

ROBERT GILS  
ASSOCIATES, INC.

ENVIRONMENTAL  
CONSULTANTS  
HAZARD  
ASSESSMENTS

CERTIFIED  
INDUSTRIAL  
HYGIENISTS

Subsurface Investigation  
Clement Avenue Associates  
2235 Clement Avenue  
Alameda, California

Written By:

*Chris Nwabuzoh*  
Chris Nwabuzoh  
Project Geologist

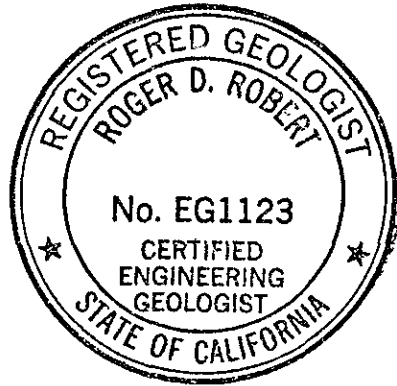
Reviewed By:

*Robert E. Gils*

Robert E. Gils  
CIH #1151

Roger Robert  
Registered Geologist

*Roger Robert*



EXPIRES 6-30-1992

February 28, 1991

**Subsurface Investigation  
Clement Avenue Associates  
2235 Clement Avenue  
Alameda, CA**

**Introduction**

Clement Avenue Associates retained RGA, Inc. to perform a site assessment of the property at 2235 Clement Avenue, Alameda, CA (fig. 1). The scope of the assessment was to drill 7 soil borings around the perimeters of the structures inside the subject property, and to collect soil samples to determine the presence or absence of industrial components in the soils.

**Site Background**

The subject site is in the light industrial/commercial area of the city of Alameda. It is approximately 100 feet from the Oakland Estuary. Present tenants engage in light industrial activities, including metal grinding and lubrication, iron and sand blasting, and boat cleaning and painting.

Previous work performed at the subject site included tank removal on May 10, 1989, by Baseline Environmental Consulting (located in Emeryville, CA). Curtis & Tompkins, Ltd., of Berkeley CA, analyzed the soil samples. Soil samples taken from the north and south walls were analyzed for both petroleum hydrocarbons and gasoline (TPH) and aromatic hydrocarbons (BTEX). Laboratory results indicated that all the samples contained residual petroleum hydrocarbons.

In November of 1990, RGA, Inc. conducted a Phase I environmental site investigation of the existing buildings and property. The investigation concluded that there was evidence of underground storage tanks and that the potential existed for subsurface contamination because of property uses and the presence of asbestos containing materials (ACM).

**Field Investigation**

**Soil Borings**

On January 15 and 16, 1991, RGA, Inc. personnel supervised the drilling of 7 soil borings by Access Soil Drilling of San Mateo, CA, using a Minuteman Rig. Borings B-1 and B-2 were located at the north end of the building occupied by Advanced Grinding and Johansing Iron Works. Boring B-5 was located inside the building. Borings B-4 and B-3 were located at the sand blasting area and the warehouse respectively.

Borings B-9 and B-10 were located at the opposite sides of the building housing the compressors and partly occupied by Cal Steel Coatings. See Figure 2 for detailed boring locations. Soil borings proposed for the paint booth area could not be drilled due to the thick slab of concrete. Each soil boring was drilled to 10 feet below grade or ground surface. Soil samples were collected using a downhole California Modified Split Spoon Sampler containing brass rings at five foot intervals.

The middle brass ring was sealed with aluminum foil, plastic caps and duct tape and placed on ice, pending laboratory analysis. Before each sampling run, the sampler and brass rings were cleaned with trisodium phosphate and double rinsed in water and distilled water. Attempts to drill in the paint booth area met with auger refusal at 13 inches below grade due to a concrete slab.

### **Site Geology**

The subject site is an island in the San Francisco Bay. The bay resulted from a Pliocene structure depression that was flooded during the Pleistocene glacial cycle. The site is underlain by Salinian-Franciscan blocks which consist of mostly metamorphic rocks, granite plutons and greenish graywackes. The site is flanked to the east by the Hayward-Calaveras fault and to the west by the San Andreas fault.

During drilling, the lithology encountered consisted primarily of silty to sandy clay from grade to 10 feet below surface. There was an occasional encounter with silty sand in boring B-2 at 3 feet below grade. Groundwater was encountered between approximately 6 to 8 feet below grade (see Appendix A for detailed lithologic description).

### **Laboratory Analysis**

Selected soil samples were recorded on a chain-of-custody form and sent to state certified BC Analytical (BCA), of Emeryville, CA. Soil samples B2-10, B9-10 and B10-10 were analyzed for petroleum hydrocarbons (EPA 418.1) and total petroleum hydrocarbons modified (TPH) (EPA 8015).

Samples B-1-10, B4-5 and B4-10 were analyzed for TPH and aromatic hydrocarbons (BTEX) (EPA Modified 8015). Samples B5-5 and B5-10 were analyzed for 14 metals (CAM.TTLC). Samples collected from the aeration site were analyzed for lead.

### **Laboratory Results**

Laboratory results indicated that, with the exception of soil boring B-5 all soil samples were non-detectable or below detection limits for the parameters analyzed.

Samples from boring B-5 contained detectable levels of metals (California metals). Sample AP-1 (Aeration Pile) contained detectable levels of lead. A summary of the detectable levels are in Figures 3 and 4, and detailed laboratory results and chain of custody are contained in Appendix B.

### **Conclusion**

On January 15 and 16, 1991, RGA personnel supervised a subsurface investigation at 2235 Clement Avenue. Ten soil borings were drilled and soil samples were collected. Soil samples were also collected from the Aeration Pile on site.

Selected samples were analyzed for 14 California metals, aromatic hydrocarbons, lead and total petroleum hydrocarbons as gasoline, fuel oil and diesel.

Laboratory results indicated that soil samples from borings B-5 and the Aeration pile

(AP) contained detectable levels of the parameters (metals) that were analyzed.

During drilling, groundwater was encountered at approximately six to eight feet below ground surface. All soil borings were backfilled with cement slurry.

Recommendation

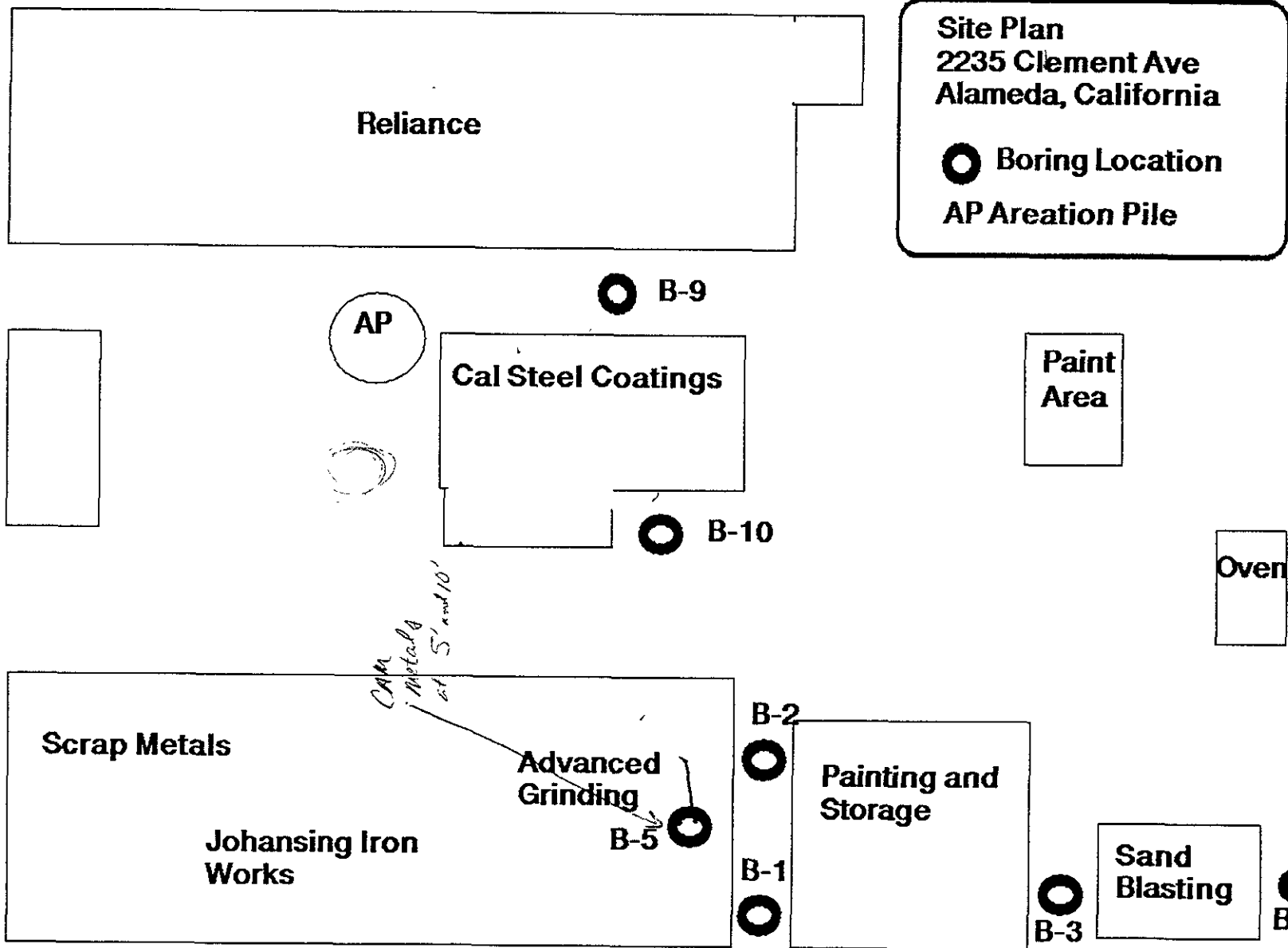
Due to the detectable levels of metals, further assessment background is necessary. The assessment will be used to determine the ambient levels of the metals and inorganic substances.

Soil samples for the assessment will be collected in an area remote from the former sampled areas. Laboratory results of the background levels will be used as a guide in determining if permissible levels have been exceeded. Permissible levels are examined on a case by case basis by the Alameda County Environmental Health Service and Regional Water Quality Control Board (RWQCB).



