025	<0.010
LF-4	09-Jun-93	ANA	9306138-16	6000/7000	1.520	0.250	<0.015	<0.003	<0.010	<0.0002	<0.025	<0.010
LF-5	01-Jun-89	B&C	89060192	200/7000	0.017	NA	<0.0400	<0.300				
LF-5	06-Dec-89	B&C	12-174-2	200/7000	<0.070	NA	<0.0400	<0.300				
LF-5	20-Jul-90	B&C	07-506-2	200/7000	0.020	0.170	<0.0500	<0.200				
LF-5	20-Jun-91	ANA	9106069-05	200/7000	0.038	NA	<0.005	0.003				
LF-5	09-Jul-92	ANA	9207119-11	200/7000	<0.010	0.111	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-5	09-Jun-93	ANA	9306138-12	6000/7000	0.0203	0.257	<0.005	<0.003	<0.010	<0.00027	<0.005	<0.010
LF-6	01-Jun-89	B&C	89060193	200/7000	15.000	NA	0.0900	<0.300				
LF-6	05-Dec-89	B&C	12-128-3	200/7000	16.000	NA	0.0600	<0.300				
LF-6	20-Jul-90	B&C	07-506-4	200/7000	14.000	0.210	<0.0500	<0.200				
LF-6	Sealed August 2, 1990											
LF-7	01-Jun-89	B&C	89060191	200/7000	0.008	NA	<0.0400	<0.300				
LF-7	06-Dec-89	B&C	12-174-3	200/7000	<0.070	NA	<0.0400	<0.300				
LF-7	19-Jul-90	B&C	07-485-4	200/7000	<0.002	0.060	<0.0500	<0.200				
LF-7	20-Jun-91	ANA	9106251-06	200/7000	0.012	NA	<0.005	<0.004				
LF-7	09-Jul-92	ANA	9207119-03	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
DUP	09-Jul-92	ANA	9207119-04	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-7	09-Jun-93	ANA	9306138-04	6000/7000	<0.010	0.191	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
DUP	09-Jun-93	ANA	9306138-05	6000/7000	<0.010	0.201	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-7	06-Jan-94	AEN	9401042-03	200	<0.002	0.07	<0.001	0.001	<0.002	<0.0002	<0.004	<0.001
LF-8	05-Dec-89	B&C	12-128-4	200/7000	<0.070	NA	<0.0400	<0.300				
LF-8	19-Jul-90	B&C	07-485-4	200/7000	<0.002	0.120	<0.0500	<0.200				
LF-8	21-Dec-90	B&C	12-529-3	200/7000	0.020	0.590	0.0015	<0.200				
LF-8	20-Jun-91	ANA	9106251-07	200/7000	0.021	NA	<0.005	<0.004				

TABLE 5
 HISTORICAL WATER QUALITY DATA SUMMARY
 INORGANIC COMPOUNDS
 (All concentrations expressed in parts per million (ppm))

