RO-2536

RMT® Integrated Environmental Solutions

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MISSING FIG 2, DEC 02 BORINGS SB1-13

March 13, 2003

Ms. Donna Drogos
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Subject: Summary of Prior Soil and Groundwater Investigation Activities, Prior Soil Excavation Work and Recommendations for Final Remedy for the Residential/Commercial Property Located at 762 Stewart Court Alameda, California

Dear Ms. Drogos:

The property located at 762 Stewart Court (Stewart Court Property) in Alameda, California is a mixed-use property, i.e., the property is zoned for a combination of commercial and residential use within the same lot. The Stewart Court Property is rectangular in shape, and measures approximately 6,100 square feet. A two-story residential structure occupies the southwest corner of the lot. The other structures on the Stewart Court Property house commercial operations. Structures occupy approximately 50 percent of the Stewart Court Property, while the remainder exists as an open yard area (Figure 1).

The Stewart Court Property is in the process of being sold, and as such, investigations have been performed on the behalf of the owner and the buyer. RMT, Inc. (RMT) has been retained on behalf of the property owner, Ms. Patricia Santanna, to review all prior work performed at the Stewart Court Property, to make recommendations for a final remedy and to discuss all prior work, and final remedy recommendations with the Alameda County Department of Environmental Health.

CHRONOLOGY OF PRIOR INVESTIGATIONS AND REMEDIAL WORK

RMT Inc., Soil Investigation – August 2, 2001 (Attachment 1)

The first soil investigation was performed by RMT on August 2, 2001. Five soil borings were located throughout the Stewart Court Property and the soil borings were completed to a depth of five feet below ground surface (bgs). Soil samples were collected at a depth of one-foot bgs and five-feet bgs from each soil boring, respectively, for a total of ten soil samples. The soil samples were analyzed for the following chemical compounds, which are summarized in Table 1 for Total Petroleum Hydrocarbons, Table 2 for Metals, and Table 3 for Volatile Organic Compounds, respectively:

- Total Petroleum Hydrocarbons as Gasoline (TPH-Gas)
- Medium-to-High Molecular Weight Total Petroleum Hydrocarbons (TPH-Heavy)
- Title 22 Metals
- Volatile Organic Compounds (VOCs)

Based on the findings of the August 2, 2001 soil investigation, which were reported in the November 29, 2001 RMT, Inc. Limited Subsurface Investigation Report, chemical-impacted soils were identified at the Stewart Court Property.

RMT, Inc. Soil Excavation – June 24, 2002 (Attachment 2)

RMT excavated chemical-impacted soils at two locations on June 24, 2002 (Figure 1). The former lathe equipment area excavation measured approximately four feet by four feet, and five feet in depth. The excavation in the open yard area measured approximately eleven feet by six feet, and three feet in depth. Chemical-impacted soils in these two areas were excavated and disposed off-site at the Chemical Waste Management Class I Hazardous Waste Landfill in Kettleman Hills, California. All excavated materials were transported by a licensed hazardous waste transporter under Uniform Hazardous Waste Manifest No. 98398997.

Piers Environmental Services, Inc. Phase I Environmental Site Assessment – October 8, 2002 (Attachment 3)

Piers Environmental Services, Inc. (Piers) prepared the October 8, 2002 Phase I Environmental Site Assessment (ESA), on the behalf of a financial lending institution, U.S. Bank, SBA Division. The Phase I ESA recommended that further soil sampling was warranted.

Piers Environmental Services, Inc. Phase II Investigation – December 17, 2002 (Attachment 4)

Piers drilled a total of twelve soil borings (Figure 1); however, soil samples were only analyzed from ten of the twelve soil borings. Soil samples were collected on December 2, 2002 and were analyzed for the following chemical compounds in selected soil borings:

- Total Petroleum Hydrocarbons as Diesel Fuel No. 2 (TPH-Diesel)
- Total Petroleum Hydrocarbons as Motor Oil (TPH-Oil)
- Total Petroleum Hydrocarbons as Stoddard Solvent (TPH-Stoddard)
- Inorganic Lead
- VOCs

Elevated TPH concentrations were detected in shallow soil at depths ranging from six-inches to one-foot bgs at soil boring SB7, SB11, and SB12 (Table 1).

Grab groundwater samples were also collected from soil borings SB6E and SB9, respectively. The grab groundwater samples were analyzed for TPH-Diesel, TPH-Oil and TPH-Stoddard. TPH concentrations were not detected in the grab groundwater samples at a method detection limit of 0.050 milligrams per liter for all three analyses, which indicates that shallow groundwater has not been impacted by TPH compounds. Low levels of several VOCs were detected in the grab groundwater sample collected from soil boring SB6E. Naphthalene was detected at 3 micrograms per liter (µg/L), toluene was detected at 1 µg/L, and 1,2,4-trimethylbenzene was detected at 2 µg/L. While shallow groundwater is not currently being used as a source of drinking water at the Stewart Court Property, a comparison to available USEPA drinking water standards indicates that the low level of detected VOC concentrations in the shallow groundwater should not be of concern. The detected concentration of toluene is three orders of magnitude below its respective USEPA Maximum Contaminant Level (MCL); the MCL for toluene is 1,000 ug/L. MCLs are not available for naphthalene, and 1,2,4-trimethylbenzene.

CONCLUSIONS & RECOMMENDATIONS FOR A FINAL REMEDY

Over eighty percent of the Stewart Court Property has been and is currently being used for commercial business purposes. All detected chemical concentrations are less than the respective USEPA Industrial Use Soil Preliminary Remediation Goals (Table 1, Table 2, Table 3). The property continues to be utilized for commercial purposes.

The proposed final remedy is to install a permanent physical barrier throughout the open yard area, and to seal/repair the floor inside the buildings where commercial operations are present. This will minimize infiltration from surface runoff, and prevent direct contact to workers in the commercial use buildings.

I will call you in due course to discuss this site and our recommendations. We request a letter response confirming your concurrence with our proposed approach. We also understand that you a have a significant case load and appreciate your attention to this matter.

If you have and questions or comments, please contact me at 408-368-7796.

Sincerely,

Alan Lui

RMT, Inc.

Alan Lui, P.E.
Senior Project Manager

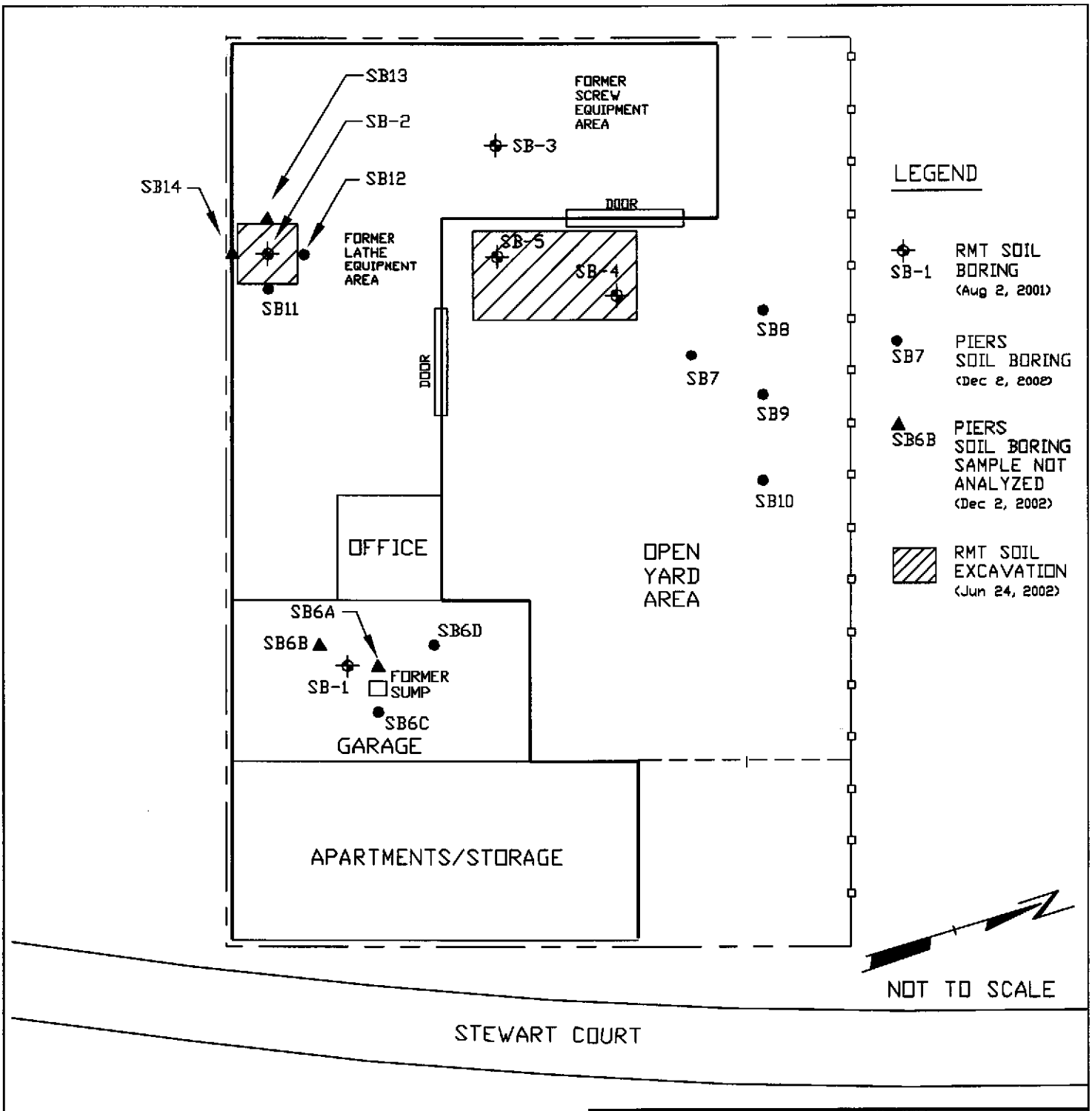
Attachments: November 29, 2001 RMT, Inc. Limited Subsurface Investigation Report

August 21, 2002 RMT, Inc. Soil Excavation and Disposal Activities

October 8, 2002 Piers Environmental Services, Inc.
Phase I Environmental Site Assessment Report

December 17, 2002 Piers Environmental Services, Inc.
Phase II Investigation

cc: Ms. Patricia Santanna
Ms. Judith Bright
Mr. Michael Bacon, RMT
Mr. Kevin Bate, RMT
Central Files



LEGEND:

- BORING LOCATION
- WOODEN FENCE
- CHAIN-LINK GATE
- ASSUMED PROPERTY LINE

PROJECT:

762 STEWART COURT, ALAMEDA, CALIFORNIA

SHEET TITLE:

SOIL BORING LOCATIONS

DRAWN BY: AL	PROJ. NO. 00-90225.02
CHECKED BY: KB	FILE NO. 90225.02-1.DWG
APPROVED BY: AL	FIGURE 1
DATE: MARCH 2003	

RMT Inc. – Sunnyvale
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Sunnyvale, CA 94089

TABLES

SOIL AND GRAB GROUNDWATER ANALYTICAL DATA

AUGUST 2, 2001
RMT, INC. INVESTIGATION

DECEMBER 2, 2002
PIERS ENVIRONMENTAL SERVICES, INC.
INVESTIGATION

TABLE 1

TOTAL PETROLEUM HYDROCARBON SOIL SAMPLING RESULTS
August 2001 and December 2002

	SB1-1	SB1-5	SB2-1	SB2-5	SB3-1	SB3-5	SB4-1	SB4-5	SB5-1	SB5-5
Chemical	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01	SOIL (mg/kg) 8/2/01
C06-C08	< 10	< 10	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1
C08-C10	< 10	< 10	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1
C10-C12	< 10	< 10	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1
C12-C14	< 10	< 10	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1
C14-C16	**27**	**1,000**	< 1	< 1	**2**	< 1	**700**	< 1	< 1	< 1
C16-C18	**300**	**2,300**	< 1	< 1	**20**	< 1	**2,600**	< 1	**2.1**	< 1
C18-C20	**350**	**1,300**	< 1	< 1	**29**	< 1	**2,800**	< 1	**6.6**	< 1
C20-C22	**150**	**700**	< 1	< 1	**59**	< 1	**3,000**	< 1	**20**	< 1
C22-C24	**250**	**350**	< 1	< 1	**95**	< 1	**3,200**	< 1	**31**	< 1
C24-C26	**190**	**240**	< 1	< 1	**100**	< 1	**3,400**	< 1	**48**	< 1
C26-C28	**230**	**240**	< 1	< 1	**120**	< 1	**2,800**	< 1	**49**	< 1
C28-C32	**350**	**140**	< 1	< 1	**210**	< 1	**2,600**	< 1	**90**	< 1
C32-C34	**120**	< 10	< 1	< 1	**56**	< 1	**280**	< 1	**20**	< 1
C34-C36	**23**	< 10	< 1	< 1	**8**	< 1	< 20	< 1	**2.0**	< 1
C36-C40	< 10	< 10	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1
C40-C44	< 10	< 10	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1
TPH as Gasoline	**2,000**	**6,300**	< 10	< 10	**700**	< 10	**21,000**	< 10	**270**	< 10
TPH as Diesel Fuel #2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TPH as Motor Oil	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TPH as Stoddard Solvent	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

NT = Not Tested

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.

TABLE 1

TOTAL PETROLEUM HYDROCARBON SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	SB6C (0.5') SOIL (mg/kg) 12/2/02	SB6C (2.5') SOIL (mg/kg) 12/2/02	SB6D (2.5') SOIL (mg/kg) 12/2/02	SB7 (1.0') SOIL (mg/kg) 12/2/02	SB7 (5.0') SOIL (mg/kg) 12/2/02	SB8 (5.0') SOIL (mg/kg) 12/2/02	SB9 (1.0') SOIL (mg/kg) 12/2/02	SB10 (1.0') SOIL (mg/kg) 12/2/02	SB10 (5.0') SOIL (mg/kg) 12/2/02	SB11 (0.5') SOIL (mg/kg) 12/2/02	SB10+11 COMP SOIL (mg/kg) 12/2/02	SB12 (0.5') SOIL (mg/kg) 12/2/02	SB6E GRAB GROUND WATER (mg/L) 12/2/02	SB9 GRAB GROUND WATER (mg/L) 12/2/02
C06-C08	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C08-C10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C10-C12	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C12-C14	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C14-C16	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C16-C18	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C18-C20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C20-C22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C22-C24	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C24-C26	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C26-C28	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C28-C32	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C32-C34	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C34-C36	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C36-C40	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
C40-C44	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TPH as Gasoline	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TPH as Diesel Fuel #2	**120**	**314**	**9,290**	< 1	< 1	< 1	< 1	< 1	< 1	**1,330**	**333**	**2,070**	< 0.050	< 0.050
TPH as Motor Oil	**276**	**850**	**4,430**	**1,980**	**137**	< 10	**182**	**471**	< 10	**9,290**	**2,450**	**15,600**	< 0.050	< 0.500
TPH as Stoddard Solvent	< 1	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 20	< 1	< 25	< 0.050	< 0.050

NT = Not Tested

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.

TABLE 2

METALS SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB1-1 SOIL (mg/kg) 8/2/01	SB1-5 SOIL (mg/kg) 8/2/01	SB2-1 SOIL (mg/kg) 8/2/01	SB2-5 SOIL (mg/kg) 8/2/01	SB3-1 SOIL (mg/kg) 8/2/01	SB3-5 SOIL (mg/kg) 8/2/01	SB4-1 SOIL (mg/kg) 8/2/01	SB4-5 SOIL (mg/kg) 8/2/01	SB5-1 SOIL (mg/kg) 8/2/01	SB5-5 SOIL (mg/kg) 8/2/01
Antimony	411	31		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Arsenic	260	22		**2.70**	**3.60**	**3.60**	**1.60**	**5.20**	**2.00**	**2.70**	**1.20**	**3.30**	**2.20**
	1.6	0.39	22 (noncancer endpoint) / 0.39 (cancer endpoint)										
Barium	67,000	5,400		**180**	**84**	**150**	**74**	**160**	**51**	**330**	**59**	**350**	**61**
Beryllium	1,900	150		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cadmium	450	37	37 (USEPA)	< 1	< 1	< 1	< 1	< 1	< 1	**12**	< 1	< 1	< 1
	7.4	1.7	1.7 (CAL-Mod PRG)										
Chromium	100,000	100,000	100,000 (Cr III)	**25**	**20**	**25**	**21**	**32**	**31**	**43**	**29**	**39**	**26**
	64	30	30 (Cr VI+++)										
Cobalt	1,900	900		**4.2**	**4.0**	**3.8**	< 3	**4.9**	**5.0**	< 3	< 3	< 3	< 3
Copper	41,000	3,100		**40**	**14**	**25**	**9**	**20**	**8**	**62**	**6**	**24**	**8**
Lead	750	400	400 (USEPA)	**98**	**36**	**480**	**21**	**150**	< 3	**82**	< 3	**160**	**4**
	not applicable	150	150 (CAL-Mod PRG)										
Mercury	0	0	ZERO (elemental Hg)	**0.270**	**0.160**	**0.100**	**0.180**	**0.110**	< 0.05	**0.067**	**0.050**	**0.094**	< 0.05
Molybdenum	5,100	390		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Nickel	20,000	1,600	1,600 (soluble nickel salts)	**24**	**16**	**7**	**< 3**	**21**	**11**	**45**	**9**	**20**	**10**
Selenium	5,100	390		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Silver	5,100	390		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Thallium	67	5.2		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Vanadium	7,200	550		**16**	**16**	**17**	**14**	**22**	**24**	**23**	**21**	**21**	**19**
Zinc	100,000	23,000		**87**	**37**	**220**	**31**	**120**	**24**	**160**	**12**	**190**	**15**

NT = Not Tested
USEPA PRG = USEPA Preliminary Remediation Goal
CAL-Mod PRG = DTSC Modified Preliminary Remediation Goal
DTSC = California Department of Toxic Substances Control

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

TABLE 2

METALS SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB6C (0.5') SOIL (mg/kg) 12/2/02	SB6C (2.5') SOIL (mg/kg) 12/2/02	SB6D (2.5') SOIL (mg/kg) 12/2/02	SB7 (1.0') SOIL (mg/kg) 12/2/02	SB7 (5.0') SOIL (mg/kg) 12/2/02	SB8 (5.0') SOIL (mg/kg) 12/2/02	SB9 (1.0') SOIL (mg/kg) 12/2/02	SB10 (1.0') SOIL (mg/kg) 12/2/02	SB10 (5.0') SOIL (mg/kg) 12/2/02	SB11 (0.5') SOIL (mg/kg) 12/2/02
Antimony	411	31		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	260	22		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	1.6	0.39	22 (noncancer endpoint) / 0.39 (cancer endpoint)										
Barium	67,000	5,400		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Beryllium	1,900	150		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	450	37	37 (USEPA)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	7.4	1.7	1.7 (CAL-Mod PRG)										
Chromium	100,000	100,000	100,000 (Cr III)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	64	30	30 (Cr VI+++)										
Cobalt	1,900	900		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Copper	41,000	3,100		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	750	400	400 (USEPA)	NT	NT	NT	NT	NT	NT	NT	NT	NT	**170**
	not applicable	150	150 (CAL-Mod PRG)										
Mercury	0	0	ZERO (elemental Hg)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Molybdenum	5,100	390		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Nickel	20,000	1,600	1,600 (soluble nickel salts)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	5,100	390		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Silver	5,100	390		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Thallium	67	5.2		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vanadium	7,200	550		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	100,000	23,000		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

NT = Not Tested
USEPA PRG = USEPA Preliminary Remediation Goal
CAL-Mod PRG = DTSC Modified Preliminary Remediation Goal
DTSC = California Department of Toxic Substances Control

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

TABLE 2

METALS SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB10+11 COMP SOIL (mg/kg) 12/2/02	SB12 (0.5') SOIL (mg/kg) 12/2/02	SB6E GRAB GROUND WATER (mg/L) 12/2/02	SB9 GRAB GROUND WATER (mg/L) 12/2/02
Antimony	411	31		NT	NT	NT	NT
Arsenic	260	22		NT	NT	NT	NT
	1.6	0.39	22 (noncancer endpoint) / 0.39 (cancer endpoint)				
Barium	67,000	5,400		NT	NT	NT	NT
Beryllium	1,900	150		NT	NT	NT	NT
Cadmium	450	37	37 (USEPA PRG)	NT	NT	NT	NT
	7.4	1.7	1.7 (CAL-Mod PRG)				
Chromium	100,000	100,000	100,000 (Cr III)	NT	NT	NT	NT
	64	30	30 (Cr VI+++)				
Cobalt	1,900	900		NT	NT	NT	NT
Copper	41,000	3,100		NT	NT	NT	NT
Lead	750	400	400 (USEPA PRG)	NT	**112**	NT	NT
	not applicable	150	150 (CAL-Mod PRG)				
Mercury	0	0	ZERO (elemental Hg)	NT	NT	NT	NT
Molybdenum	5,100	390		NT	NT	NT	NT
Nickel	20,000	1,600	1,600 (soluble nickel salts)	NT	NT	NT	NT
Selenium	5,100	390		NT	NT	NT	NT
Silver	5,100	390		NT	NT	NT	NT
Thallium	67	5.2		NT	NT	NT	NT
Vanadium	7,200	550		NT	NT	NT	NT
Zinc	100,000	23,000		NT	NT	NT	NT

NT = Not Tested
USEPA PRG = USEPA Preliminary Remediation Goal
CAL-Mod PRG = DTSC Modified Preliminary Remediation Goal
DTSC = California Department of Toxic Substances Control

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

TABLE 3

VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB1-1 SOIL (mg/kg) 8/2/01	SB1-5 SOIL (mg/kg) 8/2/01	SB2-1 SOIL (mg/kg) 8/2/01	SB2-5 SOIL (mg/kg) 8/2/01	SB3-1 SOIL (mg/kg) 8/2/01	SB3-5 SOIL (mg/kg) 8/2/01
Acetone	6,000	1,600		< 0.050	**0.120**	**0.088**	**0.130**	< 0.050	< 0.050
Acetonitrile	1,800	420		NT	NT	NT	NT	NT	NT
Acrylonitrile	0.49	0.21		NT	NT	NT	NT	NT	NT
Benzene	1.3	0.6		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Bromobenzene	92	28		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromochloromethane	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromodichloromethane	1.8	0.82		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromoform	220	62		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromomethane	13	3.9		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2-Butanone	not applicable	not applicable		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Butylbenzene	240	240		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Carbon disulfide	720	360		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Carbon tetrachloride	0.55	0.25		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chlorobenzene	530	150		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chloroethane	6.5	3		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chloroform	12	3.6	3.6 (USEPA PRG)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	2	0.94	0.94 (CAL-Mod PRG)						
Chloromethane	2.6	1.2		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2-Chlorotoluene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
4-Chlorotoluene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dibromo-3-chloropropane	2	0.45	0.45 (USEPA PRG)	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
1,2-Dibromo-3-chloropropane	0.046	0.019	0.019 (CAL-Mod PRG)						
Dibromochloromethane	0.45	1.1		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dibromoethane	0.028	0.0069		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dibromomethane	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dichlorobenzene	370	370		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,3-Dichlorobenzene	63	16		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,4-Dichlorobenzene	7.9	3.4		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dichlorodifluoromethane	310	94		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1-Dichloroethane	1,700	510	510 (USEPA PRG)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	6	2.8	2.8 (CAL-Mod PRG)						
1,2-Dichloroethane	0.6	0.28		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
cis-1,2-Dichloroethene	150	43		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
trans-1,2-Dichloroethene	230	69		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1-Dichloroethene	410	120		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dichloropropane	0.74	0.34		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,3-Dichloropropane	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2,2-Dichloropropane	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
cis-1,3-Dichloropropene	1.8	0.78		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
trans-1,3-Dichloropropene	1.8	0.78		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1-Dichloropropene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	20	8.9		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Hexachlorobutadiene	22	6.2		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
2-Hexanone	not applicable	not applicable		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Isobutanol				NT	NT	NT	NT	NT	NT
Isopropylbenzene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyltoluene	not applicable	not applicable		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Methyl tert-Butyl Ether	160	62	62 (USEPA PRG)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	36	17	17 (CAL-Mod PRG)						
4-Methyl-2-pentanone	not applicable	not applicable		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene chloride	21	9.1		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Naphthalene	not applicable	not applicable		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

NT = Not Tested
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DTSC = California Department of Toxic Substances Control

TABLE 3

VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB1-1 SOIL (mg/kg) 8/2/01	SB1-5 SOIL (mg/kg) 8/2/01	SB2-1 SOIL (mg/kg) 8/2/01	SB2-5 SOIL (mg/kg) 8/2/01	SB3-1 SOIL (mg/kg) 8/2/01	SB3-5 SOIL (mg/kg) 8/2/01
Propylbenzene	240	240		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vinyl chloride	1,700	1,700		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1,1,2-Tetrachloroethane	7.3	3.2		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1,2,2-Tetrachloroethane	0.93	0.41		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrachloroethene	3.4	1.5		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Toluene	520	520		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
1,2,3-Trichlorobenzene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2,4-Trichlorobenzene	3,000	650		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1,1-Trichloroethane	1,200	1,200		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1,2-Trichloroethane	1.6	0.73		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Trichloroethene	0.11	0.053		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Trichlorofluoromethane	2,000	390		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2,3-Trichloropropane	0.011	0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2,4-Trimethylbenzene	170	52		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,3,5-Trimethylbenzene	70	21		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vinyl chloride	0.75	0.079		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
m,p-Xylenes	not applicable	not applicable		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	not applicable	not applicable		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
sec-Butylbenzene	220	220		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butylbenzene	390	390		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