FIGURE 1

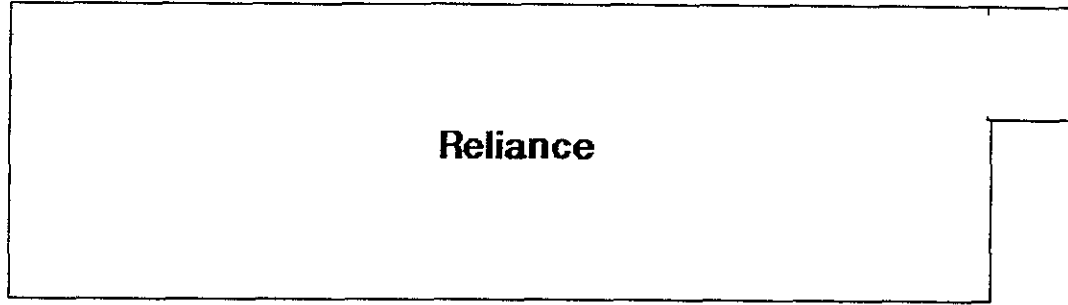
Project Name: DREAM BUILDERS  
 2235 CLEMENT AVENUE, ALAMEDA, CALIFORNIA



SCALE: 1" : 100'

FIGURE 2

where is B7 on Map, there are metals



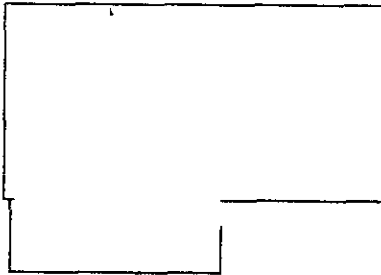
Reliance

**Site Plan**  
2235 Clement Ave  
Alameda, California

○ Boring Location  
AP Areation Pile



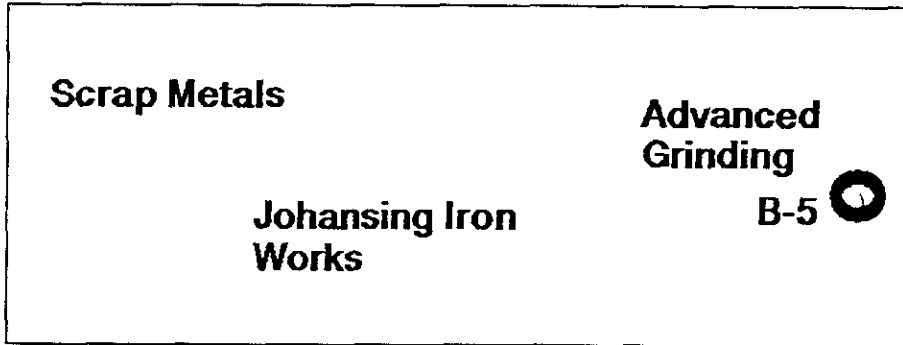
**Areation Pile**  
Surface Sample  
Lead 16 mg/kg



Paint Area



Oven



Scrap Metals

Johansing Iron Works

Advanced Grinding

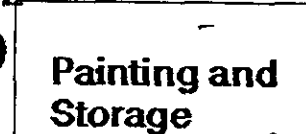
B-2



B-5



B-1



Painting and Storage

B-3



Sand Blasting

B-4



SCALE: 1" : 100'

FIGURE 3





**Site Plan**  
**2235 Clement Ave**  
**Alameda, California**

 **Boring Location**  
**AP Acreation Pile**

**Fourteen CA Metals By ICAP**

<b>Parameter</b>	<b>B5-5</b>	<b>B5-10</b>
Barium	88	97
Beryllium	.3	.3
Cadmium	4	6
Cobalt	5	4
Chromium	32	60
Copper	9	9
Nickel	19	39
Lead	7	4
Vanadium	32	32
Zinc	17	31
Arsenic	1.3	1.5

Results in mg/kg

**Paint Area**

**Over**

**Scrap Metals**

**Johansing Iron Works**

**B-5** 

**Sand Blasting**

SCALE: 1" : 100'

FIGURE 4

# DRILLING AND LITHOGRAPHIC LOG BORING # B-1

PROJECT: Clement Avenue CLIENT: Clement Avenue Associates  
 PROJECT#: DB 100487 TOTAL DEPTH OF HOLE: 10 FEET DIAM.: \_\_\_\_\_  
 LOCATION: 2235 Clement Ave, Alameda. INITIAL DEPTH-TO GRNDWATR: \_\_\_\_\_  
 DATE DRILLED: JANUARY 15, 1991. STATIC WATER LEVEL: \_\_\_\_\_  
 CASING DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_  
 SCREEN DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_ SLOT SIZE: \_\_\_\_\_  
 DRILLING COMPANY: Access Drill DRILLING METHOD: Cont. Flit. Ag SAMPLER TYPE: CA. Mod Sp. Spn.  
 LOGGED BY: Chris Nwabuzoh REVIEWED BY: \_\_\_\_\_

**CORE SAMPLE CONDITION LEGEND:**  UNDISTURBED       DISTURBED       NO RECOVERY

DESCRIPTION	DEPTH	SAMPLES			WELL CONSTR.	
		NUMBER	CONDITION	BLOWS	PIPE	FILL
0-5 feet CL  SILTY CLAY: Greenish gray; about 100% very fine grained silt and clay with medium plasticity; medium toughness; very moist; no odor; Iron (Fe) stains; no reaction HCL.	0		<input checked="" type="checkbox"/>	46		
5-10 feet CL  SILTY CLAY: Brown, wet, SAME AS ABOVE.	5	B1-5	<input checked="" type="checkbox"/>	46		
	10	B1-10	<input checked="" type="checkbox"/>	8		
	15					
	20					
	25					



**ROBERT GILS ASSOCIATES, INC.**

6400 HOLLIS STREET - SUITE #4, EMERYVILLE, CALIFORNIA 94608-1028 - 415/547-7771

# DRILLING AND LITHOGRAPHIC LOG BORING # B-2

PROJECT: Clement Avenue CLIENT: Clement Avenue Associates  
 PROJECT #: DB 100487 TOTAL DEPTH OF HOLE: 10 FEET DIAM.: \_\_\_\_\_  
 LOCATION: 2235 Clement Ave, Alameda, INITIAL DEPTH-TO GRNDWATR: \_\_\_\_\_  
 DATE DRILLED: JANUARY 15, 1991. STATIC WATER LEVEL: \_\_\_\_\_  
 CASING DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_  
 SCREEN DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_ SLOT SIZE: \_\_\_\_\_  
 DRILLING COMPANY: Access Drill DRILLING METHOD: Cont. Flig. Ag SAMPLER TYPE: CA, Mod. Sp. Spn  
 LOGGED BY: Chris Nwabuzoh REVIEWED BY: \_\_\_\_\_

CORE SAMPLE CONDITION LEGEND:  UNDISTURBED     DISTURBED     NO RECOVERY

DESCRIPTION	DEPTH	SAMPLES			WELL CONSTR.	
		NUMBER	CONDITION	BLOWS	PIPE	FILL
0-5 feet SM  SILTY SAND: Brown; about 80% fine grained, hard, rounded, sand; about 20% very fine grained silt; low dry strength; no odor; not reaction HCL.	0 1 2 3 4 5	B2-5		2 3 4		
5-10 feet CL  SANDY CLAY: Brown; about 70% very fine grained clay with medium plasticity; medium toughness; about 30% fine grained, hard, rounded sand; no odor; no reaction HCL.	10 15 20 25	B2-10		2 4 3		

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# DRILLING AND LITHOGRAPHIC LOG BORING # B-3

PROJECT: Clement Avenue CLIENT: Clement Avenue Associates  
 PROJECT #: DB 100487 TOTAL DEPTH OF HOLE: 10 Feet DIAM.: \_\_\_\_\_  
 LOCATION: 2235 Clement Ave. Alameda. INITIAL DEPTH-TO GRNDWATR: \_\_\_\_\_  
 DATE DRILLED: JANUARY 15, 1991. STATIC WATER LEVEL: \_\_\_\_\_  
 CASING DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_  
 SCREEN DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_ SLOT SIZE: \_\_\_\_\_  
 DRILLING COMPANY: Access Drill DRILLING METHOD: Cont. Flig. Ag SAMPLER TYPE: CA. Mod. Sp. Spn  
 LOGGED BY: \_\_\_\_\_ REVIEWED BY: \_\_\_\_\_

CORE SAMPLE CONDITION LEGEND:  UNDISTURBED     DISTURBED     NO RECOVERY

DESCRIPTION	DEPTH	SAMPLES			WELL CONSTR.	
		NUMBER	CONDITION	BLOWS	PIPE	FILL
0-5 feet CL  SANDY CLAY: Dark brown; about 60% very fine grained clay with low plasticity; about 40% fine grained hard, rounded sand; low toughness; no odor; very moist; no reaction HCL.	0 1 2 3 4 5	B3-5	<input checked="" type="checkbox"/>	2 3 4		
5-10 feet CL  SANDY CLAY: SAME AS ABOVE.	10 15 20 25	B3-10	<input checked="" type="checkbox"/>	3 8 10		

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# DRILLING AND LITHOGRAPHIC LOG BORING # B-4

PROJECT: Clement Avenue CLIENT: Clement Avenue Associates  
 PROJECT #: DB 100487 TOTAL DEPTH OF HOLE: 10 FEET DIAM.: \_\_\_\_\_  
 LOCATION: 2235 Clement Ave, Alameda. INITIAL DEPTH-TO GRNDWATR: \_\_\_\_\_  
 DATE DRILLED: JANUARY 15, 1991. STATIC WATER LEVEL: \_\_\_\_\_  
 CASING DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_  
 SCREEN DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_ SLOT SIZE: \_\_\_\_\_  
 DRILLING COMPANY: Access Drill DRILLING METHOD: Cont. Flit. Ag. SAMPLER TYPE: CA. Mod. Sp. Spn  
 LOGGED BY: Chris Nwabuzoh REVIEWED BY: \_\_\_\_\_

CORE SAMPLE CONDITION LEGEND:  UNDISTURBED     DISTURBED     NO RECOVERY

DESCRIPTION	DEPTH	SAMPLES			WELL CONSTR.	
		NUMBER	CONDITION	BLOWS	PIPE	FILL
0-5 feet CL  SANDY CLAY: Dark brown; about 60% very fine grained clay with medium plasticity; about 40% fine grained, hard, rounded, sand; low toughness; no reaction HCL; no odor.	0 1 2 3 4 5	B4-5	<input checked="" type="checkbox"/>	2 3 4		
5-10 feet CL  SILTY CLAY: Dark brown; about 100% very fine grained silt and clay with medium plasticity; medium toughness; no odor; very moist; no reaction HCL.	10 11 12 13 14 15 20 25	B4-10	<input checked="" type="checkbox"/>	4 4 6		

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# DRILLING AND LITHOGRAPHIC LOG