Well Number	Date Sampled	Lab	Lab I.D. No.	Type of Analysis	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-8	09-Jul-92	ANA	9207119-05	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-8	30-Dec-92	ANA	9212380-09	200/7000	0.029	0.177	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-8	09-Jun-93	ANA	9306138-09	6000/7000	0.0384	0.121	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-8	06-Jan-94	AEN	9401042-02	200	0.055	0.10	<0.001	<0.001	<0.002	<0.0002	<0.005	<0.010
LF-9	05-Dec-89	B&C	12-128-1	200/7000	0.067	NA	<0.0400	<0.300				
LF-9	19-Jul-90	B&C	07-485-7	200/7000	0.008	0.110	<0.0500	<0.200				
LF-9	21-Dec-90	B&C	12-529-5	200/7000	0.120	0.270	0.0029	<0.200				
LF-9	20-Jun-91	ANA	9106274-05	200/7000	0.075	NA	<0.005	0.012				
LF-9	06-Aug-91	ANA	9108069-02	200/7000	0.131	NA	NA	NA				
LF-9	09-Jul-92	ANA	9207119-09	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-9	30-Dec-92	ANA	9212380-10	200/7000	0.106	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-9	09-Jun-93	ANA	9306138-10	6000/7000	0.158	0.169	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-10	07-Dec-89	B&C	12-212-5	200/7000	0.650	NA	<0.0400	<0.300				
LF-10	19-Jul-90	B&C	07-485-7	200/7000	0.012	0.110	<0.0500	<0.200				
Duplicate	19-Jul-90	B&C	07-485-8	200/7000	0.008	0.140	<0.0500	<0.300				
LF-10	21-Dec-90	B&C	12-529-6	200/7000	1.000	0.330	0.0009	<0.200				
Duplicate	21-Dec-90	B&C	12-529-7	200/7000	1.100	0.350	0.0007	<0.300				
LF-10	20-Jun-91	ANA	9106274-06	200/7000	0.657	NA	<0.005	0.013				
LF-10	06-Aug-91	ANA	9108069-02	200/7000	1.090	NA	NA	NA				
LF-10	09-Jul-92	ANA	9207119-12	200/7000	0.328	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.025	<0.010
LF-10	31-Dec-92	ANA	9212395-05	200/7000	0.550	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
DUP	31-Dec-92	ANA	9212395-06	200/7000	0.552	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-10	10-Jun-93	ANA	9306148-02	6000/7000	0.958	0.249	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-10	06-Jan-94	AEN	9401041-07	200	0.940	0.190	<0.001	<0.001	<0.002	<0.0002	<0.004	<0.010
DUP	06-Jan-94	AEN	9401042-01	200	0.820	0.180	<0.001	0.001	<0.002	<0.0002	<0.004	0.002
LF-11	05-Dec-89	B&C	12-128-2	200/7000	<0.070	NA	<0.0400	<0.300				
LF-11	19-Jul-90	B&C	07-485-5	200/7000	0.007	0.120	<0.0500	<0.200				
LF-11	21-Dec-90	B&C	12-529-4	200/7000	0.011	0.180	0.0006	<0.200				
LF-11	20-Jun-91	ANA	9106251-06	200/7000	0.023	NA	<0.005	0.007				
LF-11	20-Jun-91	ANA	9106251-07	200/7000	0.024	NA	<0.005	0.006				
LF-11	06-Aug-91	ANA	9108069-04	200/7000	0.021	NA	NA	NA				
LF-11	09-Jul-92	ANA	9207119-06	200/7000	<0.010	0.169	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-11	31-Dec-92	ANA	9212395-03	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-11	09-Jun-93	ANA	9306138-15	6000/7000	0.0116	0.152	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-11	05-Jan-94	AEN	9401041-04	200	0.019	0.130	<0.001	<0.001	<0.002	<0.0002	<0.004	0.001
LF-12	06-Dec-89	B&C	12-174-2	200/7000	<0.070	NA	<0.0400	<0.300				
LF-12	18-Jul-90	B&C	07-444-5	200/7000	0.004	0.060	<0.0500	<0.300				
LF-12	19-Jun-91	ANA	9106245-04	200/7000	<0.010	NA	<0.005	<0.004				
LF-12	08-Jul-92	ANA	9207088-03	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-12	30-Dec-92	ANA	9212380-04	200/7000	0.014	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-12	08-Jun-93	ANA	9306128-01	6000/7000	0.0152	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-12	06-Jan-94	AEN	9401041-05	200	0.013	0.060	<0.001	<0.001	0.006	<0.0002	<0.005	<0.001
LF-13	06-Dec-89	B&C	12-174-7	200/7000	<0.070	NA	<0.0400	<0.300				
LF-13	18-Jul-90	B&C	07-444-4	200/7000	<0.002	<0.050	<0.0500	<0.200				
LF-13	19-Dec-90	B&C	12-474-4	200/7000	<0.002	0.100	<0.0005	<0.200				
LF-13	19-Jun-91	ANA	9106245-03	200/7000	<0.010	NA	<0.005	<0.004				
LF-13	08-Jul-92	ANA	9207088-02	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010

TABLE 5
 HISTORICAL WATER QUALITY DATA SUMMARY
 INORGANIC COMPOUNDS
 (All concentrations expressed in parts per million (ppm))