NT = Not Tested

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

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TABLE 3

VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB4-1 SOIL (mg/kg) 8/2/01	SB4-5 SOIL (mg/kg) 8/2/01	SB5-1 SOIL (mg/kg) 8/2/01	SB5-5 SOIL (mg/kg) 8/2/01	SB6C (0.5') SOIL (mg/kg) 12/2/02
Acetone	6,000	1,600		**0.068**	**0.064**	< 0.050	< 0.050	< 0.250
Acetonitrile	1,800	420		NT	NT	NT	NT	< 0.250
Acrylonitrile	0.49	0.21		NT	NT	NT	NT	< 0.250
Benzene	1.3	0.6		< 0.002	< 0.002	< 0.002	< 0.002	< 0.005
Bromobenzene	92	28		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromochloromethane	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.025
Bromodichloromethane	1.8	0.82		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromoform	220	62		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromomethane	13	3.9		< 0.005	< 0.005	< 0.005	< 0.005	< 0.025
2-Butanone	not applicable	not applicable		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Butylbenzene	240	240		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Carbon disulfide	720	360		< 0.005	< 0.005	< 0.005	< 0.005	NT
Carbon tetrachloride	0.55	0.25		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chlorobenzene	530	150		< 0.005	< 0.005	< 0.005	< 0.005	< 0.010
Chloroethane	6.5	3		< 0.005	< 0.005	< 0.005	< 0.005	< 0.025
Chloroform	12 2	3.6 0.94	3.6 (USEPA PRG) 0.94 (CAL-Mod PRG)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chloromethane	2.6	1.2		< 0.005	< 0.005	< 0.005	< 0.005	< 0.050
2-Chlorotoluene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
4-Chlorotoluene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dibromo-3-chloropropane 1,2-Dibromo-3-chloropropane	2 0.046	0.45 0.019	0.45 (USEPA PRG) 0.019 (CAL-Mod PRG)	< 0.010	< 0.010	< 0.010	< 0.010	NT
Dibromochloromethane	0.45	1.1		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dibromoethane	0.028	0.0069		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dibromomethane	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dichlorobenzene	370	370		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,3-Dichlorobenzene	63	16		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,4-Dichlorobenzene	7.9	3.4		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dichlorodifluoromethane	310	94		< 0.005	< 0.005	< 0.005	< 0.005	< 0.025
1,1-Dichloroethane	1,700 6	510 2.8	510 (USEPA PRG) 2.8 (CAL-Mod PRG)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dichloroethane	0.6	0.28		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
cis-1,2-Dichloroethene	150	43		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
trans-1,2-Dichloroethene	230	69		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1-Dichloroethene	410	120		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-Dichloropropane	0.74	0.34		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,3-Dichloropropane	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2,2-Dichloropropane	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
cis-1,3-Dichloropropene	1.8	0.78		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
trans-1,3-Dichloropropene	1.8	0.78		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1-Dichloropropene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	20	8.9		< 0.002	< 0.002	< 0.002	< 0.002	**0.039**
Hexachlorobutadiene	22	6.2		< 0.010	< 0.010	< 0.010	< 0.010	< 0.005
2-Hexanone	not applicable	not applicable		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Isobutanol				NT	NT	NT	NT	< 0.250
Isopropylbenzene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyltoluene	not applicable	not applicable		< 0.010	< 0.010	< 0.010	< 0.010	NT
Methyl tert-Butyl Ether	160 36	62 17	62 (USEPA PRG) 17 (CAL-Mod PRG)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
4-Methyl-2-pentanone	not applicable	not applicable		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene chloride	21	9.1		< 0.050	< 0.050	< 0.050	< 0.050	< 0.250
Naphthalene	not applicable	not applicable		< 0.010	< 0.010	< 0.010	< 0.010	**0.011**

NT = Not Tested
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TABLE 3

VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB4-1 SOIL (mg/kg) 8/2/01	SB4-5 SOIL (mg/kg) 8/2/01	SB5-1 SOIL (mg/kg) 8/2/01	SB5-5 SOIL (mg/kg) 8/2/01	SB6C (0.5') SOIL (mg/kg) 12/2/02
Propylbenzene	240	240		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vinyl chloride	1,700	1,700		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1,1,2-Tetrachloroethane	7.3	3.2		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1,2,2-Tetrachloroethane	0.93	0.41		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrachloroethene	3.4	1.5		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Toluene	520	520		< 0.002	< 0.002	< 0.002	< 0.002	**0.064**
1,2,3-Trichlorobenzene	not applicable	not applicable		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2,4-Trichlorobenzene	3,000	650		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1,1-Trichloroethane	1,200	1,200		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,1,2-Trichloroethane	1.6	0.73		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Trichloroethene	0.11	0.053		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Trichlorofluoromethane	2,000	390		< 0.005	< 0.005	< 0.005	< 0.005	< 0.025
1,2,3-Trichloropropane	0.011	0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2,4-Trimethylbenzene	170	52		< 0.005	< 0.005	< 0.005	< 0.005	**0.006**
1,3,5-Trimethylbenzene	70	21		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vinyl chloride	0.75	0.079		< 0.005	< 0.005	< 0.005	< 0.005	< 0.025
m,p-Xylenes	not applicable	not applicable		< 0.002	< 0.002	< 0.002	< 0.002	**0.188**
o-Xylene	not applicable	not applicable		< 0.002	< 0.002	< 0.002	< 0.002	**0.056**
sec-Butylbenzene	220	220		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butylbenzene	390	390		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

NT = Not Tested

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

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SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB6C (2.5') SOIL (mg/kg) 12/2/02	SB6D (2.5') SOIL (mg/kg) 12/2/02	SB7 (1.0') SOIL (mg/kg) 12/2/02	SB7 (5.0') SOIL (mg/kg) 12/2/02
Acetone	6,000	1,600		NT	NT	NT	NT
Acetonitrile	1,800	420		NT	NT	NT	NT
Acrylonitrile	0.49	0.21		NT	NT	NT	NT
Benzene	1.3	0.6		NT	NT	NT	NT
Bromobenzene	92	28		NT	NT	NT	NT
Bromochloromethane	not applicable	not applicable		NT	NT	NT	NT
Bromodichloromethane	1.8	0.82		NT	NT	NT	NT
Bromoform	220	62		NT	NT	NT	NT
Bromomethane	13	3.9		NT	NT	NT	NT
2-Butanone	not applicable	not applicable		NT	NT	NT	NT
Butylbenzene	240	240		NT	NT	NT	NT
Carbon disulfide	720	360		NT	NT	NT	NT
Carbon tetrachloride	0.55	0.25		NT	NT	NT	NT
Chlorobenzene	530	150		NT	NT	NT	NT
Chloroethane	6.5	3		NT	NT	NT	NT
Chloroform	12 2	3.6 0.94	3.6 (USEPA PRG) 0.94 (CAL-Mod PRG)	NT	NT	NT	NT
Chloromethane	2.6	1.2		NT	NT	NT	NT
2-Chlorotoluene	not applicable	not applicable		NT	NT	NT	NT
4-Chlorotoluene	not applicable	not applicable		NT	NT	NT	NT
1,2-Dibromo-3-chloropropane	2	0.45	0.45 (USEPA PRG)	NT	NT	NT	NT
1,2-Dibromo-3-chloropropane	0.046	0.019	0.019 (CAL-Mod PRG)	NT	NT	NT	NT
Dibromochloromethane	0.45	1.1		NT	NT	NT	NT
1,2-Dibromoethane	0.028	0.0069		NT	NT	NT	NT
Dibromomethane	not applicable	not applicable		NT	NT	NT	NT
1,2-Dichlorobenzene	370	370		NT	NT	NT	NT
1,3-Dichlorobenzene	63	16		NT	NT	NT	NT
1,4-Dichlorobenzene	7.9	3.4		NT	NT	NT	NT
Dichlorodifluoromethane	310	94		NT	NT	NT	NT
1,1-Dichloroethane	1,700 6	510 2.8	510 (USEPA PRG) 2.8 (CAL-Mod PRG)	NT	NT	NT	NT
1,2-Dichloroethane	0.6	0.28		NT	NT	NT	NT
cis-1,2-Dichloroethene	150	43		NT	NT	NT	NT
trans-1,2-Dichloroethene	230	69		NT	NT	NT	NT
1,1-Dichloroethene	410	120		NT	NT	NT	NT
1,2-Dichloropropane	0.74	0.34		NT	NT	NT	NT
1,3-Dichloropropane	not applicable	not applicable		NT	NT	NT	NT
2,2-Dichloropropane	not applicable	not applicable		NT	NT	NT	NT
cis-1,3-Dichloropropene	1.8	0.78		NT	NT	NT	NT
trans-1,3-Dichloropropene	1.8	0.78		NT	NT	NT	NT
1,1-Dichloropropene	not applicable	not applicable		NT	NT	NT	NT
Ethylbenzene	20	8.9		NT	NT	NT	NT
Hexachlorobutadiene	22	6.2		NT	NT	NT	NT
2-Hexanone	not applicable	not applicable		NT	NT	NT	NT
Isobutanol				NT	NT	NT	NT
Isopropylbenzene	not applicable	not applicable		NT	NT	NT	NT
Isopropyltoluene	not applicable	not applicable		NT	NT	NT	NT
Methyl tert-Butyl Ether	160 36	62 17	62 (USEPA PRG) 17 (CAL-Mod PRG)	NT	NT	NT	NT
4-Methyl-2-pentanone	not applicable	not applicable		NT	NT	NT	NT
Methylene chloride	21	9.1		NT	NT	NT	NT
Naphthalene	not applicable	not applicable		NT	NT	NT	NT

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VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB6C (2.5') SOIL (mg/kg) 12/2/02	SB6D (2.5') SOIL (mg/kg) 12/2/02	SB7 (1.0') SOIL (mg/kg) 12/2/02	SB7 (5.0') SOIL (mg/kg) 12/2/02
Propylbenzene	240	240		NT	NT	NT	NT
Vinyl chloride	1,700	1,700		NT	NT	NT	NT
1,1,1,2-Tetrachloroethane	7.3	3.2		NT	NT	NT	NT
1,1,2,2-Tetrachloroethane	0.93	0.41		NT	NT	NT	NT
Tetrachloroethene	3.4	1.5		NT	NT	NT	NT
Toluene	520	520		NT	NT	NT	NT
1,2,3-Trichlorobenzene	not applicable	not applicable		NT	NT	NT	NT
1,2,4-Trichlorobenzene	3,000	650		NT	NT	NT	NT
1,1,1-Trichloroethane	1,200	1,200		NT	NT	NT	NT
1,1,2-Trichloroethane	1.6	0.73		NT	NT	NT	NT
Trichloroethene	0.11	0.053		NT	NT	NT	NT
Trichlorofluoromethane	2,000	390		NT	NT	NT	NT
1,2,3-Trichloropropane	0.011	0.005		NT	NT	NT	NT
1,2,4-Trimethylbenzene	170	52		NT	NT	NT	NT
1,3,5-Trimethylbenzene	70	21		NT	NT	NT	NT
Vinyl chloride	0.75	0.079		NT	NT	NT	NT
m,p-Xylenes	not applicable	not applicable		NT	NT	NT	NT
o-Xylene	not applicable	not applicable		NT	NT	NT	NT
sec-Butylbenzene	220	220		NT	NT	NT	NT
tert-Butylbenzene	390	390		NT	NT	NT	NT

NT = Not Tested

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

NT = Not Tested
USEPA PRG = USEPA Preliminary Remediation Goal
CAL-Mod PRG = DTSC Modified Preliminary Remediation Goal
DTSC = California Department of Toxic Substances Control

TABLE 3

VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB8 (5.0') SOIL (mg/kg) 12/2/02	SB9 (1.0') SOIL (mg/kg) 12/2/02	SB10 (1.0') SOIL (mg/kg) 12/2/02	SB10 (5.0') SOIL (mg/kg) 12/2/02
Acetone	6,000	1,600		NT	NT	NT	NT
Acetonitrile	1,800	420		NT	NT	NT	NT
Acrylonitrile	0.49	0.21		NT	NT	NT	NT
Benzene	1.3	0.6		NT	NT	NT	NT
Bromobenzene	92	28		NT	NT	NT	NT
Bromochloromethane	not applicable	not applicable		NT	NT	NT	NT
Bromodichloromethane	1.8	0.82		NT	NT	NT	NT
Bromoform	220	62		NT	NT	NT	NT
Bromomethane	13	3.9		NT	NT	NT	NT
2-Butanone	not applicable	not applicable		NT	NT	NT	NT
Butylbenzene	240	240		NT	NT	NT	NT
Carbon disulfide	720	360		NT	NT	NT	NT
Carbon tetrachloride	0.55	0.25		NT	NT	NT	NT
Chlorobenzene	530	150		NT	NT	NT	NT
Chloroethane	6.5	3		NT	NT	NT	NT
Chloroform	12 2	3.6 0.94	3.6 (USEPA PRG) 0.94 (CAL-Mod PRG)	NT	NT	NT	NT
Chloromethane	2.6	1.2		NT	NT	NT	NT
2-Chlorotoluene	not applicable	not applicable		NT	NT	NT	NT
4-Chlorotoluene	not applicable	not applicable		NT	NT	NT	NT
1,2-Dibromo-3-chloropropane	2	0.45	0.45 (USEPA PRG)	NT	NT	NT	NT
1,2-Dibromo-3-chloropropane	0.046	0.019	0.019 (CAL-Mod PRG)	NT	NT	NT	NT
Dibromochloromethane	0.45	1.1		NT	NT	NT	NT
1,2-Dibromoethane	0.028	0.0069		NT	NT	NT	NT
Dibromomethane	not applicable	not applicable		NT	NT	NT	NT
1,2-Dichlorobenzene	370	370		NT	NT	NT	NT
1,3-Dichlorobenzene	63	16		NT	NT	NT	NT
1,4-Dichlorobenzene	7.9	3.4		NT	NT	NT	NT
Dichlorodifluoromethane	310	94		NT	NT	NT	NT
1,1-Dichloroethane	1,700 6	510 2.8	510 (USEPA PRG) 2.8 (CAL-Mod PRG)	NT	NT	NT	NT
1,2-Dichloroethane	0.6	0.28		NT	NT	NT	NT
cis-1,2-Dichloroethene	150	43		NT	NT	NT	NT
trans-1,2-Dichloroethene	230	69		NT	NT	NT	NT
1,1-Dichloroethene	410	120		NT	NT	NT	NT
1,2-Dichloropropane	0.74	0.34		NT	NT	NT	NT
1,3-Dichloropropane	not applicable	not applicable		NT	NT	NT	NT
2,2-Dichloropropane	not applicable	not applicable		NT	NT	NT	NT
cis-1,3-Dichloropropene	1.8	0.78		NT	NT	NT	NT
trans-1,3-Dichloropropene	1.8	0.78		NT	NT	NT	NT
1,1-Dichloropropene	not applicable	not applicable		NT	NT	NT	NT
Ethylbenzene	20	8.9		NT	NT	NT	NT
Hexachlorobutadiene	22	6.2		NT	NT	NT	NT
2-Hexanone	not applicable	not applicable		NT	NT	NT	NT
Isobutanol				NT	NT	NT	NT
Isopropylbenzene	not applicable	not applicable		NT	NT	NT	NT
Isopropyltoluene	not applicable	not applicable		NT	NT	NT	NT
Methyl tert-Butyl Ether	160 36	62 17	62 (USEPA PRG) 17 (CAL-Mod PRG)	NT	NT	NT	NT
4-Methyl-2-pentanone	not applicable	not applicable		NT	NT	NT	NT
Methylene chloride	21	9.1		NT	NT	NT	NT
Naphthalene	not applicable	not applicable		NT	NT	NT	NT

NT = Not Tested
USEPA PRG = USEPA Preliminary Remediation Goal
CAL-Mod PRG = DTSC Modified Preliminary Remediation Goal
DTSC = California Department of Toxic Substances Control

TABLE 3

VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB8 (5.0') SOIL (mg/kg) 12/2/02	SB9 (1.0') SOIL (mg/kg) 12/2/02	SB10 (1.0') SOIL (mg/kg) 12/2/02	SB10 (5.0') SOIL (mg/kg) 12/2/02
Propylbenzene	240	240		NT	NT	NT	NT
Vinyl chloride	1,700	1,700		NT	NT	NT	NT
1,1,1,2-Tetrachloroethane	7.3	3.2		NT	NT	NT	NT
1,1,2,2-Tetrachloroethane	0.93	0.41		NT	NT	NT	NT
Tetrachloroethene	3.4	1.5		NT	NT	NT	NT
Toluene	520	520		NT	NT	NT	NT
1,2,3-Trichlorobenzene	not applicable	not applicable		NT	NT	NT	NT
1,2,4-Trichlorobenzene	3,000	650		NT	NT	NT	NT
1,1,1-Trichloroethane	1,200	1,200		NT	NT	NT	NT
1,1,2-Trichloroethane	1.6	0.73		NT	NT	NT	NT
Trichloroethene	0.11	0.053		NT	NT	NT	NT
Trichlorofluoromethane	2,000	390		NT	NT	NT	NT
1,2,3-Trichloropropane	0.011	0.005		NT	NT	NT	NT
1,2,4-Trimethylbenzene	170	52		NT	NT	NT	NT
1,3,5-Trimethylbenzene	70	21		NT	NT	NT	NT
Vinyl chloride	0.75	0.079		NT	NT	NT	NT
m,p-Xylenes	not applicable	not applicable		NT	NT	NT	NT
o-Xylene	not applicable	not applicable		NT	NT	NT	NT
sec-Butylbenzene	220	220		NT	NT	NT	NT
tert-Butylbenzene	390	390		NT	NT	NT	NT

NT = Not Tested

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

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TABLE 3

VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB11 (0.5') SOIL (mg/kg) 12/2/02	SB10+11 COMP SOIL (mg/kg) 12/2/02	SB12 (0.5') SOIL (mg/kg) 12/2/02	SB6E GRAB GROUND WATER (ug/L) 12/2/02
Acetone	6,000	1,600		NT	< 0.250	NT	< 50
Acetonitrile	1,800	420		NT	< 0.250	NT	< 50
Acrylonitrile	0.49	0.21		NT	< 0.250	NT	< 50
Benzene	1.3	0.6		NT	< 0.005	NT	< 1
Bromobenzene	92	28		NT	< 0.005	NT	< 1
Bromochloromethane	not applicable	not applicable		NT	< 0.025	NT	< 5
Bromodichloromethane	1.8	0.82		NT	< 0.005	NT	< 1
Bromoform	220	62		NT	< 0.005	NT	< 1
Bromomethane	13	3.9		NT	< 0.025	NT	< 5
2-Butanone	not applicable	not applicable		NT	< 0.050	NT	< 10
Butylbenzene	240	240		NT	**0.006**	NT	< 1
Carbon disulfide	720	360		NT	NT	NT	NT
Carbon tetrachloride	0.55	0.25		NT	< 0.005	NT	< 1
Chlorobenzene	530	150		NT	< 0.010	NT	< 2
Chloroethane	6.5	3		NT	< 0.025	NT	< 5
Chloroform	12 2	3.6 0.94	3.6 (USEPA PRG) 0.94 (CAL-Mod PRG)	NT	< 0.005	NT	< 1
Chloromethane	2.6	1.2		NT	< 0.050	NT	< 10
2-Chlorotoluene	not applicable	not applicable		NT	< 0.005	NT	< 1
4-Chlorotoluene	not applicable	not applicable		NT	< 0.005	NT	< 1
1,2-Dibromo-3-chloropropane	2	0.45	0.45 (USEPA PRG)	NT	NT	NT	NT
1,2-Dibromo-3-chloropropane	0.046	0.019	0.019 (CAL-Mod PRG)	NT		NT	NT
Dibromochloromethane	0.45	1.1		NT	< 0.005	NT	< 1
1,2-Dibromoethane	0.028	0.0069		NT	< 0.005	NT	< 1
Dibromomethane	not applicable	not applicable		NT	< 0.005	NT	< 1
1,2-Dichlorobenzene	370	370		NT	< 0.005	NT	< 1
1,3-Dichlorobenzene	63	16		NT	< 0.005	NT	< 1
1,4-Dichlorobenzene	7.9	3.4		NT	< 0.005	NT	< 1
Dichlorodifluoromethane	310	94		NT	< 0.025	NT	< 5
1,1-Dichloroethane	1,700 6	510 2.8	510 (USEPA PRG) 2.8 (CAL-Mod PRG)	NT	< 0.005	NT	< 1
1,2-Dichloroethane	0.6	0.28		NT	< 0.005	NT	< 1
cis-1,2-Dichloroethene	150	43		NT	< 0.005	NT	< 1
trans-1,2-Dichloroethene	230	69		NT	< 0.005	NT	< 1
1,1-Dichloroethene	410	120		NT	< 0.005	NT	< 1
1,2-Dichloropropane	0.74	0.34		NT	< 0.005	NT	< 1
1,3-Dichloropropane	not applicable	not applicable		NT	< 0.005	NT	< 1
2,2-Dichloropropane	not applicable	not applicable		NT	< 0.005	NT	< 1
cis-1,3-Dichloropropene	1.8	0.78		NT	< 0.005	NT	< 1
trans-1,3-Dichloropropene	1.8	0.78		NT	< 0.005	NT	< 1
1,1-Dichloropropene	not applicable	not applicable		NT	< 0.005	NT	< 1
Ethylbenzene	20	8.9		NT	**0.016**	NT	< 1
Hexachlorobutadiene	22	6.2		NT	< 0.005	NT	< 1
2-Hexanone	not applicable	not applicable		NT	< 0.050	NT	< 10
Isobutanol				NT	< 0.250	NT	< 50
Isopropylbenzene	not applicable	not applicable		NT	< 0.005	NT	< 1
Isopropyltoluene	not applicable	not applicable		NT	NT	NT	
Methyl tert-Butyl Ether	160 36	62 17	62 (USEPA PRG) 17 (CAL-Mod PRG)	NT	< 0.005	NT	< 1
4-Methyl-2-pentanone	not applicable	not applicable		NT	< 0.050	NT	< 10
Methylene chloride	21	9.1		NT	< 0.250	NT	< 50
Naphthalene	not applicable	not applicable		NT	< 0.010	NT	**3**

NT = Not Tested
USEPA PRG = USEPA Preliminary Remediation Goal
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DTSC = California Department of Toxic Substances Control

TABLE 3

VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB11 (0.5') SOIL (mg/kg) 12/2/02	SB10+11 COMP SOIL (mg/kg) 12/2/02	SB12 (0.5') SOIL (mg/kg) 12/2/02	SB6E GRAB GROUND WATER (ug/L) 12/2/02
Propylbenzene	240	240		NT	< 0.005	NT	< 1
Vinyl chloride	1,700	1,700		NT	< 0.005	NT	< 1
1,1,1,2-Tetrachloroethane	7.3	3.2		NT	< 0.005	NT	< 1
1,1,2,2-Tetrachloroethane	0.93	0.41		NT	< 0.005	NT	< 1
Tetrachloroethene	3.4	1.5		NT	< 0.005	NT	< 1
Toluene	520	520		NT	< 0.005	NT	**1**
1,2,3-Trichlorobenzene	not applicable	not applicable		NT	< 0.005	NT	< 1
1,2,4-Trichlorobenzene	3,000	650		NT	< 0.005	NT	< 1
1,1,1-Trichloroethane	1,200	1,200		NT	< 0.005	NT	< 0.5
1,1,2-Trichloroethane	1.6	0.73		NT	< 0.005	NT	< 1
Trichloroethene	0.11	0.053		NT	< 0.005	NT	< 2
Trichlorofluoromethane	2,000	390		NT	< 0.025	NT	< 5
1,2,3-Trichloropropane	0.011	0.005		NT	< 0.005	NT	< 1
1,2,4-Trimethylbenzene	170	52		NT	< 0.005	NT	**2**
1,3,5-Trimethylbenzene	70	21		NT	**0.007**	NT	< 1
Vinyl chloride	0.75	0.079		NT	< 0.025	NT	< 5
m,p-Xylenes	not applicable	not applicable		NT	**0.014**	NT	< 2
o-Xylene	not applicable	not applicable		NT	< 0.005	NT	< 1
sec-Butylbenzene	220	220		NT	< 0.005	NT	< 1
tert-Butylbenzene	390	390		NT	< 0.005	NT	< 1

NT = Not Tested

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

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VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB9 GRAB GROUND WATER (ug/L) 12/2/02
Acetone	6,000	1,600		NT
Acetonitrile	1,800	420		NT
Acrylonitrile	0.49	0.21		NT
Benzene	1.3	0.6		NT
Bromobenzene	92	28		NT
Bromochloromethane	not applicable	not applicable		NT
Bromodichloromethane	1.8	0.82		NT
Bromoform	220	62		NT
Bromomethane	13	3.9		NT
2-Butanone	not applicable	not applicable		NT
Butylbenzene	240	240		NT
Carbon disulfide	720	360		NT
Carbon tetrachloride	0.55	0.25		NT
Chlorobenzene	530	150		NT
Chloroethane	6.5	3		NT
Chloroform	12 2	3.6 0.94	3.6 (USEPA PRG) 0.94 (CAL-Mod PRG)	NT
Chloromethane	2.6	1.2		NT
2-Chlorotoluene	not applicable	not applicable		NT
4-Chlorotoluene	not applicable	not applicable		NT
1,2-Dibromo-3-chloropropane	2	0.45	0.45 (USEPA PRG)	NT
1,2-Dibromo-3-chloropropane	0.046	0.019	0.019 (CAL-Mod PRG)	NT
Dibromochloromethane	0.45	1.1		NT
1,2-Dibromoethane	0.028	0.0069		NT
Dibromomethane	not applicable	not applicable		NT
1,2-Dichlorobenzene	370	370		NT
1,3-Dichlorobenzene	63	16		NT
1,4-Dichlorobenzene	7.9	3.4		NT
Dichlorodifluoromethane	310	94		NT
1,1-Dichloroethane	1,700 6	510 2.8	510 (USEPA PRG) 2.8 (CAL-Mod PRG)	NT
1,2-Dichloroethane	0.6	0.28		NT
cis-1,2-Dichloroethene	150	43		NT
trans-1,2-Dichloroethene	230	69		NT
1,1-Dichloroethene	410	120		NT
1,2-Dichloropropane	0.74	0.34		NT
1,3-Dichloropropane	not applicable	not applicable		NT
2,2-Dichloropropane	not applicable	not applicable		NT
cis-1,3-Dichloropropene	1.8	0.78		NT
trans-1,3-Dichloropropene	1.8	0.78		NT
1,1-Dichloropropene	not applicable	not applicable		NT
Ethylbenzene	20	8.9		NT
Hexachlorobutadiene	22	6.2		NT
2-Hexanone	not applicable	not applicable		NT
Isobutanol				NT
Isopropylbenzene	not applicable	not applicable		NT
Isopropyltoluene	not applicable	not applicable		
Methyl tert-Butyl Ether	160 36	62 17	62 (USEPA PRG) 17 (CAL-Mod PRG)	NT
4-Methyl-2-pentanone	not applicable	not applicable		NT
Methylene chloride	21	9.1		NT
Naphthalene	not applicable	not applicable		NT

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VOLATILE ORGANIC COMPOUND
SOIL SAMPLING RESULTS
August 2001 and December 2002

Chemical	USEPA INDUSTRIAL SOIL PRG's (mg/kg)	USEPA RESIDENTIAL SOIL PRG's (mg/kg)	Comments	SB9 GRAB GROUND WATER (ug/L) 12/2/02
Propylbenzene	240	240		NT
Vinyl chloride	1,700	1,700		NT
1,1,1,2-Tetrachloroethane	7.3	3.2		NT
1,1,2,2-Tetrachloroethane	0.93	0.41		NT
Tetrachloroethene	3.4	1.5		NT
Toluene	520	520		NT
1,2,3-Trichlorobenzene	not applicable	not applicable		NT
1,2,4-Trichlorobenzene	3,000	650		NT
1,1,1-Trichloroethane	1,200	1,200		NT
1,1,2-Trichloroethane	1.6	0.73		NT
Trichloroethene	0.11	0.053		NT
Trichlorofluoromethane	2,000	390		NT
1,2,3-Trichloropropane	0.011	0.005		NT
1,2,4-Trimethylbenzene	170	52		NT
1,3,5-Trimethylbenzene	70	21		NT
Vinyl chloride	0.75	0.079		NT
m,p-Xylenes	not applicable	not applicable		NT
o-Xylene	not applicable	not applicable		NT
sec-Butylbenzene	220	220		NT
tert-Butylbenzene	390	390		NT

NT = Not Tested

Notes:

1. Chemical-impacted soils near and around soil boring SB-2, SB-4 and SB-5 were excavated by RMT, Inc. on June 24, 2002.
2. The August 2, 2001 Investigation was performed by RMT, Inc.
3. The December 2, 2002 Investigation was performed by Piers Environmental Services, Inc.