BORING # B-5

PROJECT: Clement Avenue CLIENT: Clement Avenue Associates  
 PROJECT #: DB 100487 TOTAL DEPTH OF HOLE: 10 FEET DIAM.: \_\_\_\_\_  
 LOCATION: 2235 Clement Ave, Alameda. INITIAL DEPTH TO GRNDWATR: \_\_\_\_\_  
 DATE DRILLED: JANUARY 16, 1991. STATIC WATER LEVEL: \_\_\_\_\_  
 CASING DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_  
 SCREEN DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_ SLOT SIZE: \_\_\_\_\_  
 DRILLING COMPANY: Access Drill DRILLING METHOD: Cont. Flig. Ag SAMPLER TYPE: CA. Mod. Sp. Spn  
 LOGGED BY: Chris Nwabuzoh REVIEWED BY: \_\_\_\_\_

CORE SAMPLE CONDITION LEGEND:  UNDISTURBED     DISTURBED     NO RECOVERY

DESCRIPTION	DEPTH	SAMPLES			WELL CONSTR.	
		NUMBER	CONDITION	BLOWS	PIPE	FILL
0-5 feet CL  SANDY CLAY: Dark brown; about 70% fine grained clay with low to medium plasticity; about 30% fine grained, rounded, sand; very moist low toughness; no odor; no reaction HCL.	0 5	B5-5	<input checked="" type="checkbox"/>	3 3 5		
5-10 feet CL  SANDY CLAY: Brown; SAME AS ABOVE with medium plasticity and toughness.	10	B5-10	<input checked="" type="checkbox"/>	12 16 18		
	15					
	20					
	25					



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# DRILLING AND LITHOGRAPHIC LOG BORING # B-9

PROJECT: Clement Avenue / CLIENT: Clement Avenue Associates  
 PROJECT #: DB 100487 TOTAL DEPTH OF HOLE: 10 FEET DIAM.: \_\_\_\_\_  
 LOCATION: 2235 Clement Ave, Alameda. INITIAL DEPTH-TO GRNDWATR: \_\_\_\_\_  
 DATE DRILLED: JANUARY 16, 1991. STATIC WATER LEVEL: \_\_\_\_\_  
 CASING DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_  
 SCREEN DIAMETER: \_\_\_\_\_ LENGTH: \_\_\_\_\_ SLOT SIZE: \_\_\_\_\_  
 DRILLING COMPANY: Access Drill. DRILLING METHOD: Cont. Flig. Ag SAMPLER TYPE: CA. Mod. Sp. Spn  
 LOGGED BY: Chris Nwabuzoh REVIEWED BY: \_\_\_\_\_

**CORE SAMPLE CONDITION LEGEND :**    UNDISTURBED    DISTURBED    NO RECOVERY

DESCRIPTION	DEPTH	SAMPLES			WELL CONSTR.	
		NUMBER	CONDITION	BLOWS	PIPE	FILL
0-5 feet CL  SANDY CLAY: Brown; about 70% very fine grained clay with medium plasticity; about 30% fine grained hard, rounded sand; very moist; no odor; medium toughness; no reaction HCL.	0 5	B9-5		2 2 2		
5-10 feet CL  SANDY CLAY: Greenish gray; about 70% very fine grained clay with medium plasticity; about 30% fine grained, hard, rounded sand; medium toughness; very moist; organic odor; roots; Iron (Fe) stains; no reaction HCL.	10 15 20 25	B9-10		4 6 10		

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6400 HOLLIS STREET - SUITE #4, EMERYVILLE, CALIFORNIA 94608-1028 - 415/547-7771





# Analytical Report

LOG NO: E91-01-374

Received: 17 JAN 91

Mailed : 11 FEB 91

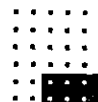
Mr. Chris Nwabuzoh  
Robert E. Gils Associates, Inc.  
6400 Hollis Street Suite 3  
Emeryville, California 94608

Purchase Order: DB-100487

## REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED		
01-374-1	B1-10	15 JAN 91		
01-374-2	B4-5 - <i>at edge of property by water</i>	15 JAN 91		
01-374-3	B4-10	15 JAN 91		
PARAMETER		01-374-1	01-374-2	01-374-3
TPH and BTEX - Modified 8015				
Date Analyzed		01.23.91	01.23.91	01.23.91
Dilution Factor, Times		1	1	1
Benzene, mg/kg		<0.3	<0.3	<0.3
Ethylbenzene, mg/kg		<0.3	<0.3	<0.3
Toluene, mg/kg		<0.3	<0.3	<0.3
Total Xylene Isomers, mg/kg		<0.3	<0.3	<0.3
Total Fuel Hydrocarbons, mg/kg		<10	<10	<10
Other TPH and BTEX - Modified 8015		---	---	---



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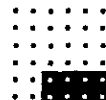
Mr. Chris Nwabuzoh  
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## REPORT OF ANALYTICAL RESULTS

Page 2

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED		
01-374-4	B2-10	15 JAN 91		
01-374-5	B9-10	16 JAN 91		
01-374-6	B10-10	16 JAN 91		
PARAMETER		01-374-4	01-374-5	01-374-6
Petroleum Hydrocarbons (418.1), mg/kg		<50	<50	<50
TPH - Modified 8015				
Date Analyzed		01.23.91	01.23.91	01.23.91
Dilution Factor, Times		1	1	1
Total Fuel Hydrocarbons, mg/kg		<10	<10	<10
Other TPH - Modified 8015		---	---	---



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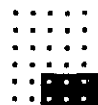
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## REPORT OF ANALYTICAL RESULTS

Page 3

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED	
01-374-7	B5-5	16 JAN 91	
01-374-8	B5-10	16 JAN 91	
PARAMETER		01-374-7	01-374-8
Fourteen CA Metals by ICAP			
Silver, mg/kg		<1	<1
Barium, mg/kg		88 ✓	97 ✓
Beryllium, mg/kg		0.3	0.3
Cadmium, mg/kg		4	6
Cobalt, mg/kg		5	4
Chromium, mg/kg		32 ✓	60 ✓
Copper, mg/kg		9	9
Molybdenum, mg/kg		<4	<4
Nickel, mg/kg		19 ✓	39 ✓
Lead, mg/kg		7	<4
Antimony, mg/kg		<4	<4
Thallium, mg/kg		<4	<4
Vanadium, mg/kg		32 ✓	32 ✓
Zinc, mg/kg		17 ✓	31 ✓
Arsenic, mg/kg		1.3 ✓	1.5 ✓
Mercury, mg/kg		<0.05	<0.05
Selenium, mg/kg		<0.4	<0.4
Nitric Acid Digestion, Date		01.24.91	01.24.91
Nitric Acid Digestion, Date		01.24.91	01.24.91



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## REPORT OF ANALYTICAL RESULTS

Page 4

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-9	B6-10	16 JAN 91
PARAMETER	01-374-9	
B/N,A Ext. Priority Pollutants		
Date Analyzed	01.30.91	
Date Extracted	01.24.91	
Dilution Factor, Times	10	
1,2,4-Trichlorobenzene, mg/kg	<0.3	
1,2-Dichlorobenzene, mg/kg	<0.3	
1,2-Diphenylhydrazine, mg/kg	<0.3	
1,3-Dichlorobenzene, mg/kg	<0.3	
1,4-Dichlorobenzene, mg/kg	<0.3	
2,4,5-Trichlorophenol, mg/kg	<0.3	
2,4,6-Trichlorophenol, mg/kg	<0.3	
2,4-Dichlorophenol, mg/kg	<0.3	
2,4-Dimethylphenol, mg/kg	<0.3	
2,4-Dinitrophenol, mg/kg	<3	
2,4-Dinitrotoluene, mg/kg	<0.3	
2,6-Dinitrotoluene, mg/kg	<0.3	
2-Chloronaphthalene, mg/kg	<0.3	
2-Chlorophenol, mg/kg	<0.3	
2-Methyl-4,6-dinitrophenol, mg/kg	<0.3	
2-Methylnaphthalene, mg/kg	18	
2-Methylphenol (o-Cresol), mg/kg	<0.3	
2-Nitroaniline, mg/kg	<2	
2-Nitrophenol, mg/kg	<0.3	
3,3'-Dichlorobenzidine, mg/kg	0.3	
3-Nitroaniline, mg/kg	<2	
4-Bromophenylphenylether, mg/kg	<0.3	
4-Chloro-3-methylphenol, mg/kg	<0.3	



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## REPORT OF ANALYTICAL RESULTS

Page 5

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-9	B6-10	16 JAN 91
PARAMETER	01-374-9	
4-Chloroaniline, mg/kg	<2	
4-Chlorophenylphenylether, mg/kg	<0.3	
4-Methylphenol (p-Cresol), mg/kg	<0.3	
4-Nitroaniline, mg/kg	<2	
4-Nitrophenol, mg/kg	<7	
Acenaphthene, mg/kg	20	
Acenaphthylene, mg/kg	<0.3	
Aniline, mg/kg	<0.3	
Anthracene, mg/kg	6.1	
Benzidine, mg/kg	<10	
Benzo(a)anthracene, mg/kg	0.3	
Benzo(a)pyrene, mg/kg	1.5	
Benzo(b)fluoranthene, mg/kg	4.6	
Benzo(g,h,i)perylene, mg/kg	<0.3	
Benzo(k)fluoranthene, mg/kg	4.6	
Benzyl alcohol, mg/kg	<2	
Benzoic acid, mg/kg	<2	
Butylbenzylphthalate, mg/kg	0.3	
Chrysene, mg/kg	12	
Di-n-octylphthalate, mg/kg	<0.3	
Dibenzo(a,h)anthracene, mg/kg	0.7	
Dibenzofuran, mg/kg	14	
Dibutylphthalate, mg/kg	<0.3	
Diethylphthalate, mg/kg	<0.3	
Dimethylphthalate, mg/kg	<0.3	
Fluoranthene, mg/kg	28	
Fluorene, mg/kg	16	

# Analytical Report

LOG NO: E91-01-374

Received: 17 JAN 91

Mailed : 11 FEB 91

Mr. Chris Nwabuzoh  
Robert E. Gils Associates, Inc.  
6400 Hollis Street Suite 3  
Emeryville, California 94608

Purchase Order: DB-100487

## REPORT OF ANALYTICAL RESULTS

Page 6

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-9	B6-10	16 JAN 91
PARAMETER	01-374-9	
Hexachlorobenzene, mg/kg	<0.3	
Hexachlorobutadiene, mg/kg	<0.3	
Hexachlorocyclopentadiene, mg/kg	<0.3	
Hexachloroethane, mg/kg	<0.3	
Indeno(1,2,3-c,d)pyrene, mg/kg	0.7	
Isophorone, mg/kg	<0.3	
N-Nitrosodimethylamine, mg/kg	<0.3	
N-Nitrosodiphenylamine, mg/kg	<0.3	
N-Nitrosodi-n-propylamine, mg/kg	<0.3	
Nitrobenzene, mg/kg	<0.3	
Naphthalene, mg/kg	81	
Phenanthrene, mg/kg	52	
Phenol, mg/kg	<0.3	
Pentachlorophenol, mg/kg	<0.3	
Pyrene, mg/kg	18	
Bis(2-chloroethoxy)methane, mg/kg	<0.3	
Bis(2-chloroethyl)ether, mg/kg	<0.3	
Bis(2-chloroisopropyl)ether, mg/kg	<0.3	
Bis(2-ethylhexyl)phthalate, mg/kg	<30	
Other B/N,A Ext. Priority Pollutants	---	
Semi-Quantified Results **		
C13H10O, mg/kg	2	
C2 Naphthalene, mg/kg	5	
C6H7N, mg/kg	2	
C7H9ON, mg/kg	3	
C8H6S, mg/kg	5	



# Analytical Report

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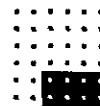
Purchase Order: DB-100487

## REPORT OF ANALYTICAL RESULTS

Page 7

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-9	B6-10	16 JAN 91
PARAMETER	01-374-9	

\*\* Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.