Well Number	Date Sampled	Lab	Lab I.D. No.	Type of Analysis	Arsenic	Barium	Cashitan	Lead	Total Chromium	Mercury	Selenium	Silver
LF-13	30-Dec-92	ANA	9212380-03	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-13	08-Jun-93	ANA	9306128-06	6000/7000	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-13	05-Jan-94	AEH	9401041-03	200	0.003	0.040	<0.005	<0.001	<0.002	<0.0002	<0.004	<0.001
LF-14	04-Sep-90	B&C	09-014-1	200/7000	0.092	0.060	<0.0005	0.007				
LF-14	02-Oct-90	B&C	10-034-2	200/7000	0.077	NA	NA					
LF-14	20-Dec-90	B&C	12-505-7	200/7000	0.150	0.470	0.0036	<0.200				
LF-14	20-Jun-91	ANA	9106251-08	200/7000	0.095	NA	<0.005	<0.004				
LF-14	09-Jul-92	ANA	9207119-07	200/7000	0.039	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-14	31-Dec-92	ANA	9212380-04	200/7000	0.121	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-14	09-Jun-93	ANA	9306138-08	6000/7000	0.102	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-15	04-Sep-90	B&C	09-014-2	200/7000	0.002	0.060	<0.0005	0.043				
LF-15	20-Dec-90	B&C	12-505-6	200/7000	<0.007	0.230	0.0007	<0.200				
LF-15	20-Jun-91	ANA	9106251-09	200/7000	<0.010	NA	<0.005	<0.004				
LF-15	08-Jul-92	ANA	9207088-09	200/7000	<0.010	0.105	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-15	30-Dec-92	ANA	9212380-08	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-15	09-Jun-93	ANA	9306138-01	6000/7000	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-16	04-Sep-90	B&C	09-014-3	200/7000	0.003	0.060	<0.0005	<0.002				
LF-16	20-Dec-90	B&C	12-505-5	200/7000	0.003	0.170	0.0007	<0.200				
LF-16	20-Jun-91	ANA	9106251-10	200/7000	0.010	NA	<0.005	<0.004				
LF-16	09-Jul-92	ANA	9207119-01	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-16	30-Dec-92	ANA	9212380-07	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-16	09-Jun-93	ANA	9306138-02	6000/7000	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.050	<0.010
LF-B1	07-Dec-89	B&C	12-212-6	200/7000	<0.070	NA	<0.0500	<0.300				
LF-B1	18-Jul-90	B&C	7-444-6	200/7000	0.007	0.08	<0.0500	<0.2				
LF-B1	20-Dec-90	B&C	12-505-4	200/7000	0.005	0.100	0.0010	<0.200				
LF-B1	20-Jun-91	ANA	9106251-05	200/7000	<0.010	NA	<0.005	0.004				
LF-B1	08-Jul-92	ANA	9207088-04	200/7000	<0.010	0.122	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B1	30-Dec-92	ANA	9212380-06	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-B1	08-Jun-93	ANA	9306128-07	6000/7000	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-B2	06-Dec-89	B&C	12-174-5	200/7000	<0.070	NA	<0.0500	<0.300				
LF-B2	18-Jul-90	B&C	7-444-9	200/7000	0.005	0.140	<0.0500	<0.200				
Duplicate	18-Jul-90	B&C	7-444-	200/7000	0.004	0.150	<0.0500	<0.200				
LF-B2	19-Dec-90	B&C	12-474-6	200/7000	0.008	0.320	0.0026	<0.200				
LF-B2	20-Jun-91	ANA	9106274-04	200/7000	<0.010	NA	<0.005	0.005				
LF-B2	08-Jul-92	ANA	9207088-05	200/7000	<0.010	0.245	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B2	08-Jun-93	ANA	9306128-03	6000/7000	<0.010	0.233	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-B3	07-Dec-89	B&C	12-212-6	200/7000	<0.070	NA	<0.0500	<0.300				
LF-B3	18-Jul-90	B&C	7-444-8	200/7000	0.003	0.100	<0.0500	<0.200				
LF-B3	20-Dec-90	B&C	12-505-3	200/7000	0.002	0.160	<0.0005	<0.200				
LF-B3	19-Jun-91	ANA	9106245-05	200/7000	<0.010	NA	<0.005	<0.004				
LF-B3	08-Jul-92	ANA	9207088-08	200/7000	<0.010	0.133	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B3	30-Dec-92	ANA	9212380-05	200/7000	<0.010	0.112	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-B3	08-Jun-93	ANA	9306128-05	6000/7000	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-B3	05-Jan-94	AEH	9401041-02	200	0.004	0.110	0.0060	<0.001	<0.002	<0.0002	<0.004	<0.001
LF-B4	17-Jul-90	B&C	07-444-3	200/7000	0.003	0.080	<0.0500	<0.200				

TABLE 5
 HISTORICAL WATER QUALITY DATA SUMMARY
 INORGANIC COMPOUNDS
 (All concentrations expressed in parts per million (ppm))