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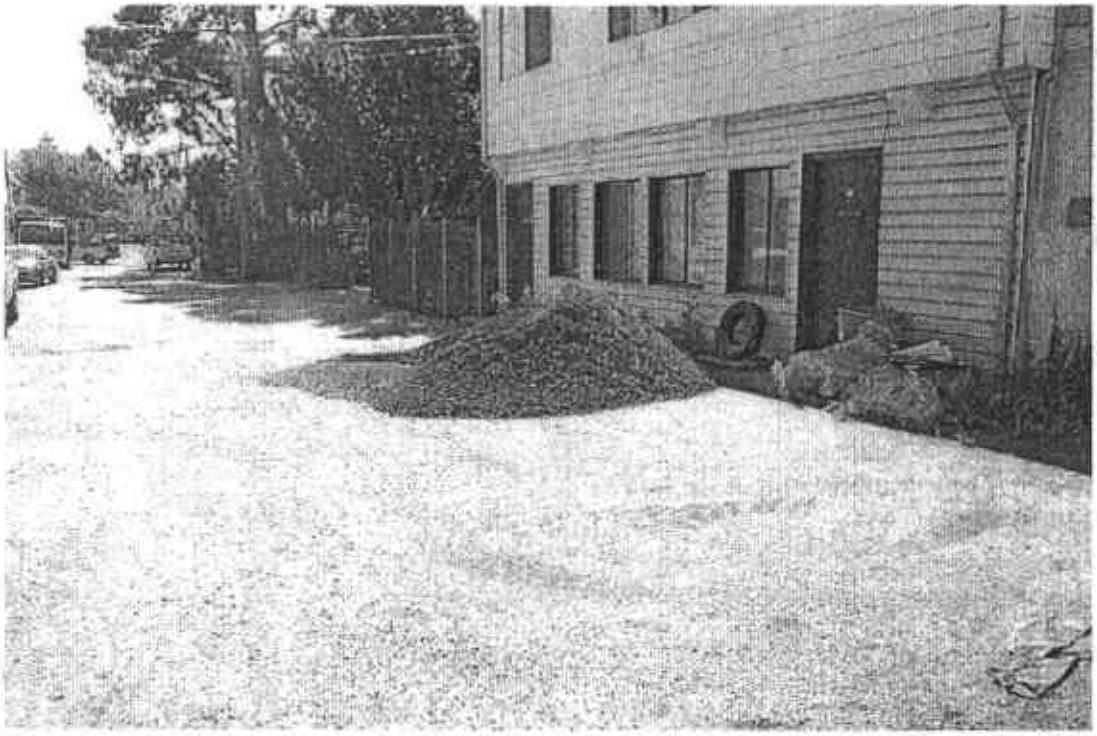
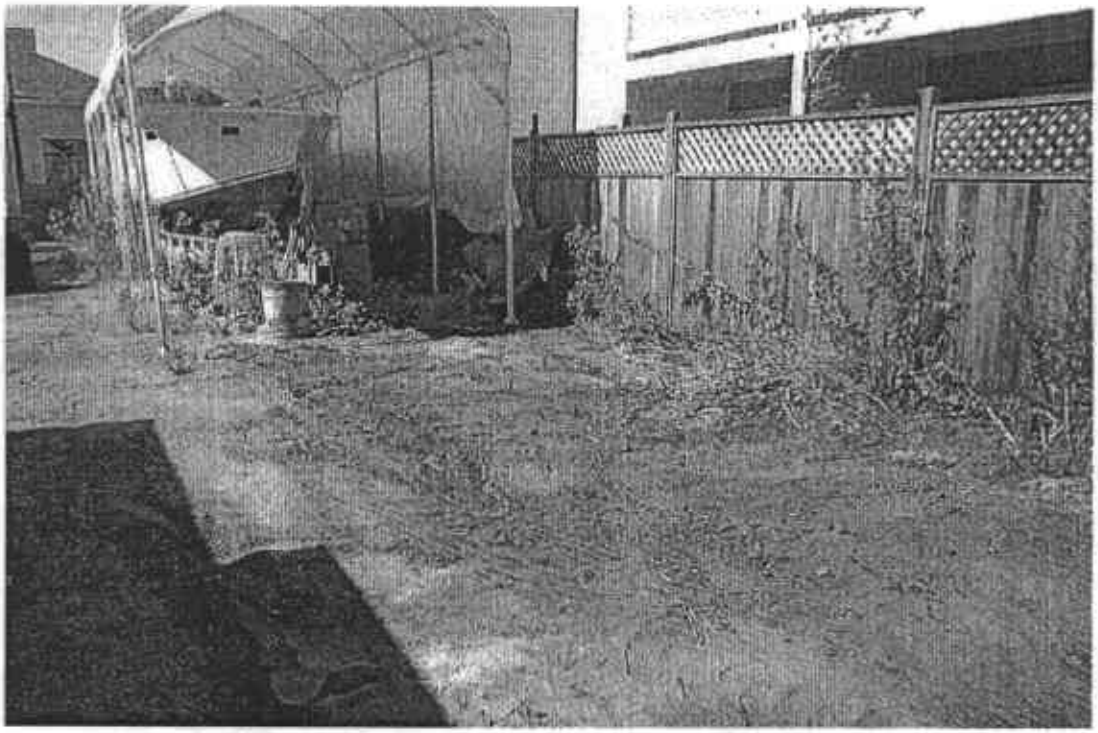
RMT
SOIL EXCAVATION PICTURES

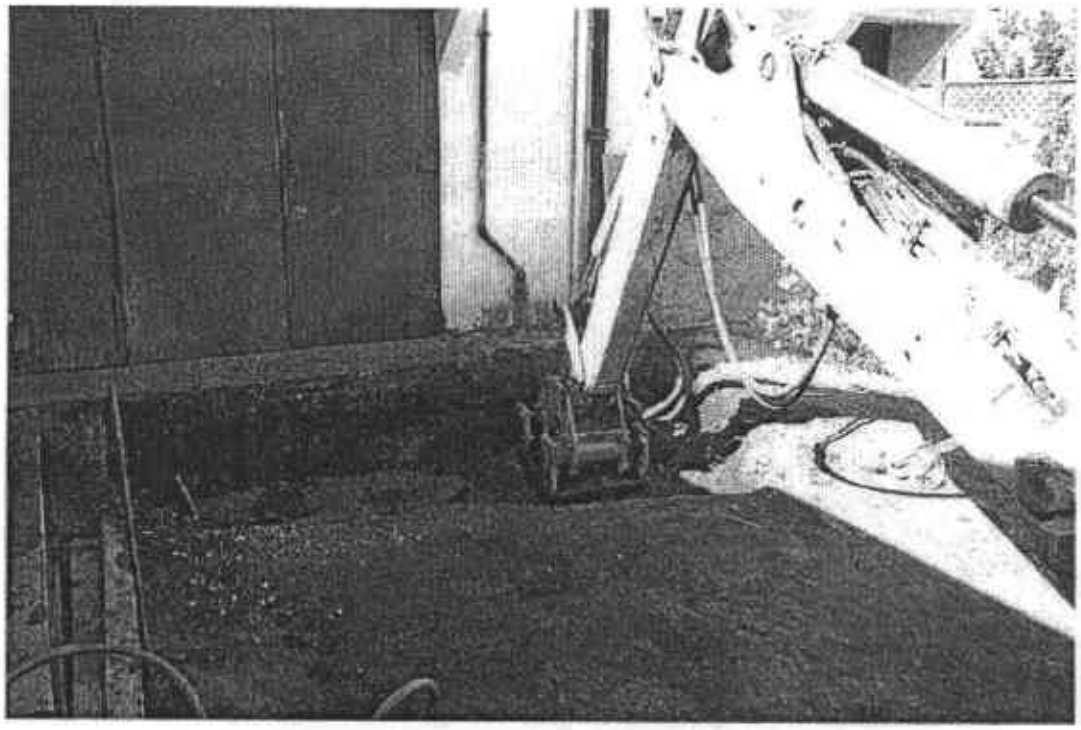
(JUNE 24, 2002)



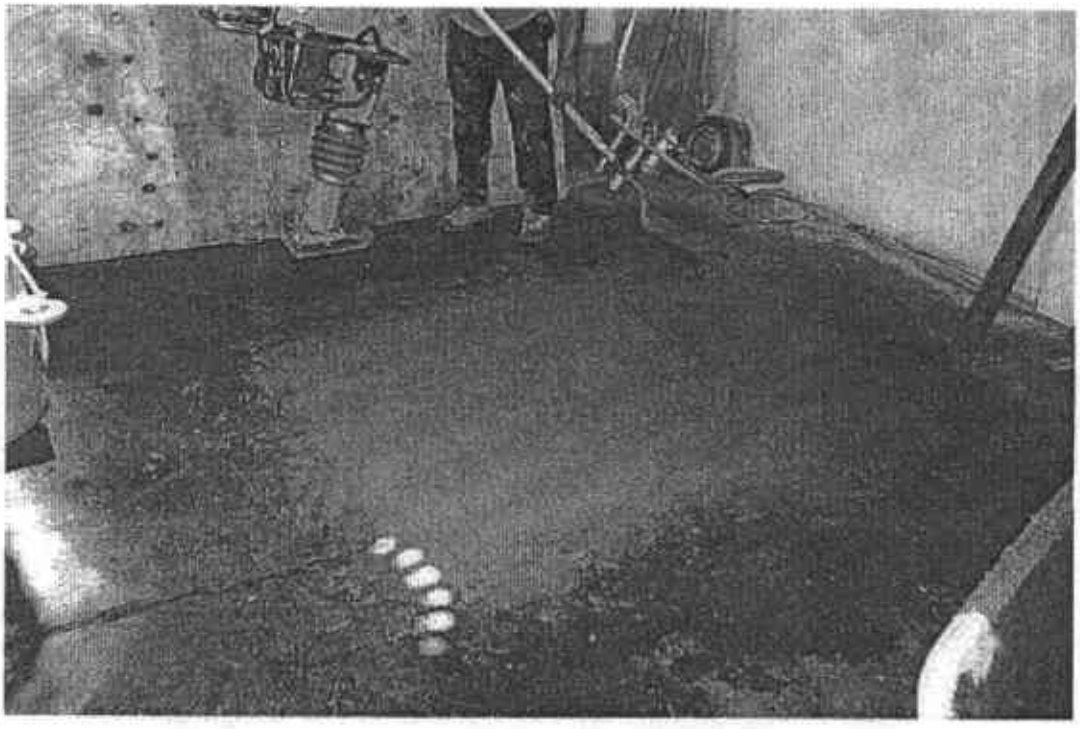
Virgin fill material.



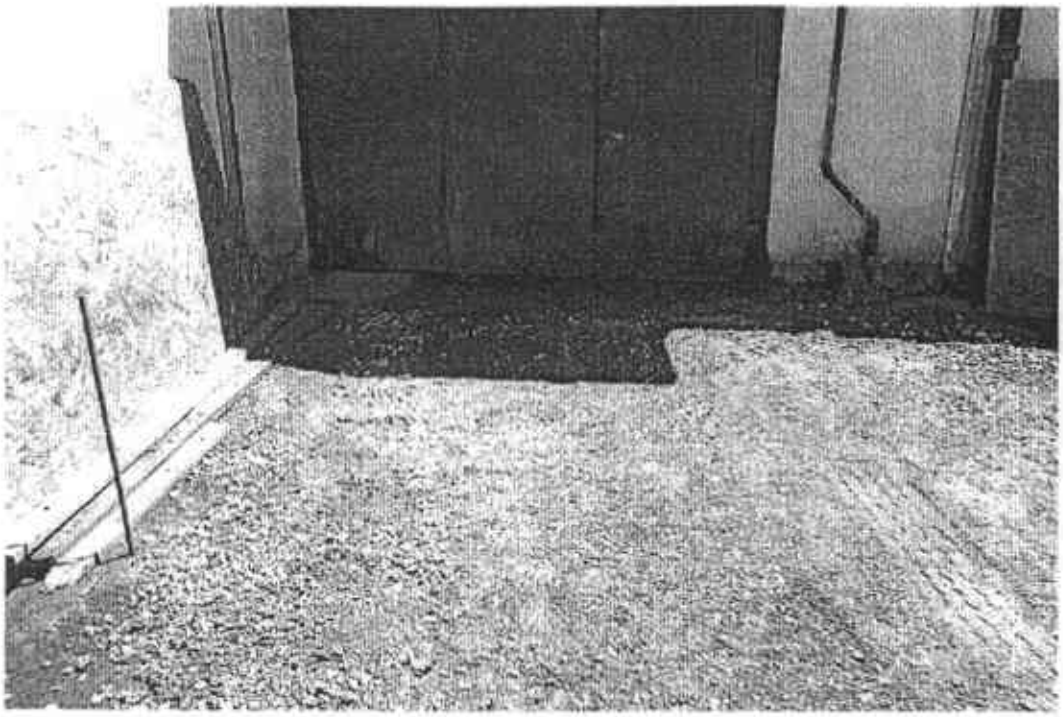
Excavated soil storage area after soil removed for disposal.



Compaction activities.

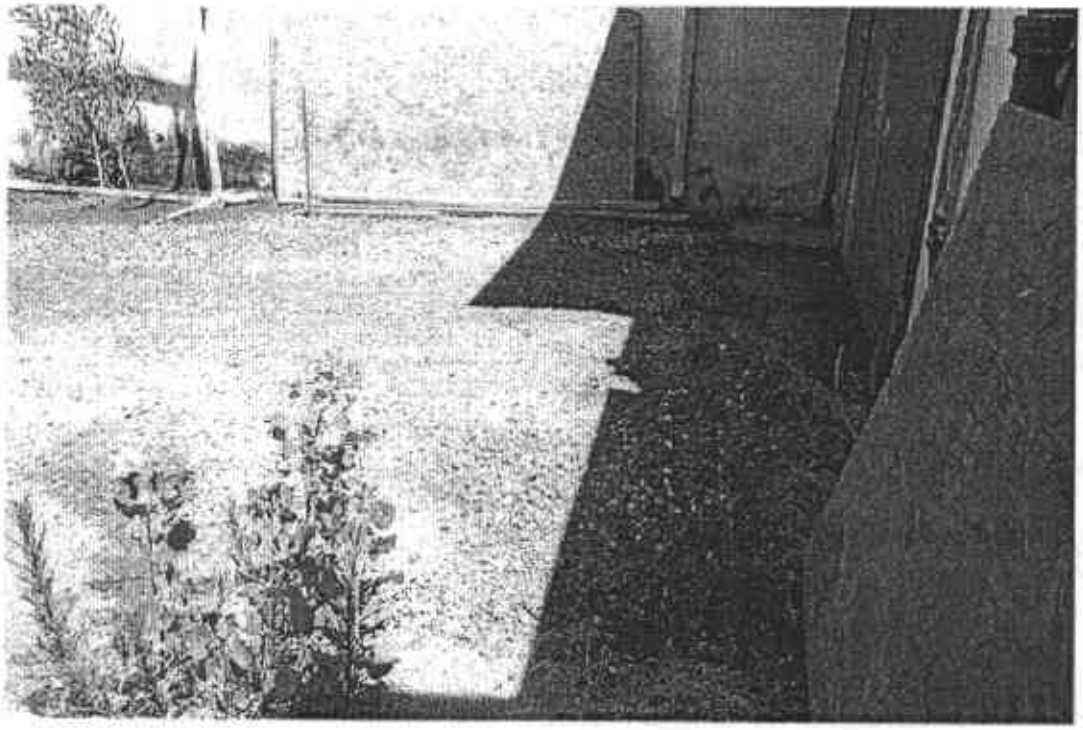


Completed concrete capping of excavated area in former lathe area.



View of complete grading of outside excavated area.

Final filling and compaction of outside excavation area.



Alternate view of complete grading of outside excavated area.

Attachment 1

RMT Integrated Environmental Solutions

6065 Bristol Parkway, 2nd Floor
Culver City, CA 90230-6601
Telephone: 310-645-6970
Fax: 310-645-6971

November 29, 2001

Ms. Patty Santanna
124 Brighton Road
Alameda, CA 94502

Subject: **Limited Subsurface Investigation Report**
762 Stewart Court, Alameda, California

Dear Ms. Santanna:

On August 2, 2001, RMT, Inc. (RMT) conducted a limited subsurface investigation at the above referenced site. The objective of the investigation was to determine if past and/or current operations conducted at the site had adversely impacted the subsurface environment, and if necessary, assign a probable remediation cost estimate to facilitate the eventual sale of the property. The methods and procedures used during the field activities, the results of the chemical analyses, and subsequent recommendations are presented in the following sections.

BACKGROUND

At your request, RMT conducted a site visit on May 23, 2001, to identify areas of potential environmental concern. At the time of the site visit, the property consisted of a studio apartment attached to a large workshop and garage with an open yard area to the west. Current and past operations at the site have consisted of boat fiber-glass work, refinishing, wood working, and machine shop activities. During the site visit, RMT observed a number of areas that appeared to be stained and/or had the potential to have impacted the subsurface environment. Noticeable petroleum hydrocarbon staining appeared to be limited to the open yard area, waste oil storage area, and to the lathing equipment and automatic screw machines areas. Additionally, a former sump located inside the building was also identified as a potential environmental concern.

Based on these findings, RMT recommended that a limited subsurface investigation be performed at these locations to determine if past and/or current operations conducted at the site had adversely impacted the subsurface environment.

SOIL SAMPLING METHODS AND PROCEDURES

Soil sampling activities were conducted on August 2, 2001, and included the advancement of five soil borings (SB1 through SB5). Each soil boring was advanced to an approximate depth of 5 feet below ground surface (bgs) using hand-auguring techniques. A site plan showing areas of concern and soil boring locations is presented as Attachment A.

Soil samples were collected from each boring at approximately 1 and 5 feet bgs using a stainless steel sampler. Each sample was placed in a 4-oz glass jar, labeled with the sample number and date, placed in a resealable bag, and stored on-ice pending transport to a state-certified laboratory following US EPA protocol, including chain-of-custody procedures. A portion of each sample collected was visually inspected for evidence of staining. Subsurface soil lithology is characterized as

dark brown/black silty clay with traces of sand. Metal shavings were identified in borings SB4 and SB5, which appear to corroborate with the Alameda County Health Care Services Agency's determination that soils in the vicinity of the site are landfill material. Groundwater was not encountered in any of the borings.

All soil boring and sampling equipment was decontaminated before initiation of sampling activities, between borings, and at the completion of investigative activities. Soil boring equipment was decontaminated using water and non-phosphate soap. Decontamination water was containerized in a 20-gallon drum and stored on-site site pending characterization and disposal. Each borehole was backfilled with soil cuttings generated and with a cement/bentonite mixture to match existing grade and surface.

CHEMICAL ANALYSES OF SAMPLES

A total of ten soil samples were chemically analyzed to detect the presence of California Title 22 metals; total petroleum hydrocarbons (TPH) and TPH-gasoline (TPH-G); and volatile organic compounds (VOCs) using US EPA SW-846 Methods 6000/7000, 8015M, and 8260B, respectively. In addition, four samples exhibiting relatively high lead and chromium concentrations (based on respective total lead and chromium concentrations greater than 10 times their respective regulatory soluble concentration limits (5 mg/L for chromium and lead, respectively) were selected for additional analysis using the California Waste Extraction Test (WET), to determine actual soluble concentrations of lead and chromium. All chemical analyses were performed by American Analytics of Chatsworth, California. A copy of the laboratory report is included as Attachment B, and the results of the chemical analyses are summarized in Tables 1, 2, and 3.

Table 1
Chemical Analyses of Soil Samples - TPH, TPH-G and VOCs

Sample Location	Sample Depth (ft)	Sample Date	Parameters (mg/kg)		
			TPH	TPH-G	Total VOCs*
SB1-1	1	8/2/01	2,000	<0.5	ND
SB1-5	5	8/2/01	6,300	<0.5	ND
SB2-1	1	8/2/01	<10	<0.5	ND
SB2-5	5	8/2/01	<10	<0.5	ND
SB3-1	1	8/2/01	700	<0.5	ND
SB3-5	5	8/2/01	<10	<0.5	ND
SB4-1	1	8/2/01	21,000	<0.5	ND
SB4-5	5	8/2/01	<10	<0.5	ND
SB5-1	1	8/2/01	270	<0.5	ND
SB5-5	5	8/2/01	<10	<0.5	ND

***Acetone was identified at concentrations ranging 64 to 130 ug/kg, however, it is considered a typical laboratory contaminant.**

Table 2
Chemical Analyses of Soil Samples - Metals

Sample Location	Sample Date	Parameters (mg/kg)																
		Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
SB1-1	8/2/01	<10	2.7	180	<1	<1	25	4.2	40	98	0.27	<5	24	<0.5	<1	<5	16	87
SB1-5	8/2/01	<10	3.6	84	<1	<1	20	4.0	14	36	0.16	<5	16	<0.5	<1	<5	16	37
SB2-1	8/2/01	<10	3.6	150	<1	<1	25	3.8	25	480	0.10	<5	6.8	<0.5	<1	<5	17	220
SB2-5	8/2/01	<10	1.6	74	<1	<1	21	<3	8.6	21	0.18	<5	<3	<0.5	<1	<5	14	31
SB3-1	8/2/01	<10	5.2	160	<1	<1	32	4.9	20	150	0.11	<5	21	<0.5	<1	<5	22	120
SB3-5	8/2/01	<10	2.0	51	<1	<1	31	5.0	7.6	<3	<0.05	<5	11	<0.5	<1	<5	24	24
SB4-1	8/2/01	<10	2.7	330	<1	12	43	<3	62	82	0.067	<5	45	<0.5	<1	<5	23	160
SB4-5	8/2/01	<10	1.2	59	<1	<1	29	<3	5.8	<3	0.050	<5	9.0	<0.5	<1	<5	21	12
SB5-1	8/2/01	<10	3.3	350	<1	<1	39	<3	24	160	0.094	<5	20	<0.5	<1	<5	21	190
SB5-5	8/2/01	<10	2.2	61	<1	<1	26	<3	8.2	3.6	<0.05	<5	10	<0.5	<1	<5	19	15

Table 3
Chemical Analyses of Soil Samples - WET

Sample Location	Sample Date	Parameters (mg/L)	
		Chromium	Lead
SB2-1	8/2/01	--	14
SB3-1	8/2/01	--	5.3
SB4-1	8/2/01	2.0	7.0
SB5-1	8/2/01	--	8.8
Regulatory Limit		5	5

--: Not analyzed.

RESULTS

The results of the chemical analyses did not identify the presence of TPH-G or VOCs. Although TPH in the diesel to waste oil range were identified in borings SB1 and SB3 through SB5 (270 to 21,000 mg/kg), however, with the exception of boring SB1, the impacts are limited to the upper 1 to 3 ft. TPH impacts in boring SB1 (installed adjacent to the sump) appear to increase with depth (2,000 mg/kg at 1 ft bgs and 6,300 mg/kg at 5 ft bgs), and are likely the result of leaks from deteriorated below grade piping from the former sump. However, since the impacts are limited to the diesel to waste oil range, the impacts are likely to be limited to the upper 10 ft due to slow migration of heavy end petroleum hydrocarbons.

Various metals were identified in each sample analyzed, however, only total lead and chromium concentrations appeared to be relatively high, based on respective total lead and chromium concentrations greater than 10 times their respective regulatory soluble concentration limits (5 mg/L for chromium and lead, respectively). As a result, select 1 foot samples that exhibited high total lead and chromium concentrations were analyzed for the California WET to determine actual respective soluble concentrations. The results of the California WET identified soluble lead concentrations in the range 5.3 to 14 mg/L, which are in excess of the regulatory limit of 5 mg/L. However, since total lead concentrations in each boring significantly decrease based on the analysis of the 5 foot samples, the potential for lead to leach from the 5 foot interval at concentrations greater than 5 mg/L is unlikely.

RECOMMENDATIONS

Based on the results of the investigation, RMT recommends that the upper 2 to 3 ft of TPH and lead impacted soils in the vicinity of the waste oil storage and open yard areas, the former sump, and the former screw machine area be remediated via soil excavation. TPH and lead impacted soils in the vicinity of the former sump should be excavated to an approximate depth of 10 ft. Soils excavated should be appropriately disposed according to all rules and regulations, and each excavation backfilled with non-contaminated soils and finished to match existing grade.

The probable cost for remediation is estimated at $34,000 including RMT contractor oversight, but excluding soil disposal costs. It should be noted that the probable cost estimate for remediation is not an actual cost, but an estimate. A detailed proposal for actual remediation costs can be prepared at your request once remediation activities are likely to commence.

If you have any questions or comments regarding this report, please do not hesitate to contact me at (310) 645-6970.