# Analytical Report

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## REPORT OF ANALYTICAL RESULTS

Page 8

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-9	B6-10	16 JAN 91
PARAMETER	01-374-9	
Volatile Organics (EPA 8240)		
Date Analyzed	01.30.91	
Date Extracted	01.23.91	
Dilution Factor, Times	1	
1,1,1-Trichloroethane, mg/kg	<0.2	
1,1,2,2-Tetrachloroethane, mg/kg	<0.2	
1,1,2-Trichloroethane, mg/kg	<0.2	
1,1-Dichloroethane, mg/kg	<0.2	
1,1-Dichloroethene, mg/kg	<0.2	
1,2-Dichloroethane, mg/kg	<0.2	
1,2-Dichlorobenzene, mg/kg	<0.2	
1,2-Dichloropropane, mg/kg	<0.2	
1,3-Dichlorobenzene, mg/kg	<0.2	
1,4-Dichlorobenzene, mg/kg	<0.2	
2-Chloroethylvinylether, mg/kg	<0.2	
2-Hexanone, mg/kg	<2	
4-Methyl-2-Pentanone, mg/kg	<2	
Acetone, mg/kg	<5	
Acrolein, mg/kg	<5	
Acrylonitrile, mg/kg	<2	
Bromodichloromethane, mg/kg	<0.2	
Bromomethane, mg/kg	<0.2	
Benzene, mg/kg	<0.2	
Bromoform, mg/kg	<0.2	
Chlorobenzene, mg/kg	<0.2	
Carbon Tetrachloride, mg/kg	<0.2	
Chloroethane, mg/kg	<0.2	





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## REPORT OF ANALYTICAL RESULTS

Page 9

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-9	B6-10	16 JAN 91

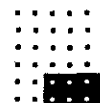
PARAMETER	01-374-9
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Chloroform, mg/kg	<0.2
Chloromethane, mg/kg	<0.2
Carbon Disulfide, mg/kg	<0.2
Dibromochloromethane, mg/kg	<0.2
Ethylbenzene, mg/kg	<0.2
Freon 113, mg/kg	<0.2
Methyl ethyl ketone, mg/kg	<2
Methylene chloride, mg/kg	<1
Styrene, mg/kg	<0.2
Trichloroethene, mg/kg	<0.2
Trichlorofluoromethane, mg/kg	<0.2
Toluene, mg/kg	<0.2
Tetrachloroethene, mg/kg	<0.2
Vinyl acetate, mg/kg	<0.2
Vinyl chloride, mg/kg	<0.2
Total Xylene Isomers, mg/kg	0.50
cis-1,2-Dichloroethene, mg/kg	<0.2
cis-1,3-Dichloropropene, mg/kg	<0.2
trans-1,2-Dichloroethene, mg/kg	<0.2
trans-1,3-Dichloropropene, mg/kg	<0.2

### Semi-Quantified Results \*\*

Tot C9-C10 Hydrocarbon, mg/kg	50
-------------------------------	----

\*\* Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.



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## REPORT OF ANALYTICAL RESULTS

Page 10

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-10	B7-10	16 JAN 91

PARAMETER	01-374-10
-----------	-----------

### Fourteen CA Metals by ICAP

Silver, mg/kg	<1
Barium, mg/kg	65 ✓
Beryllium, mg/kg	0.4
Cadmium, mg/kg	7
Cobalt, mg/kg	9
Chromium, mg/kg	57 ✓
Copper, mg/kg	20 ✓
Molybdenum, mg/kg	<4
Nickel, mg/kg	48 ✓
Lead, mg/kg	6 ✓
Antimony, mg/kg	<4
Thallium, mg/kg	<4
Vanadium, mg/kg	53 ✓
Zinc, mg/kg	47 ✓
Arsenic, mg/kg	3.1 ✓
Mercury, mg/kg	0.06
Selenium, mg/kg	<0.4
Nitric Acid Digestion, Date	01.24.91
Nitric Acid Digestion, Date	01.24.91



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## REPORT OF ANALYTICAL RESULTS

Page 11

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-10	B7-10	16 JAN 91
PARAMETER	01-374-10	
B/N,A Ext. Priority Pollutants		
Date Analyzed	01.29.91	
Date Extracted	01.24.91	
Dilution Factor, Times	1	
1,2,4-Trichlorobenzene, mg/kg	<0.03	
1,2-Dichlorobenzene, mg/kg	<0.03	
1,2-Diphenylhydrazine, mg/kg	<0.03	
1,3-Dichlorobenzene, mg/kg	<0.03	
1,4-Dichlorobenzene, mg/kg	<0.03	
2,4,5-Trichlorophenol, mg/kg	<0.03	
2,4,6-Trichlorophenol, mg/kg	<0.03	
2,4-Dichlorophenol, mg/kg	<0.03	
2,4-Dimethylphenol, mg/kg	0.16	
2,4-Dinitrophenol, mg/kg	<0.3	
2,4-Dinitrotoluene, mg/kg	<0.03	
2,6-Dinitrotoluene, mg/kg	<0.03	
2-Chloronaphthalene, mg/kg	<0.03	
2-Chlorophenol, mg/kg	<0.03	
2-Methyl-4,6-dinitrophenol, mg/kg	<0.03	
2-Methylnaphthalene, mg/kg	0.18	
2-Methylphenol (o-Cresol), mg/kg	<0.03	
2-Nitroaniline, mg/kg	<0.2	
2-Nitrophenol, mg/kg	<0.03	
3,3'-Dichlorobenzidine, mg/kg	<0.03	
3-Nitroaniline, mg/kg	<0.2	
4-Bromophenylphenylether, mg/kg	<0.03	
4-Chloro-3-methylphenol, mg/kg	<0.03	



# Analytical Report

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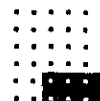
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## REPORT OF ANALYTICAL RESULTS

Page 12

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-10	B7-10	16 JAN 91
PARAMETER	01-374-10	
4-Chloroaniline, mg/kg	<0.2	
4-Chlorophenylphenylether, mg/kg	<0.03	
4-Methylphenol (p-Cresol), mg/kg	<0.03	
4-Nitroaniline, mg/kg	<0.2	
4-Nitrophenol, mg/kg	<0.7	
Acenaphthene, mg/kg	0.10	
Acenaphthylene, mg/kg	<0.03	
Aniline, mg/kg	<0.03	
Anthracene, mg/kg	<0.03	
Benzidine, mg/kg	<1	
Benzo(a)anthracene, mg/kg	<0.03	
Benzo(a)pyrene, mg/kg	<0.03	
Benzo(b)fluoranthene, mg/kg	<0.03	
Benzo(g,h,i)perylene, mg/kg	<0.03	
Benzo(k)fluoranthene, mg/kg	<0.03	
Benzyl alcohol, mg/kg	<0.2	
Benzoic acid, mg/kg	<0.2	
Butylbenzylphthalate, mg/kg	<0.03	
Chrysene, mg/kg	<0.03	
Di-n-octylphthalate, mg/kg	<0.03	
Dibenzo(a,h)anthracene, mg/kg	<0.03	
Dibenzofuran, mg/kg	0.04	
Dibutylphthalate, mg/kg	<0.03	
Diethylphthalate, mg/kg	<0.03	
Dimethylphthalate, mg/kg	<0.03	
Fluoranthene, mg/kg	<0.03	
Fluorene, mg/kg	0.03	



# Analytical Report

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## REPORT OF ANALYTICAL RESULTS

Page 13

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-10	B7-10	16 JAN 91
PARAMETER	01-374-10	
Hexachlorobenzene, mg/kg	<0.03	
Hexachlorobutadiene, mg/kg	<0.03	
Hexachlorocyclopentadiene, mg/kg	<0.03	
Hexachloroethane, mg/kg	<0.03	
Indeno(1,2,3-c,d)pyrene, mg/kg	<0.03	
Isophorone, mg/kg	<0.03	
N-Nitrosodimethylamine, mg/kg	<0.03	
N-Nitrosodiphenylamine, mg/kg	<0.03	
N-Nitrosodi-n-propylamine, mg/kg	<0.03	
Nitrobenzene, mg/kg	<0.03	
Naphthalene, mg/kg	1.6	
Phenanthrene, mg/kg	<0.03	
Phenol, mg/kg	<0.03	
Pentachlorophenol, mg/kg	<0.03	
Pyrene, mg/kg	<0.03	
Bis(2-chloroethoxy)methane, mg/kg	<0.03	
Bis(2-chloroethyl)ether, mg/kg	<0.03	
Bis(2-chloroisopropyl)ether, mg/kg	<0.03	
Bis(2-ethylhexyl)phthalate, mg/kg	<3	
Other B/N,A Ext. Priority Pollutants	---	

# Analytical Report

LOG NO: E91-01-374

Received: 17 JAN 91

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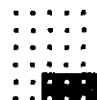
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Robert E. Gils Associates, Inc.  
6400 Hollis Street Suite 3  
Emeryville, California 94608

Purchase Order: DB-100487

## REPORT OF ANALYTICAL RESULTS

Page 14

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-10	B7-10	16 JAN 91
PARAMETER	01-374-10	
Volatile Organics (EPA 8240)		
Date Analyzed	01.30.91	
Date Extracted	01.23.91	
Dilution Factor, Times	1	
1,1,1-Trichloroethane, mg/kg	<0.2	
1,1,2,2-Tetrachloroethane, mg/kg	<0.2	
1,1,2-Trichloroethane, mg/kg	<0.2	
1,1-Dichloroethane, mg/kg	<0.2	
1,1-Dichloroethene, mg/kg	<0.2	
1,2-Dichloroethane, mg/kg	<0.2	
1,2-Dichlorobenzene, mg/kg	<0.2	
1,2-Dichloropropane, mg/kg	<0.2	
1,3-Dichlorobenzene, mg/kg	<0.2	
1,4-Dichlorobenzene, mg/kg	<0.2	
2-Chloroethylvinylether, mg/kg	<0.2	
2-Hexanone, mg/kg	<2	
4-Methyl-2-Pentanone, mg/kg	<2	
Acetone, mg/kg	<5	
Acrolein, mg/kg	<5	
Acrylonitrile, mg/kg	<2	
Bromodichloromethane, mg/kg	<0.2	
Bromomethane, mg/kg	<0.2	
Benzene, mg/kg	<0.2	
Bromoform, mg/kg	<0.2	
Chlorobenzene, mg/kg	<0.2	
Carbon Tetrachloride, mg/kg	<0.2	
Chloroethane, mg/kg	<0.2	