Well Number	Date Sampled	Lab	Lab I.D. No.	Type of Analysis	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-B4	19-Dec-90	B&C	12-474-3	200/7000	<0.002	0.080	0.0014	<0.200				
LF-B4	19-Jun-91	ANA	9106245-01	200/7000	<0.010	NA	<0.005	<0.004				
LF-B4	08-Jul-92	ANA	9207088-01	200/7000	<0.010	0.140	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B4	30-Dec-92	ANA	9212380-02	200/7000	<0.010	0.110	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B4	08-Jun-93	ANA	9306128-02	6000/7000	<0.010	<0.100	<0.005	<0.003	<0.010	<0.00027	<0.005	<0.010
LF-B4	05-Jan-94	AEN	9401041-01	200	0.003	0.070	<0.001	0.001	<0.002	<0.00027	<0.004	<0.001
FIELD & TRIP BLANKS												
LF-1-FB	01-Jun-89	B&C	89060195	200/7000	0.012	NA	<0.0400	<0.300				
LF-1-FB	07-Dec-89	B&C	12-212-2	200/7000	0.003	NA	<0.0400	<0.300				
LF-B1-FB	07-Dec-89	B&C	12-212-7	200/7000	0.014	NA	<0.0400	<0.300				
Trip Blank	07-Dec-89	B&C	12-212-9	200/7000	0.013	NA	<0.0400	<0.300				
LF-B4-TB	18-Jul-90	B&C	07-444-1	200/7000	<0.002	NA	<0.0500	<0.200				
LF-B4-BB	18-Jul-90	B&C	07-444-2	200/7000	<0.002	NA	<0.0500	<0.200				
LF-11-TB	19-Jul-90	B&C	07-485-1	200/7000	<0.002	NA	<0.0500	0.200				
LF-11-BB	19-Jul-90	B&C	07-485-2	200/7000	<0.002	NA	<0.0500	<0.200				
LF-5-TB	20-Jul-90	B&C	07-506-1	200/7000	0.002	NA	<0.0500	<0.200				
LF-16-TB	04-Sep-90	B&C	09-014-4	200/7000	<0.002	NA	<0.0005	0.005				
LF-B4-TB	19-Dec-90	B&C	12-474-1	200/7000	<0.002	<0.050	<0.0005	<0.200				
LF-B4-BB	19-Dec-90	B&C	12-474-2	200/7000	<0.002	<0.050	<0.0005	<0.200				
LF-B3-TB	20-Dec-90	B&C	12-505-1	200/7000	<0.002	<0.050	<0.0005	<0.200				
LF-B3-BR	20-Dec-90	B&C	12-505-2	200/7000	<0.002	<0.050	<0.0005	<0.200				
LF-8-TB	21-Dec-90	B&C	12-529-1	200/7000	<0.002	<0.050	<0.0005	<0.200				
LF-8-BR	21-Dec-90	B&C	12-529-2	200/7000	<0.002	<0.050	<0.0005	<0.200				
LF-B3-BR	19-Jun-91	ANA	9106245-06	200/7000	<0.010	NA	<0.005	<0.004				
LF-B4-TB	19-Jun-91	ANA	9106245-02	200/7000	<0.010	NA	<0.005	<0.004				
LF-4-TB	20-Jun-91	ANA	9106274-01	200/7000	<0.010	NA	<0.005	<0.004				
LF-11-TB	20-Jun-91	ANA	9106251-01	200/7000	<0.010	NA	<0.005	<0.004				
LF-11-BR	20-Jun-91	ANA	9106251-02	200/7000	<0.010	NA	<0.005	<0.004				
Trip Blank	06-Aug-91	ANA	9108069-01	200/7000	<0.010	NA	NA	<0.003				
LF-B3-TB	08-Jul-92	ANA	9207088-06	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-7-TB	09-Jul-92	ANA	9207119-02	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-3-TB	09-Jul-92	ANA	9207119-15	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B4-TB	30-Dec-92	ANA	9212380-11	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B4-BR	30-Dec-92	ANA	9212380-01	200/7000	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-7-TB	09-Jun-93	ANA	9306138-03	6000/7000	<0.010	<0.100	<0.005	<0.003	<0.010	<0.00027	<0.005	<0.010
LF-10-FB	10-Jun-93	ANA	9306148-01	6000/7000	<0.100	<0.100	<0.005	<0.003	<0.010	<0.00027	<0.005	<0.010
Trip Blank	08-Jun-93	ANA	9306128-08	6000/7000	<0.010	<0.100	<0.005	<0.003	<0.010	<0.00027	<0.005	<0.010
LF-10-FB	06-Jun-94	AEN	9401041-06	200	<0.002	<0.01	<0.001	<0.001	<0.01	<0.00027	<0.004	<0.001

Data entered by MEK/11 Feb; 9 Mar 94. Data proofed by KA/10/11 QA/QC by HL/11

TABLE 5
 HISTORICAL WATER QUALITY DATA SUMMARY
 INORGANIC COMPOUNDS
 (All concentrations expressed in parts per million (ppm))

Well Number	Date Sampled	Lab	Lab I.D. No.	Type of Analysis	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
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* = Data not validated based on positive results of trip blank (0.014 ppm) or boiler rinsate blank (0.013 ppm) of submitted samples. Detection limit for arsenic for December 1989 sampling period set at 0.070 or 5 times the reported value of 0.014 ppm for trip blank sample.

NA = Not Analyzed

200/7000 = EPA Method 200/6000/7000 Series for selected metals.

Analytical Laboratories:

B&C: BC Analytical Laboratory, Emeryville, California.
 ANA: Anametrix Laboratory, San Jose, California

Results of analyses for other inorganic compounds as metals that are not part of the annual and semiannual self-monitoring program for 1992 and 1993 are reported in Levine*Fricke, April 4, 1990, Table 10 and Levine*Fricke, December 20, 1991, Table 5.