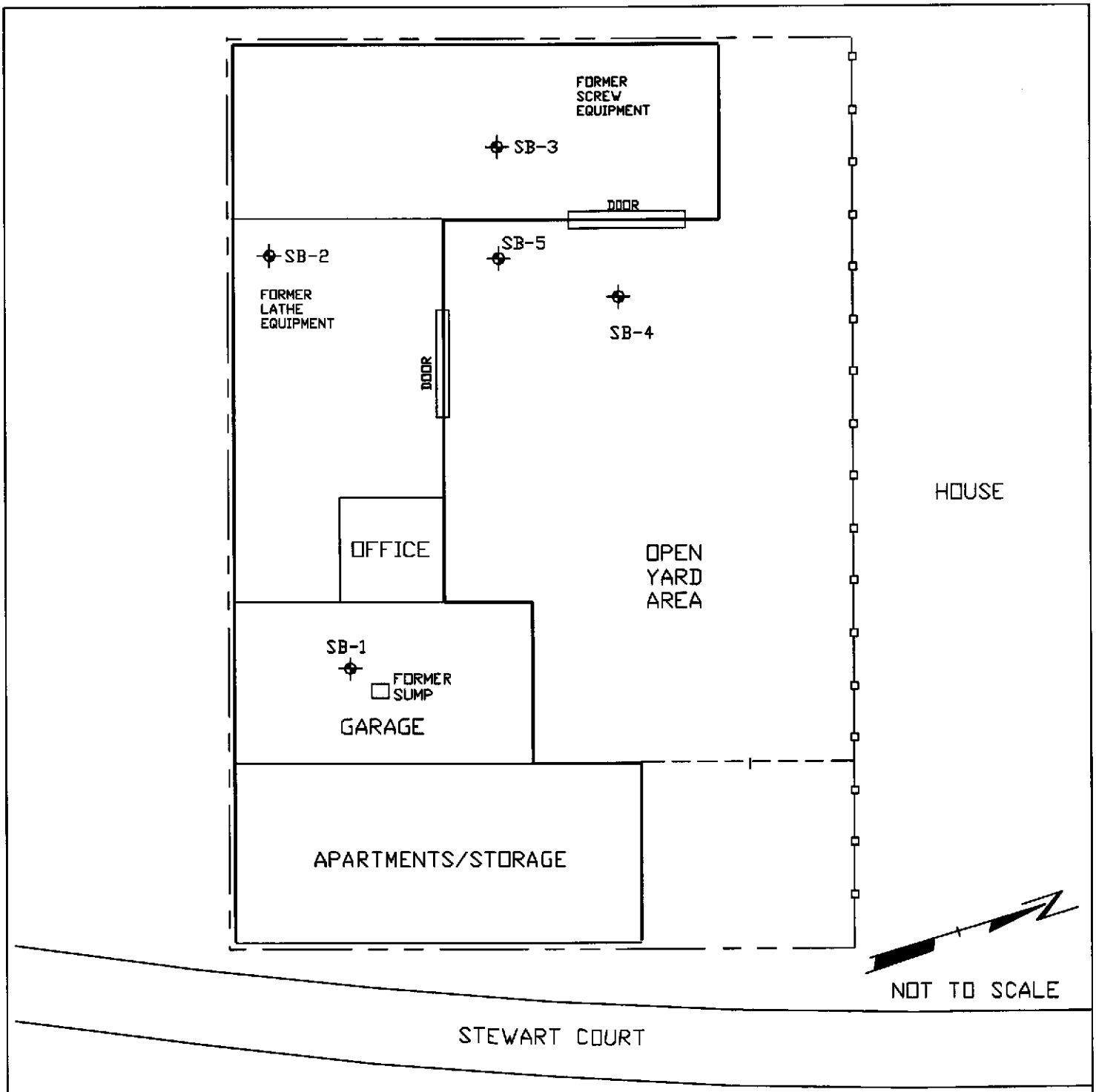
Sincerely,

RMT, Inc.

Tariq Ahmad
Project Manager

Enclosure: Attachment A – Site Plan and Boring Locations
Attachment B – Laboratory Report

Attachment A



LEGEND:

- BORING LOCATION
- WOODEN FENCE
- CHAIN-LINK GATE
- ASSUMED PROPERTY LINE

PROJECT:
762 STEWART COURT, ALAMEDA, CALIFORNIA

SHEET TITLE:
SOIL BORING LOCATIONS

DRAWN BY: SEM	PROJ. NO. 90225.01
CHECKED BY: TAA	FILE NO. 2022501.DWG
APPROVED BY: TAA	FIGURE 1
DATE: AUGUST 2001	

RMT Inc. – Los Angeles
Phone: 310/645-6970
6065 Bristol Parkway
2nd Floor
Culver City, CA 90230-6601

Attachment B

AMERICAN ANALYTICS

FAX COVER SHEET

Date: 08/15/01 Time: 13:00	American Analytics Project No. A39498
This fax is sent from American Analytics	*Phone*: 818-998-5547 *Fax*: 818-998-7258
THIS FAX IS DIRECTED TO:	Person sending fax:
RMT	Viorel ext 320
	Phone No.
Attn: Tariq	Fax No. 310-645-6971
	Number of pages (incl. this cover): 18
Comments/Instructions:	
lab results for your Santa Monica project	

cc: _____ Urgent: Yes ____ No ____

Please notify person receiving the fax that it has arrived.

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE, CHATSWORTH, CA 91311
Tel: 818-998-5547 FAX: 818-998-7258

DATE: 8/2/04
PAGE 1 OF 1

AA Client: RMT		Phone: 3106486970	Sampler's Name: Scott Bourne
Project Manager: Tariq Ahmad		P.O. No.	Sampler's Signature: Scott Bourne
Project Name: Santanna		Project No.	Project Manager's Signature
Job Name and Address:			

Client's I.D.	A.A. I.D.#	Date	Time	Sample Type	Number of Containers	6000/7000	8015M	8260B
SB1-1	124421	8/2/04	11:00	Soil	1	X	X	X
SB1-5	124422	"	11:10	"	"	X	X	X
SB2-1	124423		11:30			X	X	X
SB2-5	124424		11:40			X	X	X
SB3-1	124425		11:55			X	X	X
SB3-5	124426		12:05			X	X	X
SB4-1	124427		1:00			X	X	X
SB4-5	124428		1:10			X	X	X
SB5-1	124429		2:30			X	X	X
SB5-5	124430	↓	2:40	↓	↓	X	X	X

ANALYSIS REQUIRED (Test Name)

Special Test Requirements / Comments
i.e., - Turnaround Time, Detection Limits, Data Package.....)

6000/7000 = CAM-17
8015M = TPH-D, TPH-K, TPH-G, TPH-MO

8260B = VOCs

Regular TAT

SAMPLE INTEGRITY-TO BE FILLED IN BY RECEIVING LAB

Samples Intact	Yes ✓	No
Samples Properly Coded	Yes ✓	No
Samples Accepted	Yes ✓	No

If Not Why:

AA Project No. A39498

	Date	Time	
Relinquished by: Scott Bourne	8/2		Received by: Fed Ex
Relinquished by:	Date 8/3/04	Time 0945	Received by: Lauder
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: CAM Metals

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: mg/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/09/01	08/09/01	08/09/01	08/09/01	
AA ID No.:	124421	124422	124423	124424	
Client ID No.:	SB1-1	SB1-5	SB2-1	SB2-5	MRL
Compounds:					
Antimony	<10	<10	<10	<10	10
Arsenic	2.7	3.6	3.6	1.6	0.5
Barium	180	84	150	74	10
Beryllium	<1	<1	<1	<1	1
Cadmium	<1	<1	<1	<1	1
Chromium	25	20	25	21	3
Cobalt	4.2	4.0	3.8	<3	3
Copper	40	14	25	8.6	3
Lead	98	36	480	21	3
Mercury	0.27	0.16	0.10	0.18	0.05
Molybdenum	<5	<5	<5	<5	5
Nickel	24	16	6.8	<3	3
Selenium	<0.5	<0.5	<0.5	<0.5	0.5
Silver	<1	<1	<1	<1	1
Thallium	<5	<5	<5	<5	5
Vanadium	16	16	17	14	10
Zinc	87	37	220	31	3

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: CAM Metals

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: mg/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/09/01	08/09/01	08/09/01	08/09/01	
AA ID No.:	124425	124426	124427	124428	
Client ID No.:	SB3-1	SB3-5	SB4-1	SB4-5	MRL
Compounds:					
Antimony	<10	<10	<10	<10	10
Arsenic	5.2	2.0	2.7	1.2	0.5
Barium	160	51	330	59	10
Beryllium	<1	<1	<1	<1	1
Cadmium	<1	<1	12	<1	1
Chromium	32	31	43	29	3
Cobalt	4.9	5.0	<3	<3	3
Copper	20	7.6	62	5.8	3
Lead	150	<3	82	<3	3
Mercury	0.11	<0.05	0.067	0.050	0.05
Molybdenum	<5	<5	<5	<5	5
Nickel	21	11	45	9.0	3
Selenium	<0.5	<0.5	<0.5	<0.5	0.5
Silver	<1	<1	<1	<1	1
Thallium	<5	<5	<5	<5	5
Vanadium	22	24	23	21	10
Zinc	120	24	160	12	3

George Hevalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: CAM Metals

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: mg/Kg

Date Sampled:	08/02/01	08/02/01	
Date Analyzed:	08/09/01	08/09/01	
AA ID No.:	124429	124430	
Client ID No.:	SB5-1	SB5-5	MRL
Compounds:			
Antimony	<10	<10	10
Arsenic	3.3	2.2	0.5
Barium	350	61	10
Beryllium	<1	<1	1
Cadmium	<1	<1	1
Chromium	39	26	3
Cobalt	<3	<3	3
Copper	24	8.2	3
Lead	160	3.6	3
Mercury	0.094	<0.05	0.05
Molybdenum	<5	<5	5
Nickel	20	10	3
Selenium	<0.5	<0.5	0.5
Silver	<1	<1	1
Thallium	<5	<5	5
Vanadium	21	19	10
Zinc	190	15	3

MRL: Method Reporting Limit

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8015M (GRO)

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/13/01
Units: mg/Kg

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
124421	SB1-1	08/02/01	08/07/01	<0.5	0.5
124422	SB1-5	08/02/01	08/07/01	<0.5	0.5
124423	SB2-1	08/02/01	08/07/01	<0.5	0.5
124424	SB2-5	08/02/01	08/07/01	<0.5	0.5
124425	SB3-1	08/02/01	08/07/01	<0.5	0.5
124426	SB3-5	08/02/01	08/07/01	<0.5	0.5
124427	SB4-1	08/02/01	08/07/01	<0.5	0.5
124428	SB4-5	08/02/01	08/07/01	<0.5	0.5
124429	SB5-1	08/02/01	08/07/01	<0.5	0.5
124430	SB5-5	08/02/01	08/07/01	<0.5	0.5

MRL: Method Reporting Limit

NOTES:
GRO: Gasoline Range Organics

George Havallas
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8015M(Carbon Chain)

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/08/01
Units: mg/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/07/01	08/07/01	08/07/01	08/07/01	
Date Extracted:	08/03/01	08/03/01	08/03/01	08/03/01	
AA ID No.:	124421	124422	124423	124424	
Client ID No.:	SB1-1	SB1-5	SB2-1	SB2-5	MRL
Compounds:					
C06-C08	<10	<10	<1	<1	1
C08-C10	<10	<10	<1	<1	1
C10-C12	<10	<10	<1	<1	1
C12-C14	<10	69	<1	<1	1
C14-C16	27	1000	<1	<1	1
C16-C18	300	2300	<1	<1	1
C18-C20	350	1300	<1	<1	1
C20-C22	150	700	<1	<1	1
C22-C24	250	350	<1	<1	1
C24-C26	190	240	<1	<1	1
C26-C28	230	240	<1	<1	1
C28-C32	350	140	<1	<1	1
C32-C34	120	<10	<1	<1	1
C34-C36	23	<10	<1	<1	1
C36-C40	<10	<10	<1	<1	1
C40-C44	<10	<10	<1	<1	1
Total	2000	6300	<10	<10	10

George Havellas
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8015M(Carbon Chain)

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/08/01
Units: mg/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/07/01	08/07/01	08/07/01	08/07/01	
Date Extracted:	08/03/01	08/03/01	08/03/01	08/03/01	
AA ID No.:	124425	124426	124427	124428	
Client ID No.:	SB3-1	SB3-5	SB4-1	SB4-5	MRL
Compounds:					
C06-C08	<1	<1	<20	<1	1
C08-C10	<1	<1	<20	<1	1
C10-C12	<1	<1	<20	<1	1
C12-C14	<1	<1	<20	<1	1
C14-C16	1.8	<1	700	<1	1
C16-C18	20	<1	2600	<1	1
C18-C20	29	<1	2800	<1	1
C20-C22	59	<1	3000	<1	1
C22-C24	95	<1	3200	<1	1
C24-C26	100	<1	3400	<1	1
C26-C28	120	<1	2800	<1	1
C28-C32	210	<1	2600	<1	1
C32-C34	56	<1	280	<1	1
C34-C36	8.3	<1	<20	<1	1
C36-C40	<1	<1	<20	<1	1
C40-C44	<1	<1	<20	<1	1
Total	700	<10	21000	<10	10

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8015M(Carbon Chain)

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/08/01
Units: mg/Kg

Date Sampled:	08/02/01	08/02/01	
Date Analyzed:	08/07/01	08/07/01	
Date Extracted:	08/03/01	08/03/01	
AA ID No.:	124429	124430	
Client ID No.:	SB5-1	SB5-5	MRL
Compounds:			
C06-C08	<1	<1	1
C08-C10	<1	<1	1
C10-C12	<1	<1	1
C12-C14	<1	<1	1
C14-C16	<1	<1	1
C16-C18	2.1	<1	1
C18-C20	6.6	<1	1
C20-C22	20	<1	1
C22-C24	31	<1	1
C24-C26	48	<1	1
C26-C28	49	<1	1
C28-C32	90	<1	1
C32-C34	20	<1	1
C34-C36	2.0	<1	1
C36-C40	<1	<1	1
C40-C44	<1	<1	1
Total	270	<10	10

MRL: Method Reporting Limit

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/08/01	08/08/01	08/08/01	08/08/01	
AA ID No.:	124421	124422	124423	124424	
Client ID No.:	SB1-1	SB1-5	SB2-1	SB2-5	MRL
Compounds:					
Acetone	<50	120	88	130	50
Benzene	<2	<2	<2	<2	2
Bromobenzene	<5	<5	<5	<5	5
Bromochloromethane	<5	<5	<5	<5	5
Bromodichloromethane	<5	<5	<5	<5	5
Bromoform	<5	<5	<5	<5	5
Bromomethane	<5	<5	<5	<5	5
2-Butanone	<50	<50	<50	<50	50
Butylbenzene	<5	<5	<5	<5	5
Carbon disulfide	<5	<5	<5	<5	5
Carbon tetrachloride	<5	<5	<5	<5	5
Chlorobenzene	<5	<5	<5	<5	5
Chloroethane	<5	<5	<5	<5	5
Chloroform	<5	<5	<5	<5	5
Chloromethane	<5	<5	<5	<5	5
2-Chlorotoluene	<5	<5	<5	<5	5
4-Chlorotoluene	<5	<5	<5	<5	5
1,2-Dibromo-3-chloropropane	<10	<10	<10	<10	10
Dibromochloromethane	<5	<5	<5	<5	5
1,2-Dibromoethane	<5	<5	<5	<5	5
Dibromomethane	<5	<5	<5	<5	5
1,2-Dichlorobenzene	<5	<5	<5	<5	5
1,3-Dichlorobenzene	<5	<5	<5	<5	5
1,4-Dichlorobenzene	<5	<5	<5	<5	5
Dichlorodifluoromethane	<5	<5	<5	<5	5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/08/01	08/08/01	08/08/01	08/08/01	
AA ID No.:	124421	124422	124423	124424	
Client ID No.:	SB1-1	SB1-5	SB2-1	SB2-5	MRL
Compounds:					
1,1-Dichloroethane	<5	<5	<5	<5	5
1,2-Dichloroethane	<5	<5	<5	<5	5
1,2-Dichloroethene-(cis)	<5	<5	<5	<5	5
1,2-Dichloroethene-(trans)	<5	<5	<5	<5	5
1,1-Dichloroethene	<5	<5	<5	<5	5
1,2-Dichloropropane	<5	<5	<5	<5	5
1,3-Dichloropropane	<5	<5	<5	<5	5
2,2-Dichloropropane	<5	<5	<5	<5	5
1,3-Dichloropropene-(cis)	<5	<5	<5	<5	5
1,3-Dichloropropene-(trans)	<5	<5	<5	<5	5
1,1-Dichloropropene	<5	<5	<5	<5	5
Ethylbenzene	<2	<2	<2	<2	2
Hexachlorobutadiene	<10	<10	<10	<10	10
2-Hexanone	<50	<50	<50	<50	50
Isopropylbenzene	<5	<5	<5	<5	5
Isopropyltoluene	<10	<10	<10	<10	10
Methyl tert-Butyl Ether	<5	<5	<5	<5	5
4-Methyl-2-pentanone	<50	<50	<50	<50	50
Methylene chloride	<50	<50	<50	<50	50
Naphthalene	<10	<10	<10	<10	10
Propylbenzene	<5	<5	<5	<5	5
Styrene	<5	<5	<5	<5	5
1,1,1,2-Tetrachloroethane	<5	<5	<5	<5	5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	5
Tetrachloroethene	<5	<5	<5	<5	5

George Havellas
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/08/01	08/08/01	08/08/01	08/08/01	
AA ID No.:	124421	124422	124423	124424	
Client ID No.:	SB1-1	SB1-5	SB2-1	SB2-5	MRL
Compounds:					
Toluene	<2	<2	<2	<2	2
1,2,3-Trichlorobenzene	<5	<5	<5	<5	5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	5
1,1,1-Trichloroethane	<5	<5	<5	<5	5
1,1,2-Trichloroethane	<5	<5	<5	<5	5
Trichloroethene	<5	<5	<5	<5	5
Trichlorofluoromethane	<5	<5	<5	<5	5
1,2,3-Trichloropropane	<5	<5	<5	<5	5
1,2,4-Trimethylbenzene	<5	<5	<5	<5	5
1,3,5-Trimethylbenzene	<5	<5	<5	<5	5
Vinyl chloride	<5	<5	<5	<5	5
m,p-Xylenes	<2	<2	<2	<2	2
o-Xylene	<2	<2	<2	<2	2
sec-Butylbenzene	<5	<5	<5	<5	5
tert-Butylbenzene	<5	<5	<5	<5	5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/08/01	08/08/01	08/09/01	08/09/01	
AA ID No.:	124425	124426	124427	124428	
Client ID No.:	SB3-1	SB3-5	SB4-1	SB4-5	MRL
Compounds:					
Acetone	<50	<50	68	64	50
Benzene	<2	<2	<2	<2	2
Bromobenzene	<5	<5	<5	<5	5
Bromochloromethane	<5	<5	<5	<5	5
Bromodichloromethane	<5	<5	<5	<5	5
Bromoform	<5	<5	<5	<5	5
Bromomethane	<5	<5	<5	<5	5
2-Butanone	<50	<50	<50	<50	50
Butylbenzene	<5	<5	<5	<5	5
Carbon disulfide	<5	<5	<5	<5	5
Carbon tetrachloride	<5	<5	<5	<5	5
Chlorobenzene	<5	<5	<5	<5	5
Chloroethane	<5	<5	<5	<5	5
Chloroform	<5	<5	<5	<5	5
Chloromethane	<5	<5	<5	<5	5
2-Chlorotoluene	<5	<5	<5	<5	5
4-Chlorotoluene	<5	<5	<5	<5	5
1,2-Dibromo-3-chloropropane	<10	<10	<10	<10	10
Dibromochloromethane	<5	<5	<5	<5	5
1,2-Dibromoethane	<5	<5	<5	<5	5
Dibromomethane	<5	<5	<5	<5	5
1,2-Dichlorobenzene	<5	<5	<5	<5	5
1,3-Dichlorobenzene	<5	<5	<5	<5	5
1,4-Dichlorobenzene	<5	<5	<5	<5	5
Dichlorodifluoromethane	<5	<5	<5	<5	5

George Havallas
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/08/01	08/08/01	08/09/01	08/09/01	
AA ID No.:	124425	124426	124427	124428	
Client ID No.:	SB3-1	SB3-5	SB4-1	SB4-5	MRL
Compounds:					
1,1-Dichloroethane	<5	<5	<5	<5	5
1,2-Dichloroethane	<5	<5	<5	<5	5
1,2-Dichloroethene-(cis)	<5	<5	<5	<5	5
1,2-Dichloroethene-(trans)	<5	<5	<5	<5	5
1,1-Dichloroethene	<5	<5	<5	<5	5
1,2-Dichloropropane	<5	<5	<5	<5	5
1,3-Dichloropropane	<5	<5	<5	<5	5
2,2-Dichloropropane	<5	<5	<5	<5	5
1,3-Dichloropropene-(cis)	<5	<5	<5	<5	5
1,3-Dichloropropene-(trans)	<5	<5	<5	<5	5
1,1-Dichloropropene	<5	<5	<5	<5	5
Ethylbenzene	<2	<2	<2	<2	2
Hexachlorobutadiene	<10	<10	<10	<10	10
2-Hexanone	<50	<50	<50	<50	50
Isopropylbenzene	<5	<5	<5	<5	5
Isopropyltoluene	<10	<10	<10	<10	10
Methyl tert-Butyl Ether	<5	<5	<5	<5	5
4-Methyl-2-pentanone	<50	<50	<50	<50	50
Methylene chloride	<50	<50	<50	<50	50
Naphthalene	<10	<10	<10	<10	10
Propylbenzene	<5	<5	<5	<5	5
Styrene	<5	<5	<5	<5	5
1,1,1,2-Tetrachloroethane	<5	<5	<5	<5	5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	5
Tetrachloroethene	<5	<5	<5	<5	5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	08/02/01	08/02/01	
Date Analyzed:	08/08/01	08/08/01	08/09/01	08/09/01	
AA ID No.:	124426	124426	124427	124428	
Client ID No.:	SB3-1	SB3-5	SB4-1	SB4-5	MRL
Compounds:					
Toluene	<2	<2	<2	<2	2
1,2,3-Trichlorobenzene	<5	<5	<5	<5	5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	5
1,1,1-Trichloroethane	<5	<5	<5	<5	5
1,1,2-Trichloroethane	<5	<5	<5	<5	5
Trichloroethene	<5	<5	<5	<5	5
Trichlorofluoromethane	<5	<5	<5	<5	5
1,2,3-Trichloropropane	<5	<5	<5	<5	5
1,2,4-Trimethylbenzene	<5	<5	<5	<5	5
1,3,5-Trimethylbenzene	<5	<5	<5	<5	5
Vinyl chloride	<5	<5	<5	<5	5
m,p-Xylenes	<2	<2	<2	<2	2
o-Xylene	<2	<2	<2	<2	2
sec-Butylbenzene	<5	<5	<5	<5	5
tert-Butylbenzene	<5	<5	<5	<5	5

George Havallas
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	
Date Analyzed:	08/09/01	08/09/01	
AA ID No.:	124429	124430	
Client ID No.:	SB5-1	SB5-5	MRL
Compounds:			
Acetone	<50	<50	50
Benzene	<2	<2	2
Bromobenzene	<5	<5	5
Bromochloromethane	<5	<5	5
Bromodichloromethane	<5	<5	5
Bromoform	<5	<5	5
Bromomethane	<5	<5	5
2-Butanone	<50	<50	50
Butylbenzene	<5	<5	5
Carbon disulfide	<5	<5	5
Carbon tetrachloride	<5	<5	5
Chlorobenzene	<5	<5	5
Chloroethane	<5	<5	5
Chloroform	<5	<5	5
Chloromethane	<5	<5	5
2-Chlorotoluene	<5	<5	5
4-Chlorotoluene	<5	<5	5
1,2-Dibromo-3-chloropropane	<10	<10	10
Dibromochloromethane	<5	<5	5
1,2-Dibromoethane	<5	<5	5
Dibromomethane	<5	<5	5
1,2-Dichlorobenzene	<5	<5	5
1,3-Dichlorobenzene	<5	<5	5
1,4-Dichlorobenzene	<5	<5	5
Dichlorodifluoromethane	<5	<5	5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	
Date Analyzed:	08/09/01	08/09/01	
AA ID No.:	124429	124430	
Client ID No.:	SB5-1	SB5-5	MRL
Compounds:			
1,1-Dichloroethane	<5	<5	5
1,2-Dichloroethane	<5	<5	5
1,2-Dichloroethene-(cis)	<5	<5	5
1,2-Dichloroethene-(trans)	<5	<5	5
1,1-Dichloroethene	<5	<5	5
1,2-Dichloropropene	<5	<5	5
1,3-Dichloropropane	<5	<5	5
2,2-Dichloropropane	<5	<5	5
1,3-Dichloropropene-(cis)	<5	<5	5
1,3-Dichloropropene-(trans)	<5	<5	5
1,1-Dichloropropene	<5	<5	5
Ethylbenzene	<2	<2	2
Hexachlorobutadiene	<10	<10	10
2-Hexanone	<50	<50	50
Isopropylbenzene	<5	<5	5
Isopropyltoluene	<10	<10	10
Methyl tert-Butyl Ether	<5	<5	5
4-Methyl-2-pentanone	<50	<50	50
Methylene chloride	<50	<50	50
Naphthalene	<10	<10	10
Propylbenzene	<5	<5	5
Styrene	<5	<5	5
1,1,1,2-Tetrachloroethane	<5	<5	5
1,1,2,2-Tetrachloroethane	<5	<5	5
Tetrachloroethene	<5	<5	5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8260B

AA Project No.: A39498
Date Received: 08/03/01
Date Reported: 08/15/01
Units: ug/Kg

Date Sampled:	08/02/01	08/02/01	
Date Analyzed:	08/09/01	08/09/01	
AA ID No.:	124429	124430	
Client ID No.:	SB5-1	SB5-5	MRL
Compounds:			
Toluene	<2	<2	2
1,2,3-Trichlorobenzene	<5	<5	5
1,2,4-Trichlorobenzene	<5	<5	5
1,1,1-Trichloroethane	<5	<5	5
1,1,2-Trichloroethane	<5	<5	5
Trichloroethene	<5	<5	5
Trichlorofluoromethane	<5	<5	5
1,2,3-Trichloropropane	<5	<5	5
1,2,4-Trimethylbenzene	<5	<5	5
1,3,5-Trimethylbenzene	<5	<5	5
Vinyl chloride	<5	<5	5
m,p-Xylenes	<2	<2	2
o-Xylene	<2	<2	2
sec-Butylbenzene	<5	<5	5
tert-Butylbenzene	<5	<5	5

MRL: Method Reporting Limit

George Havallas
Laboratory Director

Attachment 2

RMT Integrated Environmental Solutions

6065 Bristol Parkway, 2nd Floor
Culver City, CA 90230-6601
Telephone: 310-645-6970
Fax: 310-645-6971

August 21, 2002

Ms. Patty Santanna
124 Brighton Road
Alameda, California 94502

Subject: **Soil Excavation and Disposal Activities**
762 Stewart Court, Alameda, California

Dear Patty:

Please find enclosed one copy of the Soil Excavation and Disposal Activities report pertaining to the above referenced site.