# Analytical Report

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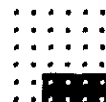
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## REPORT OF ANALYTICAL RESULTS

Page 15

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-10	B7-10	16 JAN 91
PARAMETER	01-374-10	
Chloroform, mg/kg	<0.2	
Chloromethane, mg/kg	<0.2	
Carbon Disulfide, mg/kg	<0.2	
Dibromochloromethane, mg/kg	<0.2	
Ethylbenzene, mg/kg	<0.2	
Freon 113, mg/kg	<0.2	
Methyl ethyl ketone, mg/kg	<2	
Methylene chloride, mg/kg	<1	
Styrene, mg/kg	<0.2	
Trichloroethene, mg/kg	<0.2	
Trichlorofluoromethane, mg/kg	<0.2	
Toluene, mg/kg	<0.2	
Tetrachloroethene, mg/kg	<0.2	
Vinyl acetate, mg/kg	<0.2	
Vinyl chloride, mg/kg	<0.2	
Total Xylene Isomers, mg/kg	<0.2	
cis-1,2-Dichloroethene, mg/kg	<0.2	
cis-1,3-Dichloropropene, mg/kg	<0.2	
trans-1,2-Dichloroethene, mg/kg	<0.2	
trans-1,3-Dichloropropene, mg/kg	<0.2	



# Analytical Report

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## REPORT OF ANALYTICAL RESULTS

Page 16

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-11	B8-10	16 JAN 91
PARAMETER	01-374-11	
Petroleum Hydrocarbons (418.1), mg/kg		<50
TPH - Modified 8015		
Date Analyzed	01.23.91	
Dilution Factor, Times	1	
Total Fuel Hydrocarbons, mg/kg		<10
Other TPH - Modified 8015		---





# Analytical Report

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LOG NO: E91-01-374

Received: 17 JAN 91

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## REPORT OF ANALYTICAL RESULTS

Page 17

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-11	B8-10	16 JAN 91
PARAMETER	01-374-11	
B/N,A Ext. Priority Pollutants		
Date Analyzed	01.30.91	
Date Extracted	01.24.91	
Dilution Factor, Times	1	
1,2,4-Trichlorobenzene, mg/kg	<0.03	
1,2-Dichlorobenzene, mg/kg	<0.03	
1,2-Diphenylhydrazine, mg/kg	<0.03	
1,3-Dichlorobenzene, mg/kg	<0.03	
1,4-Dichlorobenzene, mg/kg	<0.03	
2,4,5-Trichlorophenol, mg/kg	<0.03	
2,4,6-Trichlorophenol, mg/kg	<0.03	
2,4-Dichlorophenol, mg/kg	<0.03	
2,4-Dimethylphenol, mg/kg	<0.03	
2,4-Dinitrophenol, mg/kg	<0.3	
2,4-Dinitrotoluene, mg/kg	<0.03	
2,6-Dinitrotoluene, mg/kg	<0.03	
2-Chloronaphthalene, mg/kg	<0.03	
2-Chlorophenol, mg/kg	<0.03	
2-Methyl-4,6-dinitrophenol, mg/kg	<0.03	
2-Methylnaphthalene, mg/kg	<0.03	
2-Methylphenol (o-Cresol), mg/kg	<0.03	
2-Nitroaniline, mg/kg	<0.2	
2-Nitrophenol, mg/kg	<0.03	
3,3'-Dichlorobenzidine, mg/kg	<0.03	
3-Nitroaniline, mg/kg	<0.2	
4-Bromophenylphenylether, mg/kg	<0.03	
4-Chloro-3-methylphenol, mg/kg	<0.03	



# Analytical Report

LOG NO: E91-01-374

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## REPORT OF ANALYTICAL RESULTS

Page 18

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-11	B8-10	16 JAN 91
PARAMETER	01-374-11	
4-Chloroaniline, mg/kg	<0.2	
4-Chlorophenylphenylether, mg/kg	<0.03	
4-Methylphenol (p-Cresol), mg/kg	<0.03	
4-Nitroaniline, mg/kg	<0.2	
4-Nitrophenol, mg/kg	<0.7	
Acenaphthene, mg/kg	<0.03	
Acenaphthylene, mg/kg	<0.03	
Aniline, mg/kg	<0.03	
Anthracene, mg/kg	<0.03	
Benzidine, mg/kg	<1	
Benzo(a)anthracene, mg/kg	<0.03	
Benzo(a)pyrene, mg/kg	<0.03	
Benzo(b)fluoranthene, mg/kg	<0.03	
Benzo(g,h,i)perylene, mg/kg	<0.03	
Benzo(k)fluoranthene, mg/kg	<0.03	
Benzyl alcohol, mg/kg	<0.2	
Benzoic acid, mg/kg	<0.2	
Butylbenzylphthalate, mg/kg	<0.03	
Chrysene, mg/kg	<0.03	
Di-n-octylphthalate, mg/kg	<0.03	
Dibenzo(a,h)anthracene, mg/kg	<0.03	
Dibenzofuran, mg/kg	<0.03	
Dibutylphthalate, mg/kg	<0.03	
Diethylphthalate, mg/kg	<0.03	
Dimethylphthalate, mg/kg	<0.03	
Fluoranthene, mg/kg	<0.03	
Fluorene, mg/kg	<0.03	

# Analytical Report

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## REPORT OF ANALYTICAL RESULTS

Page 19

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-11	B8-10	16 JAN 91
PARAMETER	01-374-11	
Hexachlorobenzene, mg/kg	<0.03	
Hexachlorobutadiene, mg/kg	<0.03	
Hexachlorocyclopentadiene, mg/kg	<0.03	
Hexachloroethane, mg/kg	<0.03	
Indeno(1,2,3-c,d)pyrene, mg/kg	<0.03	
Isophorone, mg/kg	<0.03	
N-Nitrosodimethylamine, mg/kg	<0.03	
N-Nitrosodiphenylamine, mg/kg	<0.03	
N-Nitrosodi-n-propylamine, mg/kg	<0.03	
Nitrobenzene, mg/kg	<0.03	
Naphthalene, mg/kg	<0.03	
Phenanthrene, mg/kg	<0.03	
Phenol, mg/kg	<0.03	
Pentachlorophenol, mg/kg	<0.03	
Pyrene, mg/kg	<0.03	
Bis(2-chloroethoxy)methane, mg/kg	<0.03	
Bis(2-chloroethyl)ether, mg/kg	<0.03	
Bis(2-chloroisopropyl)ether, mg/kg	<0.03	
Bis(2-ethylhexyl)phthalate, mg/kg	<3	
Other B/N,A Ext. Priority Pollutants	---	



# Analytical Report

LOG NO: E91-01-374

Received: 17 JAN 91

Mailed : 11 FEB 91

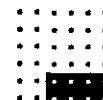
Mr. Chris Nwabuzoh  
Robert E. Gils Associates, Inc.  
6400 Hollis Street Suite 3  
Emeryville, California 94608

Purchase Order: DB-100487

## REPORT OF ANALYTICAL RESULTS

Page 20

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-11	B8-10	16 JAN 91
PARAMETER	01-374-11	
Volatile Organics (EPA 8240)		
Date Analyzed	01.30.91	
Date Extracted	01.23.91	
Dilution Factor, Times	1	
1,1,1-Trichloroethane, mg/kg	<0.2	
1,1,2,2-Tetrachloroethane, mg/kg	<0.2	
1,1,2-Trichloroethane, mg/kg	<0.2	
1,1-Dichloroethane, mg/kg	<0.2	
1,1-Dichloroethene, mg/kg	<0.2	
1,2-Dichloroethane, mg/kg	<0.2	
1,2-Dichlorobenzene, mg/kg	<0.2	
1,2-Dichloropropane, mg/kg	<0.2	
1,3-Dichlorobenzene, mg/kg	<0.2	
1,4-Dichlorobenzene, mg/kg	<0.2	
2-Chloroethylvinylether, mg/kg	<0.2	
2-Hexanone, mg/kg	<2	
4-Methyl-2-Pentanone, mg/kg	<2	
Acetone, mg/kg	<5	
Acrolein, mg/kg	<5	
Acrylonitrile, mg/kg	<2	
Bromodichloromethane, mg/kg	<0.2	
Bromomethane, mg/kg	<0.2	
Benzene, mg/kg	<0.2	
Bromoform, mg/kg	<0.2	
Chlorobenzene, mg/kg	<0.2	
Carbon Tetrachloride, mg/kg	<0.2	
Chloroethane, mg/kg	<0.2	



# Analytical Report

LOG NO: E91-01-374

Received: 17 JAN 91

Mailed : 11 FEB 91

Mr. Chris Nwabuzoh  
Robert E. Gils Associates, Inc.  
6400 Hollis Street Suite 3  
Emeryville, California 94608

Purchase Order: DB-100487

## REPORT OF ANALYTICAL RESULTS

Page 21

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-11	B8-10	16 JAN 91
PARAMETER	01-374-11	
Chloroform, mg/kg	<0.2	
Chloromethane, mg/kg	<0.2	
Carbon Disulfide, mg/kg	<0.2	
Dibromochloromethane, mg/kg	<0.2	
Ethylbenzene, mg/kg	0.4	
Freon 113, mg/kg	<0.2	
Methyl ethyl ketone, mg/kg	<2	
Methylene chloride, mg/kg	<1	
Styrene, mg/kg	<0.2	
Trichloroethene, mg/kg	<0.2	
Trichlorofluoromethane, mg/kg	<0.2	
Toluene, mg/kg	<0.2	
Tetrachloroethene, mg/kg	<0.2	
Vinyl acetate, mg/kg	<0.2	
Vinyl chloride, mg/kg	<0.2	
Total Xylene Isomers, mg/kg	1.2	
cis-1,2-Dichloroethene, mg/kg	<0.2	
cis-1,3-Dichloropropene, mg/kg	<0.2	
trans-1,2-Dichloroethene, mg/kg	<0.2	
trans-1,3-Dichloropropene, mg/kg	<0.2	
Semi-Quantified Results **		
C8H60, mg/kg	1	
C9 Hydrocarbon, mg/kg	10	
Unidentified Compound, mg/kg	2	

\*\* Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.