In June 2002, RMT performed soil excavation activities in the vicinity of the waste oil storage/open yard area and the lathe equipment area, to remove lead and heavy-end petroleum hydrocarbon impacted soils. These were the only areas RMT identified during our investigation that were impacted by your shop's activities. A review of local geology has confirmed that the site is located on fill material that was placed in the area well before your shop's activities began and that is known to be contaminated with historic hazardous materials (historic is referenced as prior to any operations performed at the site).

RMT believes that shallow soils impacted with lead and petroleum hydrocarbons as a result of site operations have been adequately removed. Any deeper contamination that may potentially exist is indicative of historic fill and is not related to your shop's site activities. It is also likely that the historic fill is an area-wide issue and not related to any specific site. Currently, RMT is aware of no regulatory activity to address the historic fill. Should regulatory action be initiated, RMT believes that our investigation and remediation activities documented in the attached report provide strong evidence that site operations were not involved.

If you have any questions or comments, please feel free to call me at (310) 645-6970.

Sincerely,

RMT, Inc.

Tariq Ahmad
Senior Project Manager

cc: Ms. Judith Bright

Enclosure: Soil Excavation Report

RMT Integrated Environmental Solutions

6065 Bristol Parkway, 2nd Floor
Culver City, CA 90230-6601
Telephone: 310-645-6970
Fax: 310-645-6971

August 21, 2002

Ms. Patty Santanna
124 Brighton Road
Alameda, CA 94502

Subject: **Soil Excavation and Disposal Activities**
762 Stewart Court, Alameda, California

Dear Ms. Santanna:

RMT, Inc. (RMT) was retained in June 2002 to coordinate soil excavation activities at two areas impacted by contaminants at the referenced site. The methods and procedures used during the field activities and the results of the chemical analyses are presented below.

BACKGROUND

On August 2, 2001, RMT performed a limited subsurface investigation at the above referenced site to determine if past and/or current operations conducted at the site had adversely impacted the subsurface environment (*Limited Subsurface Investigation Report, RMT, November 29, 2001*). The results of the investigation identified three areas that were impacted with relatively high contaminant concentrations:

- The waste oil storage/open yard area: Lead and total petroleum hydrocarbons (TPHs) were detected in the subsurface soils to approximate depths of 2 to 3 feet below ground surface (bgs).
- The lathe equipment area: Lead was detected in the subsurface soils to approximate depths of 2 to 3 feet bgs.
- The former sump area: TPHs were detected in the subsurface soils to an approximate depth of 5 to 8 feet bgs.

RMT was subsequently retained to remediate two areas (the waste oil storage/open yard area and the lathe equipment area) via excavation and disposal of impacted soils. Since only heavy-end TPHs were detected in the former sump area, remediation via excavation was not recommended since *in-situ* passive bioremediation will naturally biodegrade the petroleum hydrocarbons over a period of time. A site plan is presented as Attachment A.

SOIL EXCAVATION ACTIVITIES

Soil excavation activities were performed at two locations on June 24, 2002 using a backhoe by Decon Environmental Services, Inc. (Decon) of Hayward, California. A pit of approximate dimensions 11 ft by 6 ft by 3 ft deep was excavated in the waste oil storage/open yard area and a pit of approximate dimensions 4 ft by 4 ft by 5 ft deep was excavated in the lathe equipment area. Prior to excavation activities in the lathe equipment area, the concrete floor was removed by saw-cutting. General and commercial trash including engine block gaskets, oil pans, metal debris, bottles, and milk cartons were observed immediately underneath the concrete floor in the lathe equipment area and commingled with excavated soil from each pit. A total of approximately 16 yd^3 of soil were excavated

from the two excavation pits and stockpiled on and under visqueen in the open yard area. Groundwater was not encountered in either excavation.

CHEMICAL ANALYSES OF SOIL SAMPLE

A grab composite soil sample was collected from the stockpile and chemically analyzed for disposal requirements. The sample was analyzed for TPHs using USEPA SW-846 Method 8015M and for lead using CCR Title 22, section 66261 (California Waste Extraction Test (WET)) and USEPA Method 1311 (Total Characteristic Leaching Procedure (TCLP)). All chemical analyses were performed by American Analytics of Chatsworth, California. The results of the chemical analyses are summarized in Table 1 and copy of the laboratory report is included as Attachment B.

Table 1
Chemical Analyses of Soil Sample

Sample Identification	Sample Date	TPH (mg/kg)	Lead (STLC) (mg/l)	Lead (TCLP) (mg/l)
Sample 1	06/24/02	3,800	8.9	<0.1

SOIL DISPOSAL AND BACKFILL ACTIVITIES

On July 19, 2002, both excavations were backfilled with clean imported soil and compacted to at least 90 percent compaction. The lathe equipment area excavation was capped with concrete to match existing grade and surface. Excavated soil was transported as a non-RCRA hazardous waste (but classified as a California hazardous waste) to the Chemical Waste Management, Inc. disposal/recycling facility located in Kettleman City, California. A copy of the hazardous waste manifest is included as Attachment C.

LOCAL GEOLOGY

The site is located on Alameda Island, situated on historic wetlands, and located approximately 2,000 ft east of Alameda Point, formerly the Alameda Naval Air Station. According to the *Draft Environmental Impact Report – Alameda Point General Plan Amendment, prepared for the City of Alameda, dated November 2001*, soils at Alameda Point consist mainly of non-native soils developed on fill materials with variable properties. Most of Alameda Island consists of approximately 16 feet of loose sandy unclassified fill material. The fill material is known to be contaminated with hazardous materials, including TPHs and lead waste. Two manufactured gas plants and an oil refinery that operated from the late 1800s until the 1920s and formerly located in the vicinity of Alameda Point and at Alameda Point, respectively, are suspected to be the source of the contaminants.

CONCLUSION

The site is located on fill material that is known to be contaminated with historic hazardous materials, as supported by the results of the chemical analyses on soil samples collected in August 2001 and June 2002, in addition to visual observations made by RMT during the soil excavation activities. It is RMT's opinion that shallow soils potentially impacted by site operations have been adequately removed from the waste oil storage/open yard area and the lathe equipment area. Any impacted soils at greater depths are likely indicative of historic contaminated fill material.

If you have any questions or comments regarding this report, please do not hesitate to contact me at (310) 645-6970.

Sincerely,

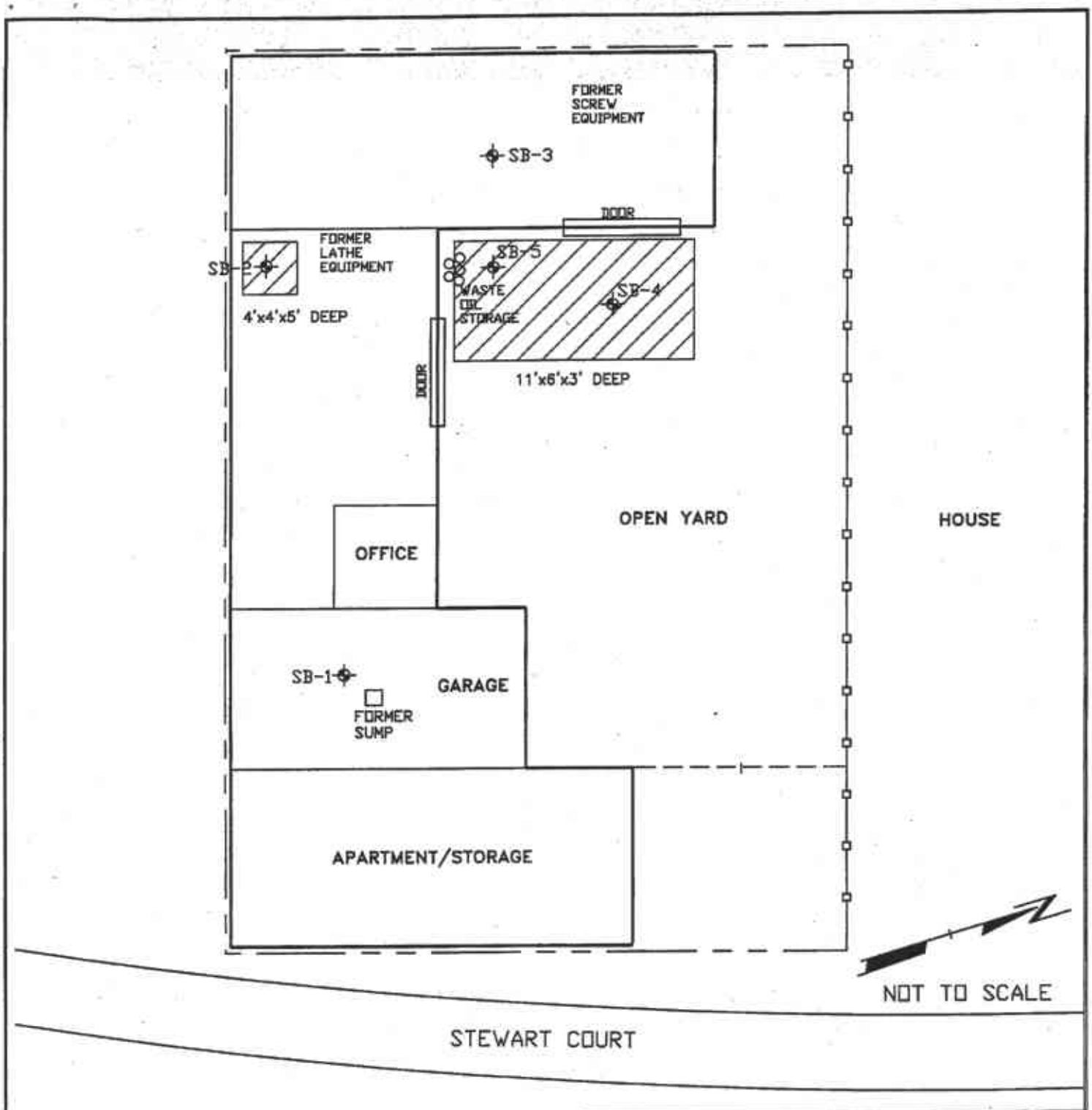
RMT, Inc.

Tariq Ahmad
Senior Project Manager

cc: Ms. Judith Bright

Enclosure: Attachment A – Site Plan and Excavated Areas
Attachment B – Laboratory Report
Attachment C – Waste Manifest

Attachment A



LEGEND:

- PREVIOUS BORING LOCATION
- WOODEN FENCE
- CHAIN-LINK GATE
- EXCAVATED AREA

PROJECT: 762 STEWART COURT, ALAMEDA, CALIFORNIA	
SHEET TITLE: PROPOSED EXCAVATION AREAS	
DRAWN BY: SEM	PROJ. NO. 90225.01
CHECKED BY: TAA	FILE NO. 2022501.DWG
APPROVED BY: TAA	FIGURE 1
DATE: APRIL 2002	

RMT

RMT Inc. – Los Angeles
Phone: 310/645-6970
6065 Bristol Parkway
2nd Floor
Culver City, CA 90230-6601

Attachment B

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: EPA 8015M(Carbon Chain)

AA Project No.: A394163
Date Received: 06/25/02
Date Reported: 06/27/02
Units: mg/Kg

Date Sampled:	06/24/02	
Date Analyzed:	06/26/02	
Date Extracted:	06/25/02	
AA ID No.:	138175	
Client ID No.:	Sample1	**MRL**
Compounds:		
C06-C08	<1	1
C08-C10	<1	1
C10-C12	<1	1
C12-C14	8.0	1
C14-C16	86	1
C16-C18	390	1
C18-C20	440	1
C20-C22	750	1
C22-C24	440	1
C24-C26	710	1
C26-C28	450	1
C28-C32	410	1
C32-C34	86	1
C34-C36	22	1
C36-C40	<1	1
C40-C44	<1	1
Total	3800	10

MRL: Method Reporting Limit

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: RMT, Inc.
Project Name: Santanna
Method: EPA 8015M(Carbon Chain)
Sample ID: Reagent Blank

Project No.: N/A
AA Project No.: A394163
Date Analyzed: 06/26/02
Date Reported: 06/27/02

Compounds	Results (mg/Kg)	MRL
C06-C08	<1	1
C08-C10	<1	1
C10-C12	<1	1
C12-C14	<1	1
C14-C16	<1	1
C16-C18	<1	1
C18-C20	<1	1
C20-C22	<1	1
C22-C24	<1	1
C24-C26	<1	1
C26-C28	<1	1
C28-C32	<1	1
C32-C34	<1	1
C34-C36	<1	1
C36-C40	<1	1
C40-C44	<1	1
Total	<10	10

MRL: Method Reporting Limit

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: RMT, Inc.
Project Name: Santanna
Method: EPA 8015M(Carbon Chain)
Sample ID: Laboratory Control Standard
Concentration: 200 mg/Kg

Project No.: N/A
AA Project No.: A394163
Date Analyzed: 06/26/02
Date Reported: 06/27/02

Compounds	Recovered Amount (mg/Kg)	Recovery (%)	Acceptable Range (%)
Diesel Range Organics	182	91	50 - 150

George Havalias
Laboratory Director

American Analytics • 9765 Eton Avenue, Chatsworth, California 91311
Tel:(818)998-5547 • • Fax:(818)998-7258

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: RMT, Inc.
Project Name: Santanna
Method: EPA 8015M(Carbon Chain)
Sample ID: Matrix Spike
Concentration: 200 mg/Kg

AA ID No.: 138175
Project No.: N/A
AA Project No.: A394163
Date Analyzed: 06/26/02
Date Reported: 06/27/02

Compounds	Result (mg/Kg)	Spike Recovery (%)	Dup. Result (mg/Kg)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Diesel Range Organics	190	95	190	95	0	50 - 150

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: STLC Lead

AA Project No.: A394163
Date Received: 06/25/02
Date Reported: 06/27/02
Units: mg/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Extracted	Date Analyzed	Results	MRL
138175	Sample1	06/24/02	06/25/02	06/27/02	8.9	0.1

MRL: Method Reporting Limit

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: RMT, Inc.
Project Name: Santanna
Method: STLC Lead
Sample ID: Reagent Blank

Project No.: N/A
AA Project No.: A394163
Date Analyzed: 06/27/02
Date Reported: 06/27/02

Compounds	Results (mg/L)	MRL
STLC Lead	<0.1	0.1

MRL: Method Reporting Limit

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: RMT, Inc.
Project Name: Santanna
Method: STLC Lead
Sample ID: Laboratory Control Standard
Concentration: 1 mg/L

Project No.: N/A
AA Project No.: A394163
Date Analyzed: 06/27/02
Date Reported: 06/27/02

Compounds	Recovered Amount (mg/L)	Recovery (%)	Acceptable Range (%)
Lead	1.02	102	75 - 125

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: RMT, Inc.
Project No.: N/A
Project Name: Santanna
Sample Matrix: Soil
Method: TCLP Lead

AA Project No.: A394163
Date Received: 06/25/02
Date Reported: 07/03/02
Units: mg/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Extracted	Date Analyzed	Results	MRL
138175	Sample1	06/24/02	07/01/02	07/02/02	<0.1	0.1

MRL: Method Reporting Limit

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: RMT, Inc.
Project Name: Santanna
Method: TCLP Lead
Sample ID: Reagent Blank

Project No.: N/A
AA Project No.: A394163
Date Analyzed: 07/02/02
Date Reported: 07/03/02

Compounds	Results (mg/L)	MRL
Lead	<0.1	0.1

MRL: Method Reporting Limit

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: RMT, Inc.
Project Name: Santanna
Method: TCLP Lead
Sample ID: Laboratory Control Standard
Concentration: 1 mg/L

Project No.: N/A
AA Project No.: A394163
Date Analyzed: 07/02/02
Date Reported: 07/03/02

Compounds	Recovered Amount (mg/L)	Recovery (%)	Acceptable Range (%)
Lead	0.997	100	75 - 125

George Havalias
Laboratory Director

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311
Tel: 818-998-5547 FAX: 818-998-7258

№ 200439

DATE: 6/24/02

PAGE 2 OF 1

AA Client: RMT	Phone: 3106456970	Sampler's Name (Print): Scott Bowe
Project Manager: Tony Ahrens	P.O. No.	Sampler's Signature:
Project Name: Santana	Client's Project No.	Project Manager's Signature
Job Name and Address:		

ANALYSIS REQUIRED (Test Name)

Client's Comment Special Test Requirements / Comments
i.e., - Turnaround Time, Detection Limits, Data Package....)

Client's I.D.	A.A. I.D.#	Date	Time	Sample Type	Number of Containers	TPH-CC 8015	Lead (STLC)	Lead (TCLP)
Sample 1	138175	6/24/02	11:45	Soil	2	X	X	(K)

Await direction for analysis.

* TPH-CC by 8015
* Lead (STLC)

72 hours TAT

6-25-02 16:00 per client request.

(K) add-on per Scott Hawley 06/28/02. Normal TAT

LAB COMMENTS

AA Project No. A394163

Relinquished by:	Date	Time	Received by:
Scott Bowe	6/24/02	5PM	Fed Ex
Relinquished by: Fed Ex	Date 6/25/02	Time 930	Received by: Stebaschuzian
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:

DISTRIBUTION: Page 1. White - Laboratory Page 2. Yellow - Laboratory Page 3, Pink - Account Executive Page 4, Gold - Client

Attachment C

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

8993397 See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAC002554158 Manifest Document No.: 4013 1 A
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: PATRICIA SANTANNA, 124 BRIGHTON ROAD, ALAMEDA CA 94502
4. Generator's Phone: (510) 410-2503

A. State Manifest Document Number: 98398997
B. State Generator's ID:

5. Transporter 1 Company Name: ROMIC BLAND TRUCKING
6. US EPA ID Number: CAR000106641
C. State Transporter's ID:
D. Transporter's Phone: 209-826-2555

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: CHEMICAL WASTE MANAGEMENT, INC., 35251 OLD SKYLINE ROAD, KETTLEMAN CITY, CA 93239
10. US EPA ID Number: CAT000646117
G. State Facility's ID: CAT000646117
H. Facility's Phone: 800 772-2964

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Numbers
a. * NON-RCRA HAZARDOUS WASTE, SOLID (SOIL W/ LEAD)	0011	DT	00016 MK	Y	State: 611; EPA/Other: NON-RCRA
b.					State: ; EPA/Other:
c.					State: ; EPA/Other:
d.					State: ; EPA/Other:

J. Additional Descriptions for Materials Listed Above: 11.a PROFILE # EB-4129
K. Handling Codes for Wastes Listed Above: a. 03 b. c. d.

15. Special Handling Instructions and Additional Information:
AVOID CONTACT. WEAR PROTECTIVE EQUIPMENT WHEN HANDLING
24 HOUR EMERGENCY CONTACT: DECON ENVIRONMENTAL SERVICES, INC. (510) 475-2961
SITE ADDRESS: 762 STEWART CT, ALAMEDA CA

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: PATRICIA L. SANTANNA Signature: Patricia L Santanna Month: 07 Day: 19 Year: 02

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RONNIE BLAND Signature: Ronnie Bland Month: 07 Day: 19 Year: 02

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: Mike Rivera Signature: Mike Rivera Month: 07 Day: 19 Year: 02

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 — TRANSPORTER — FACILITY

DTSC 8022A (4/97)
EPA 8700-22

White: TSDF SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 3000, Sacramento, CA 95812

Attachment 3

Phase I Environmental Site Assessment Report
for
762 Stewart Court
Alameda, California

Prepared For:
Mr. Douglas Shin
U. S. Bank SBA Division
185 Berry Street
San Francisco, CA 94107

Prepared By:
PIERS Environmental Services, Inc.
1330 S. Bascom Avenue, Suite F
San Jose, CA 95128

October 2002
PIERS Project Number: 02288

PIERS
Environmental Services, Inc.

1330 S. Bascom Ave., Suite F
San Jose, CA 95128

Tel. (408) 559-1248 Fax (408) 559-1224

October 8, 2002

Mr. Douglas Shin
U. S. Bank SBA Division
185 Berry Street
San Francisco, CA 94107

RE: **Phase I Environmental Site Assessment**
762 Stewart Court
Alameda, CA

Dear Mr. Shin:

PIERS Environmental Services, Inc. is pleased to provide you with the attached Phase I Environmental Site Assessment for the above referenced property. The work performed for this project included an ASTM site reconnaissance, interviews, and research of: regulatory agency files; aerial photographs; historical maps; and a review of the regulatory environmental database listings for the Property and surrounding area.

If you have any questions regarding this report, please do not hesitate to contact our office. It has been a pleasure working with you on this project and we look forward to working with U. S. Bank again in the near future.

Sincerely,
PIERS Environmental Services, Inc.

REGISTERED GEOLOGIST
No. EG 1633
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Joel G. Greger, CEG # EG1633, REA #.07079
Senior Project Manager

Dawn Murray, President
PIERS Environmental Services, Inc.
REA # 07260

INTRODUCTION

PIERS Environmental Services, Inc. (PIERS) has completed a Phase I Environmental Site Assessment (ESA) for the property located at 762 Stewart Court in the City of Alameda, Alameda County, California (cited hereafter as the Property). This report follows the guidelines as stated in ASTM Standard Designation E 1527-00; Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

EXECUTIVE SUMMARY

On September 30, 2002, PIERS conducted a visual reconnaissance of the Property for indications of past or present hazardous material handling or storage activities, which may pose a threat to the surface or subsurface environment. PIERS inspected all areas of the Property building as well as all exterior areas during our site reconnaissance, except for the roof.

The Property is located on the southern side of the western end of Stewart Court, in the City and County of Alameda, California. The Property consists of a rectangular-shaped parcel of approximately 6,101 square feet in size, which is improved with a two-story building of approximately 3,550 square feet. According to the Property Profile provided by Chicago Title, the building was constructed in 1947.

The Property building contains a two-story structure at the front of the parcel, with offices on the ground floor and a small apartment on the second floor. Both of these spaces are vacant. The rear garage-type building behind this structure is occupied by Michael's Boat Works. According to the proprietor of the boat works, the work done on the premises is small scale, not registered with or regulated by any oversight agency, and a large portion of the work is performed off-site.

The exterior portions of the Property consist of an unpaved storage yard. A boat is stored in the yard, covered by a tent canopy.

The interior of the front Property building is entirely vacant. The rear garage-type Property building is occupied by a boat works, and contains various materials, stored items, tools, and work areas.

The Property buildings are founded on concrete slab and perimeter foundations and there are no basements. The buildings' exterior surfaces are finished with vinyl siding or stucco.

The concrete slab foundation to a small former structure was observed in the storage yard area, near the northern mid-point of the Property.

Hazardous materials and other chemicals noted on the Property were as follows:

On soil in the storage yard:
Several batteries and one 5-gallon pail of oil, two 5-gallon pails of paint, and two empty propane tanks were observed stored on soil in the storage yard (see photographs of batteries). **PIERS recommends that the batteries, paint, and oil be stored inside, or properly disposed of, due to the risk of discharges to soil.**

Within the building occupied by Michael's Boat Works:
Approximately ten 5-gallon pails, ten gallons and various smaller containers of paint, several gallons of paint thinner, several cylinders of compressed gases, and several small fuel containers were observed. The small containers were stored on metal shelving. In a metal flammable liquids storage cabinet (see photographs) and a second metal storage cabinet, there were additional 5-gallon pails and smaller containers of paint and thinners. All of these materials appeared to be stored properly, and there was no evidence of improper storage, usage, or disposal of hazardous materials or other chemicals.

No evidence of water supply, irrigation, monitoring, oil, injection, or dry wells was observed on the Property. No sumps or floor drains were observed during the reconnaissance. A sump associated with the former machine shop has been filled in.

No storage tanks were observed at the Property. No significant staining was observed on exterior paved surfaces. No significant staining on soil was observed.

Based on historical research conducted for this investigation, the Property building was constructed in approximately 1948, and a machine shop operated continuously from that time until about 10 years ago. After that, some small-scale machine shop work was conducted until several years ago, when the machine shop work ceased. City directories list "Strictly Glass" in 1994-1995.

PIERS was provided with previous environmental reports for the Property by the owner. These reports consisted of a "Limited Subsurface Investigation Report" by RMT Integrated Environmental Solutions (RMT), dated November 29, 2001, and an additional report by RMT entitled "Soil Excavation and Disposal Activities", dated August 21, 2002.

The "Limited Subsurface Investigation Report" documents a site visit conducted by RMT on May 23, 2001, to identify any areas of potential environmental concern. Petroleum hydrocarbon staining was observed at that time by RMT in the open yard area, in a waste oil storage area, and at the lathing equipment and screw machine areas. Also, a former sump located inside the building was identified as a potential environmental concern. The locations of these features are shown on Figure 2.

Based on these findings, on August 2, 2001, five soil borings were completed to a depth of five feet below grade using a hand auger. The soil borings were completed at the locations shown on Figure 2. Soil samples were collected at 1 and 5 feet below grade. The subsurface soils encountered reportedly consisted of dark brown/black, silty clay with traces of sand. Metal shavings were encountered in SB4 and SB5. According to RMT, these materials were indicative of landfill material unrelated to Property activities. Groundwater was not encountered.

The samples were analyzed for Total Petroleum Hydrocarbons (TPH) and TPH as gasoline by EPA Method 8015M, volatile organic compounds (VOCs) by EPA Method 8260B, and California Title 22 metals by EPA SW-846 Methods 6000/7000. Four samples in which the lead and chromium concentrations were greater than 10 times their respective regulatory soluble concentration limits (5 parts per million for both chromium and lead) were also analyzed by the California Waste Extraction Test to determine the actual soluble concentrations.

TPH as gasoline and VOCs were not detected in any of the samples. TPH was detected in all of the samples except those from SB2, at concentrations ranging up to 21,000 parts per million (ppm). In borings SB3 through SB5, TPH was detected only in the sample collected from one foot below grade, and was non-detectable at 5 feet below grade. In boring SB1, TPH was detected at both one and five feet below grade at concentrations of 2,000 and 6,300 ppm, respectively (increasing with depth). RMT concluded that the contamination in SB1 is "likely the result of leaks from deteriorated below grade piping from the former sump. However, since the impacts are limited to the diesel to waste oil range, the impacts are likely to be limited to the upper 10 ft due to slow migration of heavy end petroleum hydrocarbons". **Although excavation of soils to 10 feet were proposed for this area in RMT's November 29, 2001, report, this excavation was not completed. PIERS recommends that prior to further excavation in this area, an additional boring be completed to define the vertical extent of the oil contamination.**

PIERS also recommends that additional subsurface exploration be conducted at and near the small concrete slab located in the storage yard. The slab appears to correspond to the oil storage area shown on the 1950 Sanborn Fire Insurance Map, and has not been previously investigated.