# Analytical Report

LOG NO: E91-01-374

Received: 17 JAN 91  
Mailed : 11 FEB 91

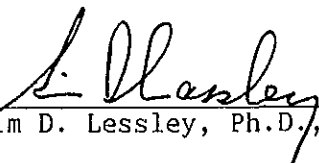
Mr. Chris Nwabuzoh  
Robert E. Gils Associates, Inc.  
6400 Hollis Street Suite 3  
Emeryville, California 94608

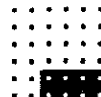
Purchase Order: DB-100487

## REPORT OF ANALYTICAL RESULTS

Page 22

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-374-12	AP-1	16 JAN 91
PARAMETER	01-374-12	
Lead, mg/kg		16
Nitric Acid Digestion, Date		01.24.91

  
\_\_\_\_\_  
Sim D. Lessley, Ph.D., Laboratory Director



## BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 1

## METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT
TPH - Modified 8015					
Date Analyzed	01.18.91	20	01.18.91	NA	Date
Dilution Factor	01.18.91	20	1	NA	Times
Total Fuel Hydrocarbons	01.18.91	20	0.18	10	mg/kg
Petroleum Hydrocarbons (418.1)	01.28.91	6	0	50	mg/kg
Fourteen CA Metals by ICAP					
Silver	01.31.91	42	0.24	1	mg/L
Barium	01.31.91	42	0	1	mg/L
Beryllium	01.31.91	42	0	0.2	mg/L
Cadmium	01.31.91	42	0.9	1	mg/L
Cobalt	01.31.91	42	0	1	mg/L
Chromium	01.31.91	42	0	1	mg/L
Copper	01.31.91	42	0	2	mg/L
Molybdenum	01.31.91	42	0	4	mg/L
Nickel	01.31.91	42	0	2	mg/L
Lead	01.31.91	42	1.96	4	mg/L
Antimony	01.31.91	42	0	4	mg/L
Thallium	01.31.91	42	1.22	4	mg/L
Vanadium	01.31.91	42	0	1	mg/L
Zinc	01.31.91	42	0	1	mg/L
Arsenic	01.29.91	39	0	0.4	mg/kg
Mercury	01.29.91	15	0	0.05	mg/kg
Mercury	01.29.91	15	0	0.0005	mg/L
Selenium	01.29.91	39	0.18	0.4	mg/kg
P/N,A Ext. Priority Pollutants					
Date Analyzed	01.29.91	014	01.29.91	NA	Date
Date Extracted	01.29.91	014	01.24.91	NA	Date
Dilution Factor	01.29.91	014	1	NA	Times
1,2,4-Trichlorobenzene	01.29.91	014	0	0.03	mg/kg
1,2-Dichlorobenzene	01.29.91	014	0	0.03	mg/kg
1,2-Diphenylhydrazine	01.29.91	014	0	0.03	mg/kg
1,3-Dichlorobenzene	01.29.91	014	0	0.03	mg/kg
1,4-Dichlorobenzene	01.29.91	014	0	0.03	mg/kg
2,4,5-Trichlorophenol	01.29.91	014	0	0.03	mg/kg
2,4,6-Trichlorophenol	01.29.91	014	0	0.03	mg/kg
2,4-Dichlorophenol	01.29.91	014	0	0.03	mg/kg
2,4-Dimethylphenol	01.29.91	014	0	0.03	mg/kg
2,4-Dinitrophenol	01.29.91	014	0	0.3	mg/kg
2,4-Dinitrotoluene	01.29.91	014	0	0.03	mg/kg
2,6-Dinitrotoluene	01.29.91	014	0	0.03	mg/kg

BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 1

MATRIX QC ACCURACY (SPIKES)

PARAMETER	DATE ANALYZED	BATCH NUMBER	SBAR RESULT	TRUE RESULT	RBAR RESULT	UNIT	PERCENT RECOVERY
PH - Modified 8015							
Total Fuel Hydrocarbons	01.22.91	20	245	250	<10	mg/kg	98
TPH and BTEX - Modified 8015							
Total Fuel Hydrocarbons	01.23.91	20	220	250	<10	mg/kg	88
Fourteen CA Metals by ICAP							
Silver	01.31.91	42	26	50	<1	mg/kg	52
Barium	01.31.91	42	600	590	92	mg/kg	102
Beryllium	01.31.91	42	9.2	10	0.3	mg/kg	92
Cadmium	01.31.91	42	100	100	4	mg/kg	100
Cobalt	01.31.91	42	52	55	5.5	mg/kg	94
Chromium	01.31.91	42	120	130	33	mg/kg	90
Copper	01.31.91	42	110	110	10	mg/kg	100
Molybdenum	01.31.91	42	96	100	<4	mg/kg	96
Nickel	01.31.91	42	100	120	18.5	mg/kg	80
Lead	01.31.91	42	540	510	6.5	mg/kg	106
Antimony	01.31.91	42	53	100	<4	mg/kg	53
Thallium	01.31.91	42	160	200	<4	mg/kg	80
Vanadium	01.31.91	42	210	230	29	mg/kg	90
Zinc	01.31.91	42	220	220	18	mg/kg	100
Arsenic	01.29.91	39	100	100	1.4	mg/kg	100
Mercury	01.29.91	15	0.38	0.40	<0.05	mg/kg	95
Mercury	01.29.91	15	0.0018	0.0020	<0.0005	mg/L	*90
Selenium	01.29.91	39	100	100	<0.4	mg/kg	100
B/N,A Ext. Priority Pollutants							
1,2,4-Trichlorobenzene	01.29.91	014	1	1.7	<0.03	mg/kg	59
1,4-Dichlorobenzene	01.29.91	014	0.95	1.7	<0.03	mg/kg	56
2,4-Dinitrotoluene	01.29.91	014	1.3	1.7	<0.03	mg/kg	76
2-Chlorophenol	01.29.91	014	2.25	3.3	<0.03	mg/kg	68
4-Chloro-3-methylphenol	01.29.91	014	2.6	3.3	<0.03	mg/kg	79
4-Nitrophenol	01.29.91	014	2.75	3.3	<0.7	mg/kg	83
Acenaphthene	01.29.91	014	1	1.7	0.10	mg/kg	56
N-Nitrosodi-n-propylamine	01.29.91	014	1.3	1.7	<0.03	mg/kg	76
Phenol	01.29.91	014	2.35	3.3	<0.03	mg/kg	71
Pentachlorophenol	01.29.91	014	2.8	3.3	<0.03	mg/kg	85
Pyrene	01.29.91	014	0.95	1.7	<0.03	mg/kg	56
Volatile Organics (EPA 8240)							
1,1-Dichloroethene	01.30.91	004	3.85	6.2	<0.2	mg/kg	62
Benzene	01.30.91	004	6.4	6.2	<0.2	mg/kg	103
Chlorobenzene	01.30.91	004	6.5	6.2	<0.2	mg/kg	105
Trichloroethene	01.30.91	004	6.25	6.2	<0.2	mg/kg	101
Toluene	01.30.91	004	6.65	6.2	<0.2	mg/kg	107



BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 1

MATRIX QC PRECISION (DUPLICATE SPIKES)

PARAMETER	DATE ANALYZED	BATCH NUMBER	S1 RESULT	S2 RESULT	UNIT	RELATIVE %DIFF
TPH - Modified 8015						
Dilution Factor	01.23.91	20	1	1	Times	0
Total Fuel Hydrocarbons	01.23.91	20	250	240	mg/kg	4
TPH and BTEX - Modified 8015						
Dilution Factor	01.23.91	20	1	1	Times	0
Total Fuel Hydrocarbons	01.23.91	20	230	210	mg/kg	9
B/N,A Ext. Priority Pollutants						
Dilution Factor	01.29.91	014	1	1	Times	0
1,2,4-Trichlorobenzene	01.29.91	014	1.0	1.0	mg/kg	0
1,4-Dichlorobenzene	01.29.91	014	0.9	1.0	mg/kg	11
2,4-Dinitrotoluene	01.29.91	014	1.3	1.3	mg/kg	0
2-Chlorophenol	01.29.91	014	2.2	2.3	mg/kg	4
4-Chloro-3-methylphenol	01.29.91	014	2.6	2.6	mg/kg	0
4-Nitrophenol	01.29.91	014	2.7	2.8	mg/kg	4
Acenaphthene	01.29.91	014	1.0	1.0	mg/kg	0
N-Nitrosodi-n-propylamine	01.29.91	014	1.3	1.3	mg/kg	0
Phenol	01.29.91	014	2.3	2.4	mg/kg	4
Pentachlorophenol	01.29.91	014	2.7	2.9	mg/kg	7
Pyrene	01.29.91	014	1.0	0.9	mg/kg	11
Volatile Organics (EPA 8240)						
Dilution Factor	01.30.91	004	1	1	Times	0
1,1-Dichloroethene	01.30.91	004	3.6	4.1	mg/kg	13
Benzene	01.30.91	004	6.8	6.0	mg/kg	13
Chlorobenzene	01.30.91	004	6.9	6.1	mg/kg	12
Trichloroethene	01.30.91	004	6.6	5.9	mg/kg	11
Toluene	01.30.91	004	7.0	6.3	mg/kg	11
1,2-Dichloroethane-d4 Reported	01.30.91	004	6.1	6.4	mg/kg	5
1,2-Dichloroethane-d4 Theo.	01.30.91	004	6.2	6.2	mg/kg	0
4-Bromofluorobenzene Reported	01.30.91	004	7.5	7.1	mg/kg	5
4-Bromofluorobenzene Theo.	01.30.91	004	6.2	6.2	mg/kg	0
Toluene-d8 Reported	01.30.91	004	7.4	7.3	mg/kg	1
Toluene-d8 Theo.	01.30.91	004	6.2	6.2	mg/kg	0

BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 1

MATRIX QC PRECISION (DUPLICATES)

PARAMETER	DATE ANALYZED	BATCH NUMBER	R1 RESULT	R2 RESULT	UNIT	RELATIVE %DIFF
Petroleum Hydrocarbons (418.1)	01.28.91	6	<50	<50	mg/kg	NA
Fourteen CA Metals by ICAP						
Silver	01.31.91	42	<1	<1	mg/kg	NA
Barium	01.31.91	42	88	96	mg/kg	9
Beryllium	01.31.91	42	0.3	0.3	mg/kg	0
Cadmium	01.31.91	42	4	4	mg/kg	0
Cobalt	01.31.91	42	5	6	mg/kg	18
Chromium	01.31.91	42	32	34	mg/kg	6
Copper	01.31.91	42	9	11	mg/kg	20
Molybdenum	01.31.91	42	<4	<4	mg/kg	NA
Nickel	01.31.91	42	19	18	mg/kg	5
Lead	01.31.91	42	7	6	mg/kg	15
Antimony	01.31.91	42	<4	<4	mg/kg	NA
Thallium	01.31.91	42	<4	<4	mg/kg	NA
Vanadium	01.31.91	42	32	26	mg/kg	21
Zinc	01.31.91	42	17	19	mg/kg	11
Arsenic	01.29.91	39	1.3	1.5	mg/kg	14
Mercury	01.29.91	15	<0.05	<0.05	mg/kg	NA
Mercury	01.29.91	15	<0.0005	<0.0005	mg/L	NA
Selenium	01.29.91	39	<0.4	<0.4	mg/kg	NA

## BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 1

## LABORATORY CONTROL STANDARDS

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
TPH - Modified 8015						
Dilution Factor	01.23.91	20	1	1	Times	100
Total Fuel Hydrocarbons	01.23.91	20	250	250	mg/kg	100
TPH - Modified 8015						
Dilution Factor	01.23.91	20	1	1	Times	100
Total Fuel Hydrocarbons	01.23.91	20	240	250	mg/kg	96
Petroleum Hydrocarbons (418.1)	01.28.91	6	210	170	mg/kg	124
Fourteen CA Metals by ICAP						
Silver	01.31.91	42	1.6	2.0	mg/L	80
Barium	01.31.91	42	0.94	1.0	mg/L	94
Beryllium	01.31.91	42	0.24	0.25	mg/L	96
Cadmium	01.31.91	42	4.7	5.0	mg/L	94
Cobalt	01.31.91	42	1.7	2.0	mg/L	85
Chromium	01.31.91	42	4.4	5.0	mg/L	88
Copper	01.31.91	42	4.1	5.0	mg/L	82
Molybdenum	01.31.91	42	0.9	1.0	mg/L	90
Nickel	01.31.91	42	1.8	2.0	mg/L	90
Lead	01.31.91	42	9.9	10	mg/L	99
Antimony	01.31.91	42	1.0	1.0	mg/L	100
Thallium	01.31.91	42	0.8	1.0	mg/L	80
Vanadium	01.31.91	42	1.0	1.0	mg/L	100
Zinc	01.31.91	42	9.3	10	mg/L	93
Arsenic	01.29.91	39	0.028	0.025	mg/L	112
Mercury	01.29.91	15	0.0017	0.0020	mg/L	85
Mercury	01.29.91	15	0.0017	0.0020	mg/L	85
Selenium	01.29.91	39	0.023	0.025	mg/L	92
B/N,A Ext. Priority Pollutants						
Dilution Factor	01.29.91	014	1	1	Times	100
1,2,4-Trichlorobenzene	01.29.91	014	1.5	1.7	mg/kg	88
1,4-Dichlorobenzene	01.29.91	014	1.5	1.7	mg/kg	88
2,4-Dinitrotoluene	01.29.91	014	1.6	1.7	mg/kg	94
2-Chlorophenol	01.29.91	014	2.9	3.3	mg/kg	88
4-Chloro-3-methylphenol	01.29.91	014	3.2	3.3	mg/kg	97
4-Nitrophenol	01.29.91	014	3.3	3.3	mg/kg	100
Acenaphthene	01.29.91	014	1.5	1.7	mg/kg	88
N-Nitrosodi-n-propylamine	01.29.91	014	1.6	1.7	mg/kg	94
Phenol	01.29.91	014	3.3	3.3	mg/kg	100
Pentachlorophenol	01.29.91	014	3.6	3.3	mg/kg	109
Pyrene	01.29.91	014	1.6	1.7	mg/kg	94
Volatile Organics (EPA 8240)						
Dilution Factor	01.30.91	004	1	1	Times	100
1,1-Dichloroethene	01.30.91	004	7.6	6.2	mg/kg	123

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE....	METHOD.....	EQUIP.	BATCH	ID.NO
			ANALYZED				
9101374*1	B1-10	8015.BTEX	01.23.91	8015	516-07	20	7754
9101374*2	B4-5	8015.BTEX	01.23.91	8015	516-07	20	7754
9101374*3	B4-10	8015.BTEX	01.23.91	8015	516-07	20	7754
9101374*4	B2-10	IR.PETROHC	01.28.91	418.1	513-03	6	7070
		8015	01.23.91	8015	516-07	20	7754
9101374*5	B9-10	IR.PETROHC	01.28.91	418.1	513-03	6	7070
		8015	01.23.91	8015	516-07	20	7754
9101374*6	B10-10	IR.PETROHC	01.28.91	418.1	513-03	6	7070
		8015	01.23.91	8015	516-07	20	7754
9101374*7	B5-5	CAM.METALS.ES	01.31.91	6010	515-01	42	7708
		AS	01.29.91	7060	514-05	39	7379
		HG	01.29.91	7471	514-02	15	7753
		SE	01.29.91	7740	514-05	39	7036
		DIG,NAQ	01.24.91	3050		42	7391
		DIG,NAQ,GFA	01.24.91	3050		39	7391
9101374*8	B5-10	CAM.METALS.ES	01.31.91	6010	515-01	42	7708
		AS	01.29.91	7060	514-05	39	7379
		HG	01.29.91	7471	514-02	15	7753
		SE	01.29.91	7740	514-05	39	7036
		DIG,NAQ	01.24.91	3050		42	7391
		DIG,NAQ,GFA	01.24.91	3050		39	7391
9101374*9	B6-10	8270	01.30.91	8270	517-02	014	3002
		8240	01.30.91	8240	517-04	004	7038
9101374*10	B7-10	CAM.METALS.ES	01.31.91	6010	515-01	42	7708
		AS	01.29.91	7060	514-05	39	7379
		HG	01.29.91	7471	514-02	15	7753
		SE	01.29.91	7740	514-05	39	7036
		DIG,NAQ	01.24.91	3050		42	7391
		DIG,NAQ,GFA	01.24.91	3050		39	7391
		8270	01.29.91	8270	517-02	014	3002
		8240	01.30.91	8240	517-04	004	7038
9101374*11	B8-10	IR.PETROHC	01.28.91	418.1	513-03	6	7070
		8015	01.23.91	8015	516-07	20	7754
		8270	01.30.91	8270	517-02	014	3002
		8240	01.30.91	8240	517-04	004	7038
9101374*12	AP-1	PB	01.30.91	7420	514-02	42	7753
		DIG,NAQ	01.24.91	3050		42	7391

\*\*\*

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.  
 ID.NO = BC Analytical employee identification number of analyst.

BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 2

LABORATORY CONTROL STANDARDS

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
Benzene	01.30.91	004	7.5	6.2	mg/kg	121
Chlorobenzene	01.30.91	004	7.2	6.2	mg/kg	116
Trichloroethene	01.30.91	004	7.3	6.2	mg/kg	118
Toluene	01.30.91	004	7.2	6.2	mg/kg	116
Lead	01.30.91	42	9.4	10	mg/L	94

## BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 2

## METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT
2-Chloronaphthalene	01.29.91	014	0	0.03	mg/kg
2-Chlorophenol	01.29.91	014	0	0.03	mg/kg
2-Methyl-4,6-dinitrophenol	01.29.91	014	0	0.03	mg/kg
2-Methylnaphthalene	01.29.91	014	0	0.03	mg/kg
2-Methylphenol (o-Cresol)	01.29.91	014	0	0.03	mg/kg
2-Nitroaniline	01.29.91	014	0	0.2	mg/kg
2-Nitrophenol	01.29.91	014	0	0.03	mg/kg
3,3'-Dichlorobenzidine	01.29.91	014	0	0.03	mg/kg
3-Nitroaniline	01.29.91	014	0	0.2	mg/kg
4-Bromophenylphenylether	01.29.91	014	0	0.03	mg/kg
4-Chloro-3-methylphenol	01.29.91	014	0	0.03	mg/kg
4-Chloroaniline	01.29.91	014	0	0.2	mg/kg
4-Chlorophenylphenylether	01.29.91	014	0	0.03	mg/kg
4-Methylphenol (p-Cresol)	01.29.91	014	0	0.03	mg/kg
4-Nitroaniline	01.29.91	014	0	0.2	mg/kg
4-Nitrophenol	01.29.91	014	0	0.6	mg/kg
Acenaphthene	01.29.91	014	0	0.03	mg/kg
Acenaphthylene	01.29.91	014	0	0.03	mg/kg
Aniline	01.29.91	014	0	0.03	mg/kg
Anthracene	01.29.91	014	0	0.03	mg/kg
Benzidine	01.29.91	014	0	1	mg/kg
Benzo(a)anthracene	01.29.91	014	0	0.03	mg/kg
Benzo(a)pyrene	01.29.91	014	0	0.03	mg/kg
Benzo(b)fluoranthene	01.29.91	014	0	0.03	mg/kg
Benzo(g,h,i)perylene	01.29.91	014	0	0.03	mg/kg
Benzo(k)fluoranthene	01.29.91	014	0	0.03	mg/kg
Benzyl alcohol	01.29.91	014	0	0.03	mg/kg
Benzoic acid	01.29.91	014	0	0.2	mg/kg
Butylbenzylphthalate	01.29.91	014	0	0.03	mg/kg
Chrysene	01.29.91	014	0	0.03	mg/kg
Di-n-octylphthalate	01.29.91	014	0	0.03	mg/kg
Dibenzo(a,h)anthracene	01.29.91	014	0	0.03	mg/kg
Dibenzofuran	01.29.91	014	0	0.03	mg/kg
Dibutylphthalate	01.29.91	014	0	0.03	mg/kg
Diethylphthalate	01.29.91	014	0	0.03	mg/kg
Dimethylphthalate	01.29.91	014	0	0.03	mg/kg
Fluoranthene	01.29.91	014	0	0.03	mg/kg

BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 3

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT
Fluorene	01.29.91	014	0	0.03	mg/kg
Hexachlorobenzene	01.29.91	014	0	0.03	mg/kg
Hexachlorobutadiene	01.29.91	014	0	0.03	mg/kg
Hexachlorocyclopentadiene	01.29.91	014	0	0.03	mg/kg
Hexachloroethane	01.29.91	014	0	0.03	mg/kg
Indeno(1,2,3-c,d)pyrene	01.29.91	014	0	0.03	mg/kg
Isophorone	01.29.91	014	0	0.03	mg/kg
N-Nitrosodimethylamine	01.29.91	014	0	0.03	mg/kg
N-Nitrosodiphenylamine	01.29.91	014	0	0.03	mg/kg
N-Nitrosodi-n-propylamine	01.29.91	014	0	0.03	mg/kg
Nitrobenzene	01.29.91	014	0	0.03	mg/kg
Naphthalene	01.29.91	014	0	0.03	mg/kg
Phenanthrene	01.29.91	014	0	0.03	mg/kg
Phenol	01.29.91	014	0	0.03	mg/kg
Pentachlorophenol	01.29.91	014	0	0.03	mg/kg
Pyrene	01.29.91	014	0	0.03	mg/kg
Bis(2-chloroethoxy)methane	01.29.91	014	0	0.03	mg/kg
Bis(2-chloroethyl)ether	01.29.91	014	0	0.03	mg/kg
Bis(2-chloroisopropyl)ether	01.29.91	014	0	0.03	mg/kg
Bis(2-ethylhexyl)phthalate	01.29.91	014	0	3	mg/kg
2-Fluorophenol Reported	01.29.91	014	0	NA	mg/kg
Volatile Organics (EPA 8240)					
Date Analyzed	01.30.91	004	01.30.91	NA	Date
Date Extracted	01.30.91	004	01.23.91	NA	Date
Dilution Factor	01.30.91	004	1	NA	Times
1,1,1-Trichloroethane	01.30.91	004	0	0.2	mg/kg
1,1,2,2-Tetrachloroethane	01.30.91	004	0	0.2	mg/kg
1,1,2-Trichloroethane	01.30.91	004	0	0.2	mg/kg
1,1-Dichloroethane	01.30.91	004	0	0.2	mg/kg
1,1-Dichloroethene	01.30.91	004	0	0.2	mg/kg
1,2-Dichloroethane	01.30.91	004	0	0.2	mg/kg
1,2-Dichlorobenzene	01.30.91	004	0	0.2	mg/kg
1,2-Dichloropropane	01.30.91	004	0	0.2	mg/kg
1,3-Dichlorobenzene	01.30.91	004	0	0.2	mg/kg
1,4-Dichlorobenzene	01.30.91	004	0	0.2	mg/kg
2-Chloroethylvinylether	01.30.91	004	0	0.2	mg/kg
2-Hexanone	01.30.91	004	0	2	mg/kg
4-Methyl-2-Pentanone	01.30.91	004	0	2	mg/kg

## BC ANALYTICAL

BATCH QC REPORT  
ORDER: E9101374

DATE REPORTED : 02/11/91

Page 4

## METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT
Acetone	01.30.91	004	0	5	mg/kg
Acrolein	01.30.91	004	0	1	mg/kg
Acrylonitrile	01.30.91	004	0	2	mg/kg
Bromodichloromethane	01.30.91	004	0	0.2	mg/kg
Bromomethane	01.30.91	004	0	0.2	mg/kg
Benzene	01.30.91	004	0	0.2	mg/kg
Bromoform	01.30.91	004	0	0.2	mg/kg
Chlorobenzene	01.30.91	004	0	0.2	mg/kg
Carbon Tetrachloride	01.30.91	004	0	0.2	mg/kg
Chloroethane	01.30.91	004	0	0.2	mg/kg
Chloroform	01.30.91	004	0	0.2	mg/kg
Chloromethane	01.30.91	004	0	0.2	mg/kg
Carbon Disulfide	01.30.91	004	0	0.2	mg/kg
Dibromochloromethane	01.30.91	004	0	0.2	mg/kg
Ethylbenzene	01.30.91	004	0	0.2	mg/kg
Freon 113	01.30.91	004	0	0.2	mg/kg
Methyl ethyl ketone	01.30.91	004	0	2	mg/kg
Methylene chloride	01.30.91	004	0	1	mg/kg
Styrene	01.30.91	004	0	0.2	mg/kg
Trichloroethene	01.30.91	004	0	0.2	mg/kg
Trichlorofluoromethane	01.30.91	004	0	0.2	mg/kg
Toluene	01.30.91	004	0	0.2	mg/kg
Tetrachloroethene	01.30.91	004	0	0.2	mg/kg
Vinyl acetate	01.30.91	004	0	0.2	mg/kg
Vinyl chloride	01.30.91	004	0	0.2	mg/kg
Total Xylene Isomers	01.30.91	004	0	0.2	mg/kg
cis-1,2-Dichloroethene	01.30.91	004	0	0.2	mg/kg
cis-1,3-Dichloropropene	01.30.91	004	0	0.2	mg/kg
trans-1,2-Dichloroethene	01.30.91	004	0	0.2	mg/kg
trans-1,3-Dichloropropene	01.30.91	004	0	0.2	mg/kg
1,2-Dichloroethane-d4 Reported	01.30.91	004	7.4	NA	mg/kg
1,2-Dichloroethane-d4 Theo.	01.30.91	004	6.2	NA	mg/kg
4-Bromofluorobenzene Reported	01.30.91	004	7.7	NA	mg/kg
4-Bromofluorobenzene Theo.	01.30.91	004	6.2	NA	mg/kg
Toluene-d8 Reported	01.30.91	004	8.8	NA	mg/kg
Toluene-d8 Theo.	01.30.91	004	6.2	NA	mg/kg
Lead	01.30.91	42	0	NA	mg/kg



CHAIN OF CUSTODY RECORD

BCA Log Number 91-01-374

Client name <b>ROBERT GILS ASSOCIATE</b>		Project or PO# <b>DB-100487</b>	
Address <b>6400 HOLIS STREET # 4</b>		Phone # <b>(415) 547-7771</b>	
City, State, Zip <b>EMERYVILLE CA 94608</b>		Report attention <b>Chris Mwabuzoh.</b>	

Lab Sample number	Date sampled	Time sampled	Type* See key below	Sampled by	Number of containers	Analyses required										Remarks		
						8240	8270	6010	8015	TPH	TOTAL	Hazardous sample	Special handling required	Special handling required	Special handling required		Special handling required	
B1-10	1-15	Am	SO		1													* Title 22, 17 metals
B2-10	1-15	Am	SO		1													** IR method for hydrocarbons
B4-5	1-15	pm	SO		1													*** BTEX
B4-10	1-15	pm	SO		1													
B5-5	1-16	Am	SO		1													
B5-10	1-16	Am	SO		1													
B6-10	1-16	Am	SO		1													
B7-10	1-16	Am	SO		1													
B8-10	1-16	pm	SO		1													
B9-10	1-16	pm	SO		1													
B10-10	1-16	pm	SO		1													
AP-1	1-16	pm	SO		2													

Signature	Print Name	Company	Date	Time
Relinquished by <i>Chris Mwabuzoh</i>			1/17/91	4:52pm
Received by <i>Tony Blake</i>	Tony Blake	BCA	1/17/91	4:53pm
Relinquished by				
Received by				
Relinquished by				
Received by Laboratory				

**BC ANALYTICAL**  
 1255 Powell Street, Emeryville, CA 94608 (415) 428-2300  
 801 Western Avenue, Glendale, CA 91201 (818) 247-5737  
 1200 Pacific Avenue, Anaheim, CA 92805 (714) 978-0113

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

\*KEY: AQ—Aqueous NA—Nonaqueous SL—Sludge  
 GW—Groundwater SO—Soil OT—Other PE—Petroleum

Disposal arrangements: \_\_\_\_\_

CHAIN OF CUSTODY RECORD

BCA Log Number 91-01-374

Client name <b>ROBERT GILS ASSOCIATE</b>		Project or PO# <b>DB-100487</b>		Analyses required												
Address <b>6400 HOLIS STREET # 4</b>		Phone # <b>(415) 547-7171</b>		8240 <del>CON</del> ✓ 8270 <del>CON</del> ✓ 0010 / 4000 ✓ 8015 mvd (DEL) ✓ TPH TYPE ✓ TOTAL LEAD ✓ Hazardous sample Special handling required												
City, State, Zip <b>EMERYVILLE CA 94608</b>		Report attention <b>Chris Nwabuzor</b>														
Lab Sample number	Date sampled	Time sampled	Type* See key below	Sampled by	Sample description	Number of containers	Remarks									
B1-10	1-15	Am	SO			1	* Title 22, 17 metals									
B2-10	1-15	Am	SO			1	** IR method for hydrocarbons									
B4-5	1-15	Pm	SO			1	✓									
B4-10	1-15	Pm	SO			1	✓									
B5-5	1-16	Am	SO			1	✓									
B5-10	1-16	Am	SO			1	✓									
B6-10	1-16	Am	SO			1	✓ ✓									
B7-10	1-16	Am	SO			1	✓ ✓ ✓									
B8-10	1-16	Pm	SO			1	✓ ✓ ✓									
B9-10	1-16	Pm	SO			1	✓									
B10-10	1-16	Pm	SO			1	✓									
AP-1	1-16	Pm	SO			2	✓									
Signature				Print Name				Company				Date		Time		
Relinquished by <i>Chris Nwabuzor</i>												1/17/91		4:52pm		
Received by <i>Tom Blake</i>				Tom Blake				BCA				1/17/91		4:53pm		
Relinquished by																
Received by																
Relinquished by																
Received by Laboratory																

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Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

\*KEY AQ—Aqueous NA—Nonaqueous SL—Sludge  
 GW—Groundwater SO—Soil OT—Other PE—Petroleum

Disposal arrangements: \_\_\_\_\_

CHAIN OF CUSTODY RECORD

BCA Log Number 91-01-374

Client name <b>ROBERT GILS ASSOCIATE</b>		Project or PO# <b>DB-100487</b>	
Address <b>6400 HOLIS STREET # 4</b>		Phone # <b>(415) 547-7771</b>	
City, State, Zip <b>EMERYVILLE, CA 94608</b>		Report attention <b>Chris Nwabuzoh</b>	

Analyses required										
BAY	SOIL	SOIL	SOIL	TPH	TOTAL LEAD	HAZARDOUS SAMPLE	Special handling required			Remarks

Lab Sample number	Date sampled	Time sampled	Type* See key below	Sampled by	Sample description	Number of containers	BAY	SOIL	SOIL	SOIL	TPH	TOTAL LEAD	HAZARDOUS SAMPLE	Special handling required	Remarks
B1-10	1-15	Am	SO			1					✓				* Title 22, 17 metals
B2-10	1-15	Am	SO			1				✓					** IR method for Hydrocarbons
B4-5	1-15	Pm	SO			1					✓				*** 8015 BTEX
B4-10	1-15	Pm	SO			1					✓				
B5-5	1-16	Am	SO			1		✓							
B5-10	1-16	Am	SO			1		✓							
B6-10	1-16	Am	SO			1	✓	✓							
B7-10	1-16	Am	SO			1	✓	✓	✓	PE					
B8-10	1-16	Pm	SO			1	✓	✓		✓					
B9-10	1-16	Pm	SO			1				✓					
B10-10	1-16	Pm	SO			1				✓					
AP-1	1-16	Pm	SO			2						✓			

Signature	Print Name	Company	Date	Time
Relinquished by <i>Chris Nwabuzoh</i>			1/17/91	4:52pm
Received by <i>Tony Blake</i>	Tony Blake	BCA	1/17/91	4:53pm
Relinquished by				
Received by				
Relinquished by				
Received by Laboratory				

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Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.  
 Disposal arrangements: \_\_\_\_\_

\*KEY AO—Aqueous NA—Nonaqueous SL—Sludge  
 GW—Groundwater SO—Soil OT—Other PE—Petroleum