Antimony, beryllium, molybdenum, selenium silver, and thallium were non-detectable in all of the soil samples obtained from the borings. The concentrations of the other metals in soil at the Property were compared by PIERS to risk-based screening levels (RBSLs) contained in the RWQCB Interim Final document "Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater", dated December, 2001. The RBSLs were developed to address environmental protection goals presented in the "Basin Plan" for the S. F. Bay, including (for surface water and groundwater) protection of drinking water resources; protection of human health; protection of aquatic and terrestrial biota; and protection against adverse nuisance conditions. The RBSLs used in this comparison are those from Table "A" for shallow soils in areas where groundwater is to be protected. The concentrations of metals in soil at the Property were also compared to the Preliminary Remediation Goals (PRGs) established by the Department of Toxic Substances Control (DTSC). All of the metal concentrations in soil at the Property except for arsenic, cadmium, and lead are below both the residential and commercial RBSLs and PRGs.

The lowest regulatory limit value for lead in soil is the RBSL for residential use of 200 ppm. Lead was detected in only one sample at a concentration exceeding 200 ppm. This sample location was at SB-2 at one foot below grade, which was later excavated (see discussion below). Lead was greatly attenuated at the sample collected at SB–2 at five feet below grade, where it was measured at a concentration of 21 ppm. Based on these findings, the lead concentrations identified the soil samples from RMT's borings has been successfully mitigated.

The RBSLs and the PRGs for arsenic in soil are identical, and are 0.39 ppm for residential usage, and 2.7 ppm for commercial usage. Ten of the soil samples at the Property had concentrations of arsenic in excess of the residential value, and four samples were in excess of the commercial usage value. The maximum concentration of arsenic in the Property soils was in SB-3 at 1 foot below grade, where it was present at a concentration of 5.2 ppm. **As the arsenic concentrations are relatively consistent, ranging from 1.2 to 5.2 ppm, they may represent "background" concentrations unrelated to historical Property activities, however, this has not been determined.**

One sample (SB4-1) contained a concentration of cadmium of 12 ppm, which is above the residential RBSL of 7.4 ppm, and equal to the commercial RBSL of 12 ppm. However, this material was excavated and removed from the site, and all of the other samples, including one from boring SB4 at 5 feet below grade, were non-detectable for cadmium.

Based on the findings from RMT's five borings, and as documented in RMT's report entitled "Soil Excavation and Disposal Activities" dated August 21, 2001, two areas at the Property were excavated by RMT to remove soils impacted by lead and hydrocarbons. These areas included a pit of approximately 11 feet by 6 feet wide and 3 feet deep at the former waste oil storage area (hydrocarbon impacts) in the storage yard, and an area approximately 4 by 4 feet wide by 5 feet deep at the lathe equipment area (lead impacts). After cutting open the concrete floor at the lathe equipment area, debris was encountered immediately beneath the floor, and included engine block gaskets, oil pans, and metal. These kinds of materials were apparently also found in the excavation at the waste oil storage area. A total of approximately 16 cubic yards of soil was transported to a landfill at Kettleman City, California. No confirmation samples were taken on the sidewalls of either of the two excavations, apparently because the encountered soils were believed to be contaminated from previous uses unrelated to Property activities. Also, the excavations appear to have been completed to the practical limit on the two sides adjacent to the sides of the building or interior walls. The confirmation samples for the vertical limits of the excavation were established by the lower samples taken at five feet in the borings in these areas. Based on the lead concentration of 21 ppm in boring SB-2 in the lathe equipment area at 5 feet, below regulatory limits, and the non-detectable concentrations of TPH at 5 feet in borings SB-4 and SB-5, in the waste oil storage area, the vertical extent of these excavations appears to be appropriate; however, **confirmation of the residual contaminants at the lateral extent of these excavations has not been performed.**

The RMT report references a "Draft Environmental Impact Report – Alameda Point General Plan Amendment" dated November 2001, in support of their assertion that the debris underlying the Property is from previous uses unrelated to Property activities. PIERS reviewed this report, and found no specific information that could be used to determine the source of the materials underlying the Property. The Alameda Point area, in fact, does not include the area of the Property.

To establish what residual contamination at the Property can be attributed to landfill materials that preceded Property activities, and to define a scope of work that will lead to site certification (closure), PIERS recommends that the Property owner consult with the Department of Toxic Substances Control and/or the Alameda County Health Care Services Agency, regarding obtaining agency oversight through a Voluntary Cleanup Program. This agency oversight should be obtained prior to any further investigation or remediation at the Property. Through this process, the Property owner can obtain agency oversight that will lead to closure certification, and avoid incurring any costs for unnecessary work.

PURPOSE, INVOLVED PARTIES

The purpose of performing this Phase I ESA was to determine past, current and potential future environmental liabilities associated with the current and past uses of the Property. Specific types of liabilities addressed in this report are based on statements detailed in ASTM Standard Designation E 1527-00.

PIERS was retained by Mr. Douglas Shin of U. S. Bank SBA Division (cited hereafter as the Client) to conduct this Phase I Environmental Site Assessment for the said Property.

DETAILED SCOPE OF SERVICES

The Scope of Services for the performance of this Phase I ESA included the following tasks:

- Current visual reconnaissance of the Property to evaluate on-site activities in respect to hazardous materials use, storage and disposal activities.
- General visual survey of the current uses of the immediately adjacent sites.
- Review of selected historic documentation for the Property to determine what activities have occurred at the subject site since the Property's first developed use or since 1940 (whichever is earlier).
- Review of reasonably ascertainable regulatory agency files concerning chemical use, storage and disposal at the Property and at surrounding sites.
- Acquisition of a current computerized review (PIERS radius report) of federal, state, and local publications to identify National Priority List (NPL); Resource Conservation and Recovery Act (RCRA); United States Environmental Protection Agency (EPA), Region 9, Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); RCRA Treatment, Storage and Disposal (TSD); and Emergency Response Notification System (ERNS) sites located within close proximity to the Property as well as landfills, Leaking Underground Storage Tanks (LUST) sites and registered underground storage tank (UST) sites.

- ❖ Review of reports on file at environmental regulatory agencies concerning on-going environmental investigations at nearby agency-listed sites.

- ❖ Preparation of this report in general accordance with the document entitled *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (The American Society for Testing and Materials [ASTM], Designation E 1527-00).

SPECIAL TERMS AND CONDITIONS / ADDITIONAL SERVICES

The Client for this project requested no special terms, conditions or extraneous services. Therefore, PIERS implemented no special terms, conditions or extraneous services for this project. Business Environmental Risk concerns have not been addressed for this project.

USER RELIANCE

This Phase I Environmental Site Assessment (ESA) has been prepared for the exclusive use of the Client and/or its agents. PIERS will distribute any information regarding this assessment and report only upon the request of the Client and/or its agents. The Client may rely on the statements and information contained within this report.

PIERS warrants that the services, findings, and/or recommendations provided to the Client and its affiliates and subsidiaries, have been prepared, performed and rendered in accordance with procedures, practices and standards generally accepted and customary in the consultant's profession for use in similar assignments.

CURRENT SITE DESCRIPTION

LOCATION AND LEGAL DESCRIPTION

The Property is located on the southern side of the western end of Stewart Court, in the city of Alameda, Alameda County, California. A Site Vicinity Map, Property Parcel Map and Property Site Plan are attached to this report as Figures 1, 2, and 3, respectively.

The Property consists of a rectangular-shaped parcel of approximately 6,101 square feet in size, which is improved with a two-story building of approximately 3,550 square feet. According to the Property Profile provided by Chicago Title, the building was constructed in 1947. The Property is legally described as Assessor's Parcel Number 24 of Assessor's Map 73, Page 426 (Assessor's Parcel Number 073-0426-024, see Figure 2).

SITE AND VICINITY GENERAL CHARACTERISTICS

The vicinity of the Property is occupied by residential structures, the offices of a construction company, and open space. The area of the Property is relatively flat. A Property Site Plan (Figure 3) is attached to this report.

CURRENT USE OF THE PROPERTY

The Property building contains a two-story structure at the front of the parcel, with offices on the ground floor and a small apartment on the second floor. Both of these spaces are vacant. The rear garage-type building behind this structure is occupied by Michael's Boat Works. According to the proprietor of the boat works, the work done on the premises is small scale, not registered or regulated with any oversight agency, and a large portion of the work performed off-site.

SITE RECONNAISSANCE

On September 30, 2002, PIERS conducted a visual reconnaissance of the Property for indications of past or present hazardous material handling or storage activities, which may pose a threat to the surface or subsurface environment. Property photographs are attached to this report.

METHODOLOGY AND LIMITING CONDITIONS

PIERS inspected all areas of the Property building as well as all exterior areas during our site reconnaissance, except for the roof. Property photographs (Attachment A), site plans, and notes were taken during the reconnaissance.

GENERAL SITE SETTING

Improvements on the Property include a two-story commercial building with a small apartment on the second floor, and an adjacent garage-type building. The Property appears to be served by the normal municipal utilities. The following sections provide the results of the Property inspection.

EXTERIOR OBSERVATIONS

The exterior portions of the Property consist of a storage yard that is unpaved. A boat is stored in the yard, covered by a tent canopy. A few paint containers, a pail of oil, and several batteries were stored within the storage yard, and are discussed further under "Hazardous Materials Storage, Use, Disposal".

INTERIOR OBSERVATIONS

The interior of the front Property building is entirely vacant. The rear garage-type Property building is occupied by a boatworks, and contains various materials, stored items, tools, and work areas.

DESCRIPTION OF STRUCTURES AND PROPERTY IMPROVEMENTS:

STRUCTURES

The Property buildings are founded on concrete slab and perimeter foundations and there are no basements. The buildings exterior surfaces are finished with vinyl siding or stucco.

The concrete slab foundation to a small former structure was observed in the storage yard area, near the northern mid-point of the Property. This feature may correspond to the oil storage area outlined on the Sanborn Fire Insurance Maps (see discussion of these maps under that heading).

ROADS

No roads are located on the Property. The storage yard at the Property is accessed from Stewart Court.

MECHANICAL SYSTEMS

No mechanical systems were observed at the Property.

SOLID WASTE AND SEWAGE DISPOSAL

Solid waste is picked up by a municipal garbage service. Sewage is disposed of via city sewer lines.

HEATING AND COOLING SYSTEMS

The Property building has a gas heating system.

SOURCE OF POTABLE WATER

Water is provided by a municipal water service.

HAZARDOUS MATERIALS STORAGE, USE, DISPOSAL

Hazardous materials and other chemicals noted on the Property were as follows:

On soil in the storage yard:
Several batteries and one 5-gallon pail of oil, two 5-gallon pails of paint, and two empty propane tanks were observed stored on soil in the storage yard (see photographs of batteries). **PIERS recommends that the batteries, paint, and oil be stored inside, or properly disposed of, due to the risk of discharges to soil.**

Within the building occupied by Michael's Boat Works:
Approximately ten 5-gallon pails, ten gallons and various smaller containers of paint, several gallons of paint thinner, several cylinders of compressed gases, and several small fuel containers. The small containers were stored on metal shelving. In a metal flammable liquid cabinet (see photographs) and a second metal storage cabinet, there were additional 5-gallon pails and smaller containers of paint and thinners. All of these materials appeared to be stored properly, and there was no evidence of improper storage, usage, or disposal of hazardous materials or other chemicals.

WELLS

No evidence of water supply, irrigation, monitoring, oil, injection, or dry wells was observed on the Property.

FLOOR DRAINS AND SUMPS

No sumps or floor drains were observed during the reconnaissance. A sump associated with the former machine shop has been filled in. Some soil sampling and excavation work was conducted, which is summarized further in this report under "Previous Environmental Reports".

STORAGE TANKS

No storage tanks were observed at the Property.

STAINED SOIL OR PAVEMENT

No significant staining on soil was observed. According to the previous environmental reports on the Property, areas of significant staining on soil in the storage yard were excavated and removed. This work is summarized further in this report under "Previous Environmental Reports".

No significant staining was observed on exterior paved surfaces.

CURRENT USES OF ADJOINING PROPERTIES

The area surrounding the Property is comprised of commercial and residential developments, and open space. PIERS conducted a field reconnaissance of the properties adjacent to the Property to evaluate their actual or potential impact on the Property. The parcels immediately surrounding and in the vicinity of the Property are as follows:

- The Property is bound to the north by an area of open space with railroad tracks known as the "belt line", a former railroad line.
- The Property is bound to the south by residences.
- The Property is bound to the west by a parcel that is occupied by the offices of a construction company.
- The Property is bound to the east by a parcel that is occupied by an apartment building.

No items of obvious environmental concern were observed on the vicinity reconnaissance.

USER PROVIDED INFORMATION

TITLE RECORDS, ENVIRONMENTAL LIENS, USE LIMITATIONS, SPECIALIZED KNOWLEDGE, VALUE REDUCTION FOR ENVIRONMENTAL ISSUES

PIERS was not provided with any information regarding liens, use limitations, specialized knowledge, or value reductions for environmental issues on the Property.

OWNER, PROPERTY MANAGER OR OCCUPANT INFORMATION

Ms. Patty Santanna is the current owner of record of the Property.

PREVIOUS ENVIRONMENTAL REPORTS

PIERS was provided with previous environmental reports for the Property by the owner. These reports consisted of a "Limited Subsurface Investigation Report" by RMT Integrated Environmental Solutions (RMT), dated November 29, 2001, and an additional report by RMT entitled "Soil Excavation and Disposal Activities", dated August 21, 2002.

The "Limited Subsurface Investigation Report" documents a site visit conducted by RMT on May 23, 2001, to identify any areas of potential environmental concern. Petroleum hydrocarbon staining was observed at that time by RMT in the open yard area, in a waste oil storage area, and at the lathing equipment and screw machine areas. Also, a former sump located inside the building was identified as a potential environmental concern. The locations of these features are shown on Figure 2.

Based on these findings, five soil borings were completed to a depth of five feet below grade using a hand auger on August 2, 2001. The soil borings were completed at the locations shown on Figure 2. Soil samples were collected at 1 and 5 feet below grade. The subsurface soils encountered reportedly consisted of dark brown/black, silty clay with traces of sand. Metal shavings were encountered in SB4 and SB5. According to RMT, these materials are indicative of landfill material previously identified by the Alameda County Health Care Services Agency. Groundwater was not encountered.

The samples were analyzed for Total Petroleum Hydrocarbons (TPH) and TPH as gasoline by EPA Method 8015 M, volatile organic compounds (VOCs) by EPA Method 8260B, and California Title 22 metals by EPA SW-846 Methods 6000/7000. Four samples in which the lead and chromium concentrations were greater than 10 times their respective regulatory soluble concentration limits (5 parts per million for both chromium and lead) were also analyzed by the California Waste Extraction Test to determine the actual soluble concentrations.

TPH as gasoline and VOCs were not detected in any of the samples. TPH was detected in all of the samples except those from SB2, at concentrations ranging up to 21,000 parts per million (ppm). In borings SB3 through SB5, TPH was detected only in the sample collected from one foot below grade, and was not detected at 5 feet below grade. In boring SB1, TPH was detected at both one and five feet below grade at concentrations of 2,000 and 6,300 ppm, respectively (increasing with depth). RMT concluded that the contamination in SB1 is "likely the result of leaks from deteriorated below grade piping from the former sump. However, since the impacts are limited to the diesel to waste oil range, the impacts are likely to be limited to the upper 10 ft due to slow migration of heavy end petroleum hydrocarbons". **Although excavation of soils to 10 feet were proposed for this area in RMT's November 29, 2001 report, this excavation was not completed. PIERS recommends that prior to further excavation in this area, an additional boring be completed to define the vertical extent of the oil contamination.**

PIERS also recommends that additional subsurface exploration be conducted at and near the small concrete slab located in the storage yard. The slab appears to correspond to the oil storage area shown on the 1950 Sanborn Fire Insurance Map, and has not been previously investigated.

Antimony, beryllium, molybdenum, selenium silver, and thallium were not detected in all of the soil samples obtained from the borings. The concentrations of the other metals in soil at the Property were compared by PIERS to risk-based screening levels (RBSLs) contained in the RWQCB Interim Final document "Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater", dated December, 2001. The RBSLs were developed to address environmental protection goals presented in the "Basin Plan" for the S. F. Bay, including (for surface water and groundwater) protection of drinking water resources; protection of human health; protection of aquatic and terrestrial biota; and protection against adverse nuisance conditions. The RBSLs used in this comparison are those from Table "A" for shallow soils in areas where groundwater is to be protected. The concentrations of metals in soil at the Property were also compared to the Preliminary Remediation Goals (PRGs) established by the Department of Toxic Substances Control (DTSC). All of the metal concentrations in soil at the Property, except for arsenic, cadmium, and lead, are below both the residential and commercial RBSLs and PRGs.

The lowest regulatory limit value for lead in soil is the RBSL for residential use of 200 ppm. Lead was detected in only one sample at a concentration exceeding 200 ppm. This sample location was at SB-2 at one foot below grade, which was later excavated (see discussion below). Lead was greatly attenuated at the sample collected at SB-2 at five feet below grade, where it was measured at a concentration of 21 ppm. Based on these findings, the lead concentrations identified the soil samples from RMT's borings has been successfully mitigated.

The RBSLs and the PRGs for arsenic in soil are identical, and are 0.39 ppm for residential usage, and 2.7 ppm for commercial usage. Ten of the soil samples at the Property had concentrations of arsenic in excess of the residential value, and four samples were in excess of the commercial value. The maximum concentration of arsenic in the Property soils was in SB-3 at 1 foot below grade, where it was present at a concentration of 5.2 ppm. **As the arsenic concentrations are relatively consistent, ranging from 1.2 to 5.2 ppm, they may represent "background" concentrations unrelated to historical Property activities, however, this has not been determined.**

One sample (SB4-1) contained a cadmium concentration of 12 ppm, which is above the residential RBSL of 7.4 ppm, and equal to the commercial RBSL of 12 ppm. However, this material was excavated and removed from the site, and all of the other samples, including one from boring SB4 at 5 feet below grade, were non-detectable for cadmium.

Based on the findings from RMT's five borings, and as documented in RMT's report entitled "Soil Excavation and Disposal Activities" dated August 21, 2001, two areas at the Property were excavated by RMT to remove soils impacted by lead and hydrocarbons. These areas included a pit of approximately 11 feet by 6 feet wide and 3 feet deep at the former waste oil storage area (hydrocarbon impacts) in the storage yard, and an area approximately 4 by 4 feet wide by 5 feet deep at the lathe equipment area (lead impacts). After cutting the concrete floor open at the lathe equipment area, debris was encountered immediately beneath the floor, which included engine block gaskets, oil pans, and metal. These kinds of materials were apparently also found in the excavation at the waste oil storage area.

A total of approximately 16 cubic yards of soil was transported to a landfill at Kettleman City, California. No confirmation samples were taken on the sidewalls of either of the two excavations, apparently because the encountered soils were believed to be contaminated from previous uses unrelated to Property activities. Also, the excavations appear to have been completed to the practical limit on the two sides adjacent to the sides of the building or interior walls. The confirmation samples for the vertical limits of the excavation were established by the lower samples taken at five feet in the borings in these areas. Based on the lead concentration of 21 ppm in boring SB-2 in the lathe equipment area at 5 feet, below regulatory limits, and the non-detectable concentrations of TPH at 5 feet in borings SB-4 and SB-5, in the waste oil storage area, the vertical extent of these excavations appears to be appropriate; however, **confirmation of the residual contaminants at the lateral extent of these excavations has not been performed.**

The RMT report references a "Draft Environmental Impact Report – Alameda Point General Plan Amendment" dated November 2001, in support of their assertion that the debris underlying the Property is from previous uses unrelated to Property activities. PIERS reviewed this report, and found no specific information that could be used to determine the source of the materials underlying the Property. The Alameda Point area, in fact, does not include the area of the Property.

To establish what residual contamination at the Property can be attributed to landfill materials that preceded Property activities, and to define a scope of work that will lead to site certification (closure), PIERS recommends that the Property owner consult with the Department of Toxic Substances Control and/or the Alameda County Health Care Services Agency, regarding obtaining agency oversight through a Voluntary Cleanup Program. This agency oversight should be obtained prior to any further investigation or remediation at the Property. Through this process, the Property owner can obtain agency oversight that will lead to closure certification, and avoid incurring any costs for unnecessary work.

INTERVIEWS

On September 30, 2002, PIERS submitted an ASTM Site Reconnaissance and Interview Form to Mr. Victor Jin, agent for the owner of the Property, regarding the current and historical environmental information for the Property. Mr. Jin was unaware of: 1) the existence of environmental liens on the Property; 2) any notifications by government of violations of current or historic environmental laws; 3) any existing or historic violations of environmental laws by past or current occupants; or, 4) the presence of any lawsuits, or administrative proceedings concerning the presence of contamination at the Property, except for the contamination documented in the previous environmental reports for the Property. A copy of the interview form is attached to this report (Attachment B).

According to Ms. Patty Santanna, owner of the Property, the Property has operated as a machine shop since 1927, when the building was constructed, until approximately ten years ago. Her father continued some very small-scale machine shop work after that time.

HISTORICAL RECORDS REVIEW FOR THE PROPERTY

Standards developed by ASTM, and agreed upon by most financial institutions, require that the history of a site be established from the present time back to 1940, or to the year that it was developed from agricultural use or open space. Sources of such information are typically interviews, aerial photographs, Sanborn Fire Insurance (Sanborn) Maps, city directories, and local fire, building and health department files. Historical research, therefore, includes a review of as many sources as needed to obtain developmental history of a site.

TOPOGRAPHIC MAP REVIEW

The Property is located at an elevation of approximately 15 feet above mean sea level (U. S. Geological Survey 7.5 Minute Topographic Quadrangle, "Oakland West"). The Property is located within an area that is relatively flat.

SANBORN FIRE INSURANCE MAPS REVIEW

On October 1, 2002, PIERS reviewed historical Sanborn Fire Insurance Maps at the University of California at Berkeley Earth Sciences Library. Maps from 1897, 1948, 1950, and 1987 were found and reviewed.

On the 1897 map, the Property and vicinity is vacant. Stewart Court does not exist.

On the 1948 map, the Property building is present, but apparently unfinished. The usage is shown as storage. The adjacent parcels are either vacant or contain residences, except for the adjacent parcel tot he east, which is also occupied by a nearly adjacent machine shop.

On the 1950 map, the Property building is shown as occupied by a machine shop. "Oils" are shown as stored on the western side of the Property. Heat treating is shown as being conducted on the portion of the Property nearest Stewart Court, which at that time is known as Atlantic Avenue. The machine shop, with oil storage, remains on the adjacent Property to the east.

On the 1987 map, the front of the Property building is shown as an office with a residence above. The rear of the building remains a machine shop, with a heat treating area behind the office. Atlantic Avenue is now known as Stewart Court. The area beyond Stewart Court to the east is shown as the Alameda Belt Line Railroad property.

LOCAL FIRE DEPARTMENT RECORDS REVIEW

Alameda Fire Department (AFD)
Review Date - October 9, 2002.

On October 9, 2002, PIERS reviewed the file for the Property at the AFD. An Inspection Notice dated October 6, 1999, was contained in the file. Documents dated between 1970 and 1994 were contained in the file. All of the documents were for Bright's Machine Shop, except for a business license application from June 1992, for Skinner Auto Restoration. As there are no other documents related to this business, it is assumed that they never took occupancy.

The earliest file document was a permit dated April 27, 1970, which allows welding gases, cutting oil, cyanide salt, and cleaning solvent to be stored at the machine shop. A 1976 permit indicates kerosene was stored outside in a 55-gallon drum, as well as 55-gallon drums of two other types of oil.

Fire Safety Inspection Reports between 1984 and 1991 contain various fire code violations, however, none relate to possible discharges of chemicals that could create adverse impacts at the Property.

The most recent document in the file was a business license application for Bright's Machine Shop, dated March 7, 1994.

A list of underground storage tank (UST) locations at the AFD was also reviewed. This list was reviewed for USTs at or in the vicinity of the Property. There were three USTs listed at 768 Atlantic Avenue in 1951. The USTs included two 2,000-gallon and one 1,000-gallon UST. The 768 Atlantic Avenue address would correspond to the adjacent parcel to the east. This site is not listed by the regulatory agencies, which suggests that the USTs were removed from this site prior to the mid 1980's.

The hydrocarbon analyses for the previous exploratory borings completed at the site yielded non-detectable concentrations of TPH as gasoline for all soil samples. TPH was encountered in all of the borings, but was limited to the samples collected from one foot below grade in borings SB3 through SB5, which is inconsistent with a source on the adjacent Property. In SB1, located adjacent to the former sump, elevated concentrations were also encountered at five feet below grade, however, this appears to correlate with waste oil leaking from the sump piping. Therefore, based on the analytical data collected to date, there is no indication of hydrocarbon impacts from the USTs at the adjacent parcel. **However, any future sampling performed should be reviewed to confirm these findings.**

LOCAL BUILDING DEPARTMENT RECORDS REVIEW

City of Alameda Building Department (ABD)
Review Date - October 2, 2002

On October 2, 2002, PIERS reviewed the file for the Property at the ABD. An Activity Report and a Summary covering the period of 1948 through 1972 was contained in the file. The documents are for a garage operated by John Bright. A building addition was permitted in 1955. A toilet and shower was permitted in 1961. There were no items of particular environmental concern contained in the file documents.

LOCAL HEALTH DEPARTMENT RECORDS REVIEW

Alameda County Environmental Health (ACEH)
Inquiry Date - October 1, 2002

On October 1, 2002, PIERS was informed by ACEH that there were no files for the Property.

LOCAL CITY DIRECTORY REVIEW

City Directories have been published for major cities and towns across the United States since the 18th century. Originally, these Directories, published in the 20th century, also included a street index. For each street address, the Directory lists the name of the resident or business operating from this address during a given year. City Directories are a valuable source of historical information with regard to site tenancy and use. Directories for rural areas were not often published.

On September 30, 2002, PIERS reviewed historical city directories at the Oakland Public Library. Pacific Telephone directories for the period of 1946 through 1970, and Haine's directories for the period of 1973 through 2002 were reviewed. The specific directories reviewed are listed in the references to this report.

Stewart Court is not listed between 1974 and 1992 in the directories reviewed. The first listing of Stewart Court is in the 1993 directory. Prior to that, the Property was known as 762 Atlantic Court. The following is a summary of listings for the Property in the city directories:

<u>762 Atlantic Avenue</u>
1946, 1948 – no listing found
1949 through 1997 – Bright's Machine Shop
1998 – 2002 – no listing

<u>762 – 1/2 Atlantic Avenue</u> (apparently the second story apartment)
1973-1974 – Mark Bright
1975-1989 – Del Olsen

<u>762 Stewart Court</u>
1994 – 1995 - Strictly Glass
1996 - no listing
1997 – Keith Puckett
1998 – 2000 – no listing
2001 - 2002 – John Bright

The Pacific Telephone directory ad for Bright's Machine Shop reads "Automatic Screw Machine – Heat Treating – Welding – General Industrial Manufacturing".

HISTORICAL AERIAL PHOTOGRAPH REVIEW

On October 3, 2002, aerial photographs from the U. S. Geological Survey of Menlo Park, California were reviewed for evidence of hazardous materials and features that may have impacted the Property. The following is a summary of this review:

DATE	PHOTOS	OBSERVATIONS
7-29-46	GS-CP 2-33 and 2-34	The Property is a vacant, vegetated lot and there are no structures (this is consistent with the Sanborn maps, where the building is under construction in 1948). The area to the north consists of a railroad yard. There is a building on the adjacent parcel to the east. The parcel to the west is vacant. There are residences along Eagle Avenue to the south of (and adjacent to) the Property.
8-13-58	BUT-4V-79 and 80	The Property building is present in the existing configuration. There is a small structure on the western side of the Property that is apparently the oil storage area shown on the Sanborn maps. Atlantic Avenue (later renamed Stewart Court) is present. There are no significant changes to the adjacent parcels.
5-18-65	ALA 15-130 and 131	There are no significant changes to the Property or adjacent parcels, except that the existing apartment building is now present on the adjacent parcel to the west.
10-14-74	13-38 and 13-39	There are no significant changes to the Property or adjacent parcels.
10-1-80	GS-VEZR 1-39 and 1-40	There are no significant changes to the Property or adjacent parcels.
7-10-93	Microsoft Terraserver	There are no significant changes to the Property or adjacent parcels, except that the railroad yard to the north of the Property is now vacated.

ADDITIONAL FILE REVIEWS

Additional file reviews were not conducted for this investigation.

REGULATORY AGENCIES DATABASES REVIEW

ENVIRONMENTAL DATABASES SEARCH FOR THE PROPERTY AND SURROUNDING SITES WITHIN ONE-MILE

Attached to this report is a PIERS "Identified Hazardous Materials Sites Radius Report" for the subject Property. The report identifies sites of environmental concern within a one-mile radius of the subject Property. The databases searched to compile the enclosed report are gathered from numerous federal, state and local governing environmental entities. All of the databases required to be searched by ASTM Standard E 1527-00 – Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process – Section 7.2.1.1 "Standard Environmental Records Sources" have been included in this report, and searched to the required distances from the subject property. Further information about the radius report and detailed descriptions of the databases searched are found in the report itself. The following is an analysis of the attached report.

DATABASES SEARCHED/FINDINGS

SUBJECT PROPERTY

The subject Property was not included on any of the ASTM Standard agency-published databases included in the attached database report.

NPL - NATIONAL PRIORITIES LIST

No sites were listed within a one-mile radius from the subject Property on the U.S. Environmental Protection Agency's (EPA) National Priority List (NPL) of the highest priority sites.

PROPOSED NPL

No sites within a one-mile radius from the subject Property were listed on the Proposed NPL database.

CORRACTS

The Resource Conservation Recovery Act database (RCRA) lists facilities that have undergone corrective action (CORRACTS). One CORRACTS facility was listed within a one-mile radius of the Property. This site consists of the U. S. Navy Oakland Naval Supply Center at 2155 Mariner Square Loop, approximately 3,634 feet to the north. As this site is located well distant from and cross-gradient relative to the Property, it does not appear to be of significant environmental concern.

TSD

The Resource Conservation and Recovery Information System (RCRIS) maintains information on sites which transport, store, or dispose (TSD) of hazardous waste. No sites within a one-half mile radius of the Property were listed on the TSD database.

SMBRP

The Department of Toxic Substances Control has developed a database with information about sites in California that are contaminated with hazardous substances, or uncharacterized. Two facilities within a one-mile radius of the Property were listed on the Site Mitigation and Brownfield's Re-use (SMBRP) database. One of these is the Naval Supply Center CORRACTS site listed above. The other SMBRP site consists of the Encinal School site at 1527 Buena Vista Avenue, approximately 4,151 feet to the east. According to the available information, the soil underlying this site may contain gasoline and diesel. However, based on the mobility of these contaminants in groundwater and the distance of this site from the Property, it does not appear to be of significant environmental concern.

SLIC

The Spills, Leaks, Investigation and Cleanup Cost Recovery (SLIC) database is compiled by the State Regional Water Quality Control Board, and includes contaminated sites that impact or have the potential to impact groundwater. Three sites were listed on the CA SLIC database within a one-mile radius of the Property. One of these sites is a leaking underground storage tank site (Shell station) at 1601 Webster Street, approximately 1,412 feet to the southwest. As this site is located well distant from and downgradient relative to the Property, it does not appear to be of significant environmental concern.

The next closest SLIC site is the Encinal Marina Landing site at 2020 Sherman Drive, approximately 3,090 feet to the east. This site appears to be too distant to create significant adverse environmental impacts at the Property.

The third SLIC site is a portion of the Naval Supply Center that is located approximately 5,192 feet to the northwest. As this site is located nearly one mile distant and cross-gradient relative to the Property, it does not appear to be of significant environmental concern.

DEED RESTRICTION SITES

The State Department of Toxic Substances Control maintains a list of sites with deed restrictions. One Deed Restriction site is located within one mile of the Property. This site consists of the Naval Supply Center CORRACTS site, which is discussed above under the CORRACTS heading.

CERCLIS

The EPA Comprehensive Environmental Response, Compensation and Liability Act (CERCLIS) database lists potential hazardous waste sites. Two sites within a one-half mile radius from the Property were listed on the CERCLIS database. One of these sites is the Best Foods facility at 1916 Webster Street, approximately 827 feet to the west. The second site is a City of Alameda substation located approximately 1,171 feet to the northwest. As these sites are located downgradient to cross-gradient relative to the Property, neither appear to be of significant environmental concern.

CERCLIS/NFRAP

No sites were listed on the CERCLIS/No Further Remedial Action Planned (NFRAP) database within a one-quarter mile radius from the Property.

LUST

Forty-seven sites were listed on the LUST database within a one-half mile radius of the Property.

In fuel leak cases, research conducted in the State of California by Lawrence Livermore National Laboratory (LLNL) in 1996 indicates that attenuation and degradation of the product in groundwater play major roles in reducing the hydrocarbon contamination to non-detectable levels within several hundred feet of the contaminant source. Moreover, this research indicates that in over 90% of the hydrocarbon contamination cases, groundwater contaminant plumes do not extend more than 250 feet from the source. Solvent/toxic contamination plumes may extend farther from the source.

Based on the discussion above, fuel leak LUST sites that are within 1/8 mile in the upgradient direction, and upgradient solvent or toxic leak sites are considered to have potential risk to the subsurface soils and/or groundwater of the Property. No LUST sites were listed within 1/8 mile of the Property. In addition, there do not appear to be any solvent or toxic leak sites located further upgradient.

SWLF (Solid Waste Landfill)

No SWLF sites were listed within a one-half mile radius of the Property.

WELLS

No water wells were listed within one-quarter mile of the Property.

HAZMAT

There were no HAZMAT listings within one-quarter mile of the Property.

ERNS

The subject Property and adjacent sites were not listed on the Emergency Response Notification System (ERNS) database. One ERNS site was listed within one-eighth mile of the Property.

RCRIS GENERATORS

The U.S. EPA RCRIS list was researched for the Property and immediately adjacent properties, for both Small Quantity (SQG) and Large Quantity Generators (LQG) of hazardous materials as defined by RCRA. Neither the Property nor any adjacent site was listed on this database. There were no SQG or LQG sites listed within one-eighth mile of the Property.

UST

This database includes active UST facilities gathered by the State Water Resources Control Board from local regulatory agencies. Neither the Property nor any adjacent parcels are listed on this database. There were no UST listings within 1/8 mile of the Property.

AST

The Above-Ground Petroleum Storage Tank (AST) Facilities database is compiled by the State Water Resources Control Board. Neither the Property nor any adjacent parcel is listed on this database. There were no AST sites listed within one-eighth mile of the Property.

CLEANERS

A list of drycleaner-related facilities that have EPA ID numbers is maintained by Department of Toxic Substance Control. No drycleaners were listed within one-eighth mile of the Property.

HAZNET

The Hazardous Waste Information System (HAZNET) is compiled by the California Environmental Protection Agency from copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. Neither the Property nor any adjacent parcel is listed on this database. There were no HAZNET sites listed within 1/8 mile of the Property.

CONCLUSIONS AND RECOMMENDATIONS

Please see the Executive Summary section on page one of this report for full conclusions and recommendations.

LIMITATIONS AND EXCEPTIONS

This Phase I Environmental Site Assessment does not guarantee the condition of a Property. PIERS Environmental Services Inc. (PIERS) shall not be responsible for conditions or consequences arising from facts and information that were withheld or concealed, or not fully disclosed at the time the evaluation is performed. Conclusions and recommendations made in the report for the Property are preliminary in nature and are based wholly upon the data obtained and available information reviewed during the assessment. The site assessment is prepared to assist in decisions regarding this Property, and its possible subsurface environmental hazards. PIERS is not responsible for errors or omissions in agency files or databases or non-disclosure by current Property owners or representatives. To achieve the study objectives stated in this report, we were required to base PIERS' conclusions and recommendations on the best information available during the period the investigation was conducted and within the limits prescribed by PIERS' client in the contract/authorization agreement and standard terms and conditions.

PIERS professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar fields. The findings were mainly based upon examination of historic records, maps, aerial photographs, and governmental agencies lists. It should be noted that governmental agencies often do not list all sites with environmental contamination; the lists and data used could be inaccurate and/or incomplete. Recommendations are based on the historic land use of the subject property, as well as features noted during the site walk. The absence of potential gross contamination sources, historic or present, does not necessarily imply that the subject property is free of any contamination. This report only represents a "due diligence" effort as to the integrity of the subject property. No other warranty or guarantee, expressed or implied, is made as to the professional conclusions or recommendations contained in this report. The limitations contained within this report supersede all other contracts or scopes of work, implied or otherwise, except those stated or acknowledged herewith.

This report does not address, in any way: septic systems, leach fields, septic tanks, or related health hazards, lead in drinking water, lead based paint, asbestos containing materials, radon, wetlands, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, high voltage power lines, mold, dust, any air quality issues or microorganism concerns were not addressed within the scope of this project. This report does not address: permitting, environmental compliance, or business environmental risks. This project does not include sampling of materials (for example: soil, water, air, mold, building materials).

No warranties, therefore, are expressed or implied. PIERS total liability to the Client for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to this agreement from any cause or causes, including but not limited to PIERS negligence, errors, omissions, strict liability, or breach of contract shall not exceed the total amount of the contract for this project.

An environmental compliance audit may be necessary for the Property. The scope of services are based on ASTM standards and not on any other local, state or federal standards, codes, regulations or laws.

The information and opinions rendered in this report are exclusively for use by the Client. Qualifications of professionals completing this project are available upon request. PIERS will not distribute or publish this report without Client's consent except as required by law or court order. The information and opinions included in this report were given in response to a limited scope of work and should be considered and implemented only in light of that particular scope of work. The services provided by PIERS in completing this project have been provided in a manner consistent with the normal standards of the profession. No other warranty, expressed or implied, is made.

REFERENCES

Haine's City Directories, Oakland: 1973 through 1979, 1981 through 1987, 1989 through 2002 (consecutive).

Pacific Telephone Directories, Oakland: 1946, 1948 through 1970 (consecutive).

RMT Integrated Environmental Solutions, 2002. Soil Excavation and Disposal Activities, 762 Stewart Court, Alameda, California, dated August 21, 2002.

RMT Integrated Environmental Solutions, 2001. Limited Subsurface Investigation Report, 762 Stewart Court, Alameda, California, dated November 29, 2001.

RMT Integrated Environmental Solutions, 2002. Soil Excavation and Disposal Activities, 762 Stewart Court, Alameda, California, dated August 21, 2002.

Sanborn Fire Insurance Maps: 1897, 1948, 1950, and 1987.

FIGURE 1
PROPERTY VICINITY MAP

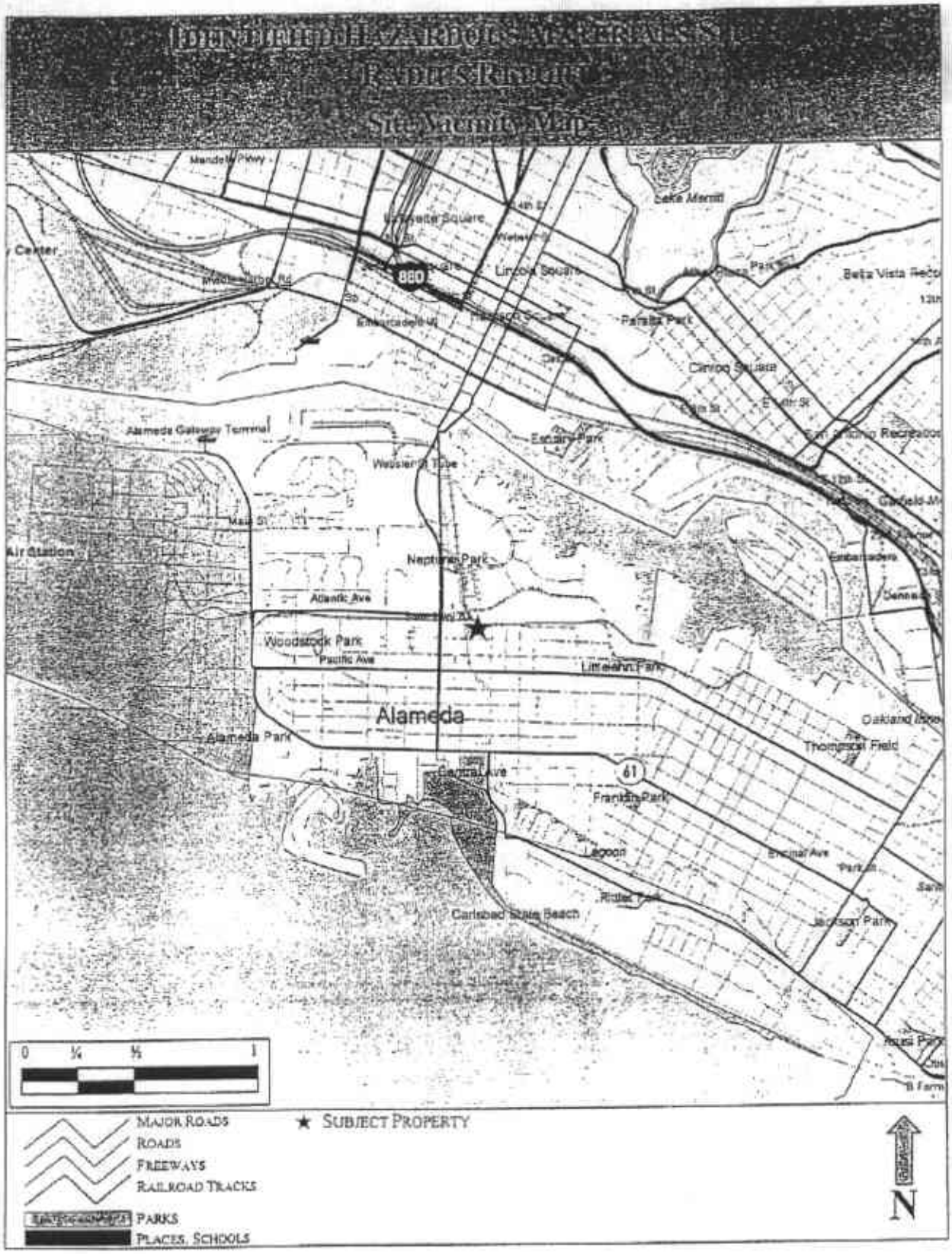


FIGURE 1
PROPERTY VICINITY MAP

762 STEWART COURT
ALAMEDA, CALIFORNIA

NOT TO SCALE
OCTOBER 2002

PIERS ENVIRONMENTAL SERVICES, INC. 1330 S. BASCOM AVE., SUITE F, SAN JOSE, CA 95128
PHONE: 408-559-1248 FAX: 408-559-1224 WWW.PIERSES.COM

FIGURE 2
PROPERTY PARCEL MAP

Parcel Number:	073 -0426-024-00		
Owner 1:	BRIGHT, JOHN R TR		
Owner 2:			
Phone:		**Pg-Grd:**	11-A2/649-G7
Site Address:	762 STEWART CT	**Census:**	4273.005
Site City/State:	ALAMEDA CA	**Ownership:**	
Mail Address:	915 PACIFIC AVE	**Zoning:**	
Mail City/State:	ALAMEDA CA		
Flood Panel:	060002 0005	**Map Number:**	

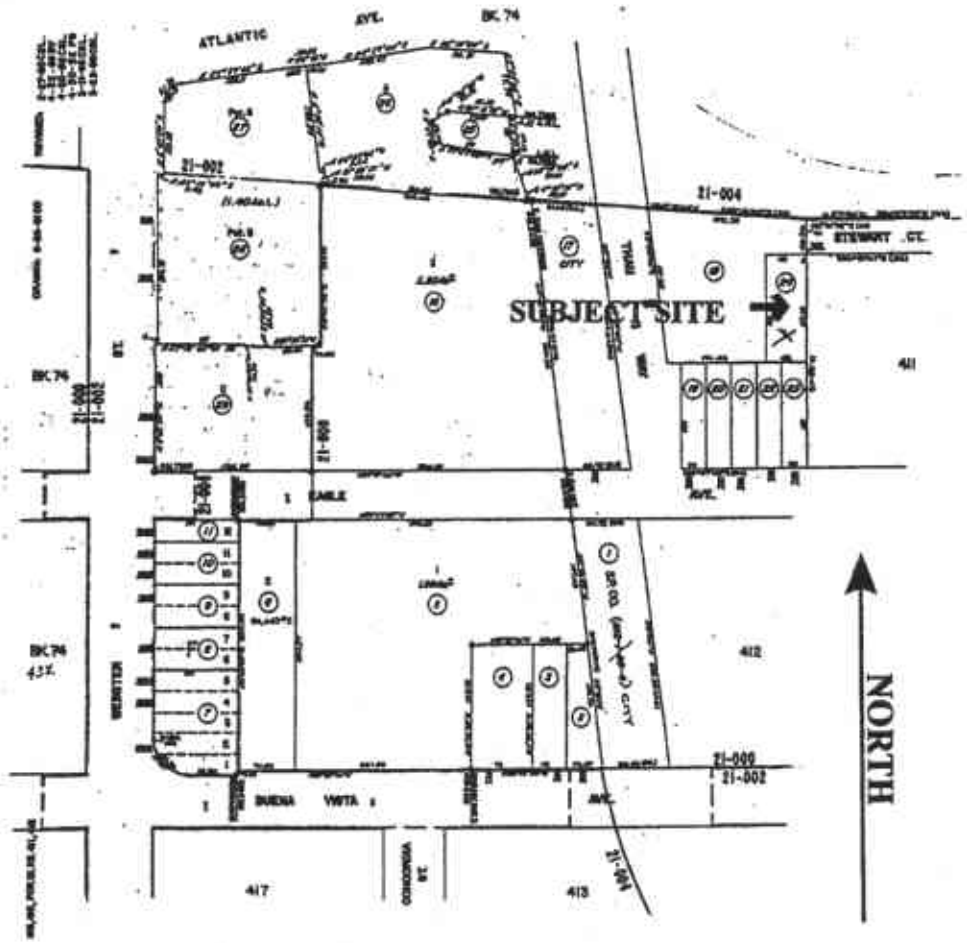


FIGURE 2
PROPERTY PARCEL MAP

762 STEWART COURT
ALAMEDA, CALIFORNIA

NOT TO SCALE
OCTOBER 2002

PIERS ENVIRONMENTAL SERVICES, INC. 1330 S. BASCOM AVE., SUITE F, SAN JOSE, CA 95128
PHONE: 408-559-1248 FAX: 408-559-1224 WWW.PIERSES.COM

FIGURE 3
PROPERTY SITE PLAN

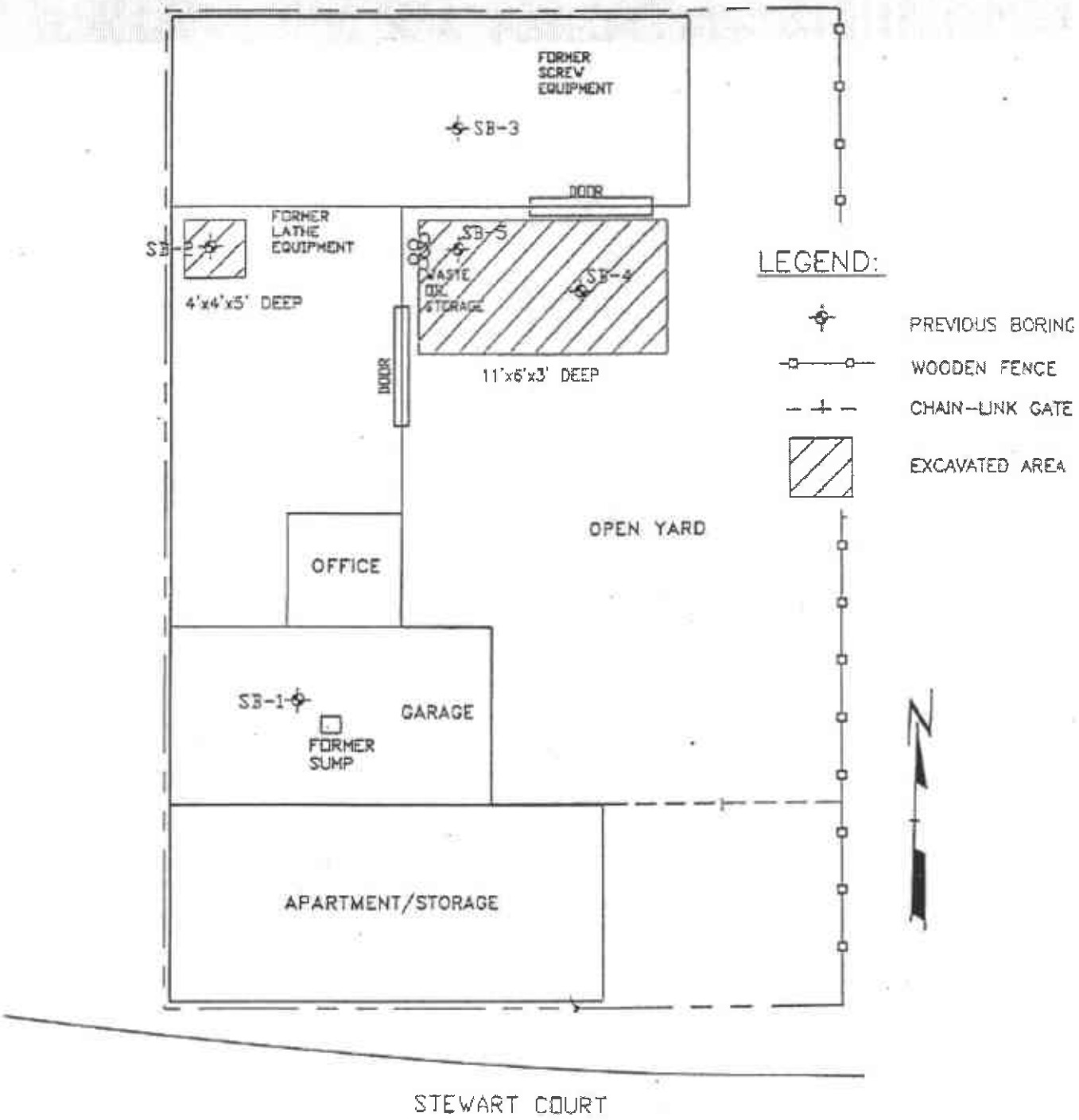


FIGURE 3
PROPERTY SITE PLAN

762 STEWART COURT
ALAMEDA, CALIFORNIA

NOT TO SCALE
OCTOBER 2002

PIERS ENVIRONMENTAL SERVICES, INC. 1330 S. BASCOM AVE., SUITE F, SAN JOSE, CA 95128
PHONE: 408-559-1248 FAX: 408-559-1224 WWW.PIERSES.COM

ATTACHMENT A
PROPERTY PHOTOGRAPHS

Property: 762 Stewart Court, Alameda, CA

Photo #1: View west showing front of Property building, apartment on second floor.

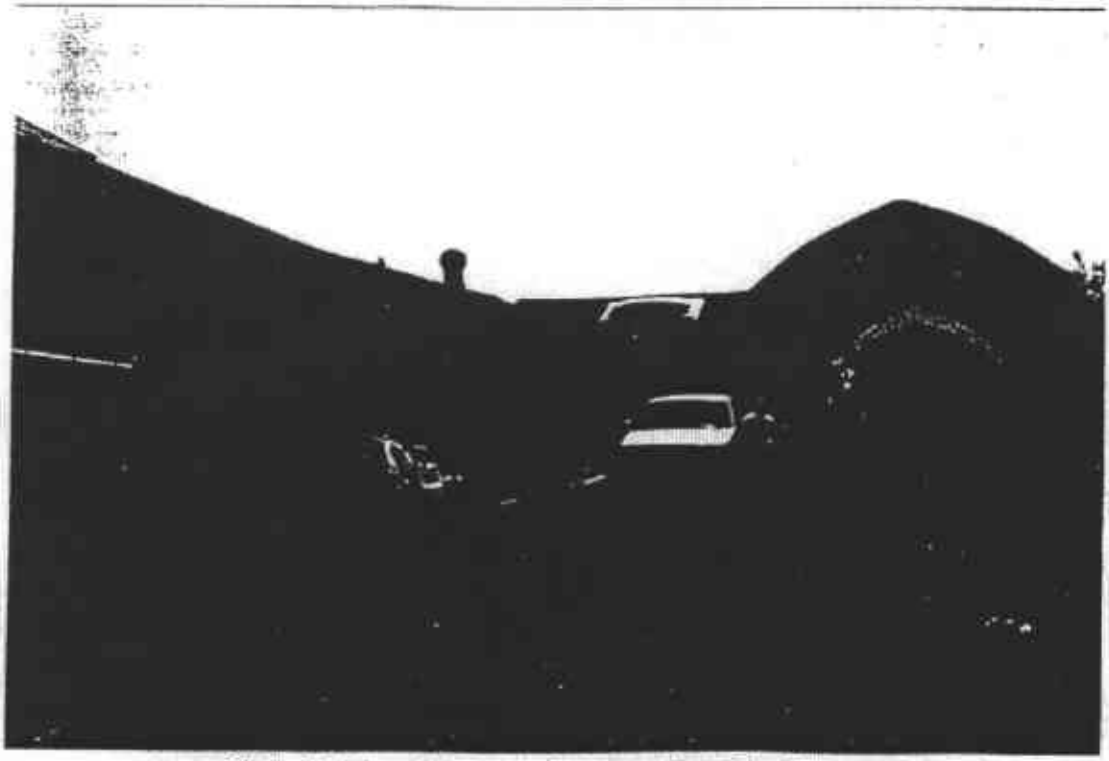


Photo #2: View of storage yard along northern side of Property.

ATTACHMENT B
ENVIRONMENTAL DISCLOSURE
INTERVIEW FORM

ENVIRONMENTAL QUESTIONNAIRE / DISCLOSURE STATEMENT AND PROPERTY OBSERVATION FORM

PROPERTY / PROJECT ADDRESS: 762 Stewart Court Alameda, CA

DATE: 9/30/02

PERSON INTERVIEWED & TITLE: Ms. Patty Santana, owner

PROJECT MANAGER: Joel Gregor

QUESTION (YES / NO)	OWNER	OCCUPANT	OBSERVED DURING SITE VISIT
1. Is the property or any adjoining property currently used for an industrial use? **Identify which:**	1. YES NO (boat repair)	1. YES NO	1. (YES) NO small scale boat works
1A. Did you observe evidence or do you have any prior knowledge that the property or adjoining property has been used for industrial use in the past? **Identify which:**	1A. (YES) NO machine shop	1A. YES NO	1A. (YES) NO fmr. machine shop
2. Is the property or adjoining property currently used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)? **Identify which:**	2. YES (NO)	2. YES NO	2. YES (NO)
2A. Did you observe evidence or do you have any prior knowledge that the property or adjoining property was used as any of the above mentioned in the past? **Identify which:**	2A. (YES) NO Per report - land fill.	2A. YES NO	2A. (YES) NO apparently property overlies land fill materials
3. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers greater than five gallons in the aggregate, stored on or used at the property or at the facility? **Identify which:**	(1) 3 batteries in driveway, tenant mds paint in storage (2) 3. (YES) NO	3. YES NO	3. (YES) NO 3 batteries - driveway all paints in use & property stor
3A. Did you observe evidence or do you have any prior knowledge of any of the above mentioned items, which have been previously stored or used at the property or at the facility? **Identify which:**	3A. (YES) NO Per report - oil.	3A. YES NO	3A. (YES) NO (machine shop)
4. Did you observe evidence or do you have prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site or that is of an unknown origin? **Identify which:**	4. (YES) NO reference report	4. YES NO	4. (YES) NO See # 2A & previous report

5. Are there currently any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal? **Identify which:** 5A. Did you observe evidence or do you have any prior knowledge that there have been any of the above mentioned previously located on the property? **Identify which:**	5. YES (NO) 5A. YES (NO)	5. YES NO 5A. YES NO	5. YES (NO) 5A. YES (NO)
6. Is there currently any stained soil on the property? **Identify which:** 6A. Did you observe evidence or do you have any prior knowledge that there has been previously, any stained soil on the property? **Identify which:**	6. YES (NO) 6A. YES NO ?	6. YES NO 6A. YES NO	6. YES (NO) 6A. YES NO ?
7. Are there currently any registered or unregistered storage tanks (above or underground) located on the property? **Identify which:** 7A. Did you observe evidence or do you have any prior knowledge that there have been any of the above mentioned previously located on the property? **Identify which:**	7. YES (NO) 7A. YES (NO)	7. YES NO 7A. YES NO	7. YES (NO) 7A. YES (NO)
8. Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property? **Identify which:** 8A. Did you observe evidence or do you have any prior knowledge that there have been any of the above mentioned previously located on the property? **Identify which:**	8. YES (NO) 8A. YES (NO)	8. YES NO 8A. YES NO	8. YES (NO) 8A. YES (NO)
9. Is there currently evidence of leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property? **Identify which:** 9A. Did you observe evidence or do you have any prior knowledge that there have been any of the above mentioned previously located on the property? **Identify which:**	9. YES (NO) 9A. YES (NO) ?	9. YES NO 9A. YES NO	9. YES (NO) 9A. YES NO ?

10. If the property is served by a private well or non-public water system, is there evidence or do you have any prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system? **Identify which:** **10A.** If the property is served by a private well or non-public water system, is there evidence or do you have any prior knowledge that the well has been designated as contaminated by any government environmental/health agency? **Identify which:**	N/A **10.** YES NO **10A.** YES NO	**10.** YES NO **10A.** YES NO	N/A **10.** YES NO **10A.** YES NO
11. Does the owner or occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property? **Identify which:**	**11.** YES (NO)	**11.** YES NO	**11.** YES (NO)
12. Has the owner or occupant of the property been informed of the current existence of hazardous substances or petroleum products with respect to the property or any facility located on the property? **Identify which:** **12A.** Has the owner or occupant of the property been informed of the past existence of the above mentioned with the respect to the property or any facility located on the property? **Identify which:**	**12.** (YES) NO **12A.** (YES) NO reference report	**12.** YES NO **12A.** YES NO	**12.** (YES) NO **12A.** (YES) NO previous excav. & sampling - June-August 2002 (RMT, 2002)
13. Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property? **Identify which:**	**13.** (YES) NO Reference report	**13.** YES NO	**13.** (YES) NO See #12

14. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property? **Identify which:**	14. YES (NO)	14. YES NO	14. YES (NO)
15. Does the property discharge any waste water (not including sanitary waste or storm water) onto the property or adjacent property and/or into a sanitary sewer system or storm water system? **Identify which:**	15. YES (NO)	15. YES NO	15. YES (NO)
16. Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above ground, buried and/or burned on the property? **Identify which:**	16. (YES) NO Refer rep. 2	16. YES NO	16. (YES) NO Property apparently overlies landfill materials
17. Is there a transformer, capacitor, or any hydraulic equipment, for which there are any records indicating the presence of PCBs? **Identify which:**	17. YES (NO)	17. YES NO	17. YES (NO)

PROJECT MANAGER _____ **DATE** 9/30/02

OWNER/OCCUPANT _____ **DATE** 9/30/02

Attachment 4

Phase II Investigation
of
762 Stewart Court
Alameda, California

Prepared For:
Ms. Patricia Santanna
124 Brighton Road
Alameda, CA 94502

Prepared By:
PIERS Environmental Services, Inc.
1330 S. Bascom Avenue, Suite F
San Jose, CA 95128

December 2002
PIERS Project Number: 02343

PIERS
Environmental Services, Inc.

1330 S. Bascom Ave., Suite F
San Jose, CA 95128

Tel. (408) 559-1248 Fax (408) 559-1224

December 17, 2002

Ms. Patricia Santanna
124 Brighton Road
Alameda, CA 94502

RE: **Phase II Investigation**
762 Stewart Court
Alameda, CA

Dear Ms. Colburn:

This report presents the results of the recent completion thirteen exploratory soil borings at the above-referenced Property. The purpose of this work was to determine whether the subsurface soils and/or groundwater beneath the Property have been impacted from the former usage of the Property, or from off-site sources.

The scope of the work performed by PIERS for this investigation consisted of the following: completion of five exploratory soil borings using a Geoprobe drill rig and eight borings using a hand auger, collection of soil and groundwater samples, submission of the soil and water samples for chemical analysis, data analysis and interpretation, and preparation of this report.

SITE DESCRIPTION AND BACKGROUND

In October 2002, PIERS completed a Phase I Environmental Site Assessment (ESA) for the Property. The ESA included the review of previous investigative and remedial work completed at the site by RMT Integrated Environmental Solutions (RMT).

The Property is located on the southern side of the western end of Stewart Court, in the City and County of Alameda, California (see Figure 1). The Property consists of a rectangular-shaped parcel of approximately 6,101 square feet in size, which is improved with a two-story building of approximately 3,550 square feet. Based on historical research, the Property building was constructed circa 1948, and a machine shop operated continuously from that time until about 10 years ago. After that, some small-scale machine shop work was conducted until several years ago, when the machine shop work ceased.

In August 2, 2001, five soil borings were completed by RMT to a depth of five feet below grade using a hand auger. The soil borings were completed at the locations shown on Figure 2. Soil samples were collected at 1 and 5 feet below grade. The subsurface soils encountered reportedly consisted of dark brown/black, silty clay with traces of sand. Metal shavings were encountered in SB4 and SB5. According to RMT, the shavings are indicative of landfill material unrelated to Property activities. Groundwater was not encountered.

The samples were analyzed for Total Petroleum Hydrocarbons (TPH) and TPH as gasoline by EPA Method 8015M, volatile organic compounds (VOCs) by EPA Method 8260B, and California Title 22 metals by EPA SW-846 Methods 6000/7000. Four samples in which the lead and chromium concentrations were greater than 10 times their respective regulatory soluble concentration limits (5 parts per million for both chromium and lead) were also analyzed by the California Waste Extraction Test to determine the actual soluble concentrations.

TPH as gasoline and VOCs were not detected in any of the samples. TPH was detected in all of the samples except those from SB2, at concentrations ranging up to 21,000 parts per million (ppm). In borings SB3 through SB5, TPH was detected only in the samples collected from one foot below grade, and was non-detectable at 5 feet below grade. In boring SB1, TPH was detected at both one and five feet below grade at concentrations of 2,000 and 6,300 ppm, respectively (increasing with depth). RMT concluded that the contamination in SB1 is "likely the result of leaks from deteriorated below grade piping from the former sump. However, since the impacts are limited to the diesel to waste oil range, the impacts are likely to be limited to the upper 10 ft due to slow migration of heavy end petroleum hydrocarbons". Although excavation of soils to 10 feet were proposed for this area in RMT's November 29, 2001 report, this excavation was not completed. PIERS recommended that prior to further excavation in this area, an additional boring be completed to define the vertical extent of the oil contamination.

PIERS also recommended that additional subsurface exploration be conducted at and near the small concrete slab located in the storage yard. The slab appears to correspond to the oil storage area shown on the 1950 Sanborn Fire Insurance Map, and had not been previously investigated.

Antimony, beryllium, molybdenum, selenium silver, and thallium were non-detectable in all of the soil samples obtained from the RMT borings. The concentrations of the other metals in soil at the Property were compared by PIERS to risk-based screening levels (RBSLs) contained in the RWQCB Interim Final document "Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater", dated December, 2001. The RBSLs were developed to address environmental protection goals presented in the "Basin Plan" for the San Francisco Bay, including (for surface water and groundwater) protection of drinking water resources; protection of human health; protection of aquatic and terrestrial biota; and protection against adverse nuisance conditions. The RBSLs used in this comparison are those from Table "A" for shallow soils in areas where groundwater is to be protected. The concentrations of metals in soil at the Property were also compared to the Preliminary Remediation Goals (PRGs) established by the Department of Toxic Substances Control (DTSC).

All of the metal concentrations in soil at the Property are below both the residential and commercial RBSLs and PRGs, except for arsenic, cadmium, and lead. The lowest regulatory limit value for lead in soil is the RBSL for residential use of 200 ppm. Lead was detected in only one sample at a concentration exceeding 200 ppm. This sample location was at SB-2 at one foot below grade, which was later excavated (see discussion below). Lead was greatly attenuated at the sample collected at SB–2 at five feet below grade, where it was measured at a concentration of 21 ppm. Based on these findings, the lead concentrations identified in the soil samples from RMT's borings appeas to have been successfully mitigated, in PIERS opinion.

The RBSLs and the PRGs for arsenic in soil are identical, and are 0.39 ppm for residential usage, and 2.7 ppm for commercial usage. Ten of the soil samples at the Property had concentrations of arsenic in excess of the residential value, and four samples were in excess of the commercial value. The maximum concentration of arsenic in the Property soils was in SB-3 at 1 foot below grade, where it was present at a concentration of 5.2 ppm. The arsenic concentrations are relatively consistent, ranging from 1.2 to 5.2 ppm, and are within the range of background concentrations. Therefore, the occurrence of arsenic at the Property was considered to be naturally occurring background concentrations and was not recommended for any further investigation.

One sample (SB4-1) contained a concentration of cadmium of 12 ppm, which is above the residential RBSL of 7.4 ppm, and equal to the commercial RBSL of 12 ppm. However, this material was excavated and removed from the site, and all of the other samples, including one sample from boring SB4 at 5 feet below grade, were non-detectable for cadmium.

Based on the findings from RMT's five soil borings, and as documented in RMT's report entitled "Soil Excavation and Disposal Activities" dated August 21, 2001, two areas at the Property were excavated by RMT to remove soils impacted by lead and hydrocarbons. These areas included a pit of approximately 11 feet by 6 feet wide and 3 feet deep at the former waste oil storage area (hydrocarbon impacts) in the storage yard, and an area approximately 4 feet by 4 feet wide by 5 feet deep at the lathe equipment area (lead impacts). After cutting open the concrete floor at the lathe equipment area, debris, including engine block gaskets, oil pans, and metal, was encountered immediately beneath the floor. These kinds of materials were apparently also found in the excavation at the waste oil storage area. A total of approximately 16 cubic yards of soil was transported to a landfill at Kettleman City, California. No confirmation samples were taken on the sidewalls of either of the two excavations, apparently because the encountered soils were believed to be contaminated from previous uses unrelated to Property activities. Also, the excavation completed outside the building appears to have been completed to the practical limit on the two sides adjacent to the building. The confirmation samples for the limits of the excavation vertically were established by the lower samples taken at five feet in the borings in these areas. Based on the lead concentration of 21 ppm in boring SB-2 in the lathe equipment area at 5 feet, below regulatory limits, and the non-detectable concentrations of TPH at 5 feet in borings SB-4 and SB-5, in the waste oil storage area, the vertical extent of these excavations appears to be appropriate, however, confirmation of the residual contaminants at the lateral extent of these excavations was recommended.

The RMT report references a "Draft Environmental Impact Report – Alameda Point General Plan Amendment" dated November 2001, in support of their assertion that the debris underlying the Property is from previous uses unrelated to Property activities. PIERS reviewed this report, and found no specific information that could be used to determine the source of the materials underlying the Property, because the Alameda Point area does not include the area of the Property.

To establish what residual contamination at the Property can be attributed to landfill materials that preceded Property activities, and to define a scope of work that will lead to site certification (closure), PIERS also recommended that the Property consult with the Department of Toxic Substances Control and/or the Alameda County Health Care Services Agency regarding obtaining agency oversight through a Voluntary Cleanup Program.

RECENT FIELD ACTIVITIES

On December 2, 2002, thirteen borings were completed at the Property using hand auger tools and a Geoprobe drill rig provided by Vironex, Inc., of San Leandro, a California-licensed driller. Prior to drilling, a permit was obtained from the Alameda County Department of Public Works. The locations of the borings are shown on Figure 2.

Borings SB6A through SB6E were advanced near the former sump and previous boring SB1. All of these borings except for SB6E were completed by hand auger due to overhead access limitations. Boring SB6A was proposed to determine if groundwater was impacted near the sump; however, the boring could only be extended to six feet below grade by hand auger, and water did not collect in the borehole. Borings SB6B through SB6D were extended to three feet below grade, where an obstruction that appeared to be a concrete slab was encountered. Boring SB6E was located just outside the garage door and was completed using the Geoprobe drill rig. This boring was extended to 12 feet below grade, to allow collection of a groundwater sample at the closest accessible location near the sump.

Soil samples were collected by hand auger for borings SB6B through SB6D at approximately 0.5 to one foot below grade, just below the slab, and at 2.5 feet below grade. Soil samples were collected by Geoprobe for boring SB6E from one and six feet below grade. A groundwater sample was also collected from SB6E.

The soils encountered in boring SB6E consisted predominantly of fine-grained silty sand with debris indicative of fill materials (fragments of brick and concrete) to a depth of approximately 6.3 feet below grade, where apparent native fine-grained silty sand was encountered. The soils were saturated at approximately 6.5 feet below grade. Dark staining and hydrocarbon odors were observed at approximately six feet below grade, which would correspond to the capillary fringe zone.

Slotted PVC casing was placed in boring SB6E to facilitate sample collection. The groundwater is likely under tidal influence, and was measured during sample collection in this boring at approximately eleven feet below grade. PVC casing was also placed in boring SB6A to six feet below grade, however, no groundwater collected in that boring.

Borings SB7 through SB10 were advanced in the outside storage yard area using the Geoprobe drill rig. Borings SB7 and SB8 were advanced to provide lateral confirmation sampling for previous excavation work to five feet below grade in a former oil storage area. The previous excavation was completed to the practical limit where adjacent to the building, and no sampling was proposed on those two sides. Boring SB8, as well as SB9 and SB10, also investigated a former oil storage area shown on Sanborn maps. All of these borings except SB9 were advanced to a depth of approximately six feet below grade, and soil samples were collected at one and five feet below grade. SB9 was also sampled at one and five feet below grade for soil, and then extended to twelve feet below grade. Slotted PVC casing was installed in SB9 to facilitate collection of a groundwater sample. Groundwater was encountered at approximately nine feet below grade, and a groundwater sample was collected. As in SB6E, the soils were saturated below approximately six feet, although groundwater was measured deeper, possibly due to tidal influence.

To provide lateral confirmation sampling at the former lathe equipment area, four hand auger borings were advanced to a depth of one foot below grade (SB11 through SB14). Soil samples were collected just below the slab at approximately 0.5 feet below grade, and were analyzed for Total Lead. Because odors of hydrocarbons were observed in SB11 and SB12, these samples were also analyzed for hydrocarbons.

The soil conditions encountered in the borings were generally consistent, and consisted of silty sand with brick and concrete debris indicative of fill materials to approximately two to 2.5 feet below grade, which was underlain by apparently native, silty sand. The fill material appeared to extend to approximately 6.3 feet below grade in boring SB6E. The soils were generally saturated below approximately six feet below grade, and stained capillary fringe soils were observed at approximately five feet below grade in all of the borings that extended below five feet.

The soil samples from the hand auger borings were obtained by inserting brass liners directly into the soil retrieved by a hand auger. The liners were then sealed with Teflon-lined plastic caps, labeled, and placed in individually sealed plastic bags, which were then stored in a cooler, on ice, until delivery to a state-certified laboratory. Prior to each use, the hand auger tool was cleaned by triple rinsing with water using a non-phosphate detergent.

In the borings installed with the Geoprobe, relatively undisturbed soil samples were collected by hydraulically driving a sampling tool lined with a plastic liner. The soil samples selected for laboratory analyses were cut from the continuous core and contained in the plastic liner. The liners were then sealed with Teflon-lined plastic caps, labeled, and placed in individually sealed plastic bags, which were then stored in a cooler, on ice, until delivery to a state-certified laboratory. Prior to each use, the drill rods and sampling tool were cleaned by triple rinsing with water using a non-phosphate detergent.

ANALYTICAL RESULTS

The soil samples were analyzed by North State Analytical Laboratory in South San Francisco, California, a California state-certified Hazardous Material Testing Laboratory. All samples analyzed were accompanied by properly executed Chain of Custody documentation. Selected soil samples from borings SB6C and SB6D, and SB7 through SB12, and the groundwater samples from SB6E and SB9, were analyzed by EPA Method 8015 – Modified for Total Petroleum Hydrocarbons (TPH) as diesel, motor oil, and stoddard solvent. The soil samples collected from SB11 and SB12 were also analyzed for Total Lead. Where solvent-like odors in soil were encountered, the samples were also analyzed for EPA Method 8010 constituents. The groundwater sample from SB6E, near the former sump, was also analyzed for EPA Method 8010 constituents.

The analytical results are summarized on Tables 1 and 2. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

DISCUSSION

"Risk-Based Screening Levels" (RBSLs) for concentrations of contaminants in soils and groundwater have been established by the Regional Water Quality Control Board (RWQCB). These levels are used to determine the relative risks to human health and the environment. Generally the presence of a chemical in soil or groundwater at concentrations below the corresponding RBSL can be assumed to not pose a significant threat to human health or the environment. The RBSLs for soil differentiate between residential and commercial usage, although in some cases the values are the same. The RBSLs for the analytes for this investigation are shown on Tables 1 and 2.

Borings SB11 and SB12 were installed to provide lateral delineation around an area formerly excavated to dispose of lead-impacted soils. Soil samples obtained from these borings indicated concentrations of lead below the residential and commercial RBSLs. No further investigation for lead impacts to soil appears warranted. However, based on odors encountered during drilling, these samples were also analyzed for diesel, motor oil, and stoddard solvent, and were found to contain concentrations in excess of the residential and commercial RBSLs, in particular at SB12 at 0.5 feet, where diesel and motor oil were present at concentrations of 2,070 ppm and 15,600 ppm, respectively.

Low concentrations of toluene, ethylbenzene, and xylenes were detected in SB6C (0.5 feet) and in a composite sample of soils from SB10 and SB11. As these concentrations were below both the residential and commercial RBSLs, further investigation for gasoline constituents at the Property does not appear warranted.

In addition to borings SB11 and SB12, elevated concentrations of diesel and motor oil in excess of both the residential and commercial RBSLs were encountered in SB6D (2.5 ft) and at SB7 (1 ft). A concentration of motor oil in excess of the residential RBSL but less than the commercial RBSL was encountered in SB6C (2.5 ft).

While a groundwater sample could not be obtained directly adjacent to the sump due to overhead restrictions, a sample was obtained approximately eight feet away from SB6D, which had the highest concentrations of diesel and motor oil of the borings completed around the sump. The groundwater sample yielded non-detectable concentrations of diesel and motor oil. Toluene, 1,2,4 – trimethylbenzene, and napthalene were detected at concentrations of 1, 2, and 3 parts per billion (ppb), respectively. The occurrences of toluene and napthalene were below their respective RBSLs. All other EPA Method 8010 constituents were non-detectable.

A groundwater sample was also collected at SB9, at a former oil storage area. The soil sample collected from one foot below grade from this boring yielded non-detectable concentrations of diesel, and 182 ppm of motor oil, below the RBSL. The groundwater sample was non-detectable for diesel and motor oil.

CONCLUSIONS

The constituents of concern that have been identified in the borings completed at the Property during this investigation consist of diesel and motor oil. Further investigation of other constituents does not appear warranted. The diesel and motor oil was not detected in groundwater, but was detected in shallow soils at concentrations above the RBSLs in the area around the former sump (SB6C and SB6D) and former lathe area (SB11 and SB12), and in the outside storage yard at SB7.

RECOMMENDATIONS

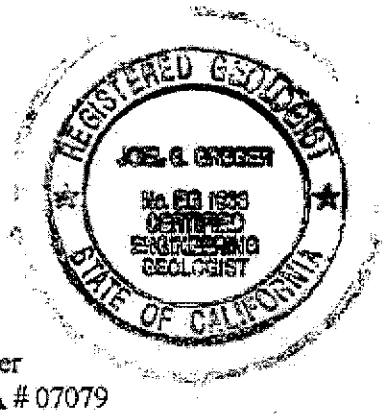
Excavation and removal of the hydrocarbon-impacted soils in the vicinity of the former sump and former lathe area, and in the vicinity of SB7, should be performed. Confirmation sampling of the excavation sidewalls and bottom should be performed at these excavations to confirm that the residual concentrations of diesel and motor oil in the remaining soils are below the RBSLs. An estimate to complete this work can be provided at your request.

LIMITATIONS

The observations and conclusions presented in this report are professional opinions based on the scope of work outlined herein. This report was prepared in accordance with generally accepted standards of environmental geological practice in California at the time this investigation was performed. The opinions presented apply to site conditions existing at the time of our study and cannot apply to site conditions or changes of which we are not aware or have not had the opportunity to evaluate. This investigation was conducted solely to evaluate environmental conditions beneath the Property at specific locations. Subsurface conditions may vary away from the data points available. Additional work, including subsurface investigation, can reduce the inherent uncertainties associated with this type of investigation. It must be recognized that any conclusions drawn from these data rely on the integrity of the information available at the time of investigation and that a full and complete determination of environmental contamination and risks cannot be made.

If you have any questions regarding this report, please do not hesitate to contact our office.

Sincerely,
PIERS Environmental Services, Inc.



Joel G. Greger
Senior Project Manager
CEG # EG1633, REA # 07079

Kay Pannell
Chief Operations Officer
REP# 05800

Attachments

Tables 1 and 2
Figures 1 and 2
Laboratory Analytical Data Sheets and Chain of Custody

TABLE 1
SOIL ANALYTICAL RESULTS
762 Stewart Court, Alameda, CA

Samples collected on December 2, 2002

Sample/ Depth (feet)	TPH-diesel ppm	TPH-mo ppm	Lead ppm	Toluene ppm	Ethylbenzene ppm	Total xylenes ppm
SB6C (0.5')*	120	276	NA	0.064	0.039	0.244
SB6C (2.5')	314	850	NA	NA	NA	NA
SB6D (2.5')	9,290	4,430	NA	NA	NA	NA
SB7 (1')	<1	1,980	NA	NA	NA	NA
SB7 (5')	<1	137	NA	NA	NA	NA
SB8 (5')	<1	<10	NA	NA	NA	NA
SB9 (1')	<1	182	NA	NA	NA	NA
SB10 (1')	<1	471	NA	NA	NA	NA
SB10 (5')	<1	<10	NA	NA	NA	NA
SB11 (0.5')	1,330	9,290	170	NA	NA	NA
SB12 (0.5')	2,070	15,600	112	NA	NA	NA
SB10/11	333	2,450	NA	<0.005	0.016	0.014
Composite**						
RBSL: Res./	500/1,000	500/1,000	200/750	8.4/8.4	24/24	1.0/1.0
Commercial						

Results are given in parts per million (ppm).

TPH as stoddard solvent was non-detectable in all samples.

* The following other EPA Method 8260 compounds were also detected: 0.006 ppm of 1.2,4-trimethylbenzene, and 0.011 ppm of napthalene.

* * The following other EPA Method 8260 compounds were also detected: 0.007 ppm of 1,3,5-trimethylbenzene, and 0.002 ppm of n-Butylbenzene.

RBSL = Risk-Based Screening Level from Table B. Groundwater is not a potential or current source of drinking water.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
762 Stewart Court, Alameda, CA

Samples collected on December 2, 2002

Sample	TPH-diesel ppb	TPH-mo ppb	Toluene ppb	1,2,4-Tri-methylbenzene	Napthalene ppb
SB6E	<50	<500	1	2	3
SB9	<50	<500	NA	NA	NA
RBSL	640	640	130	not available	24

Results given in parts per billion (ppb)

TPH as stoddard solvent was not detected in either sample.

RBSL = Risk-Based Screening Level from Table B. Groundwater is not a potential or current source of drinking water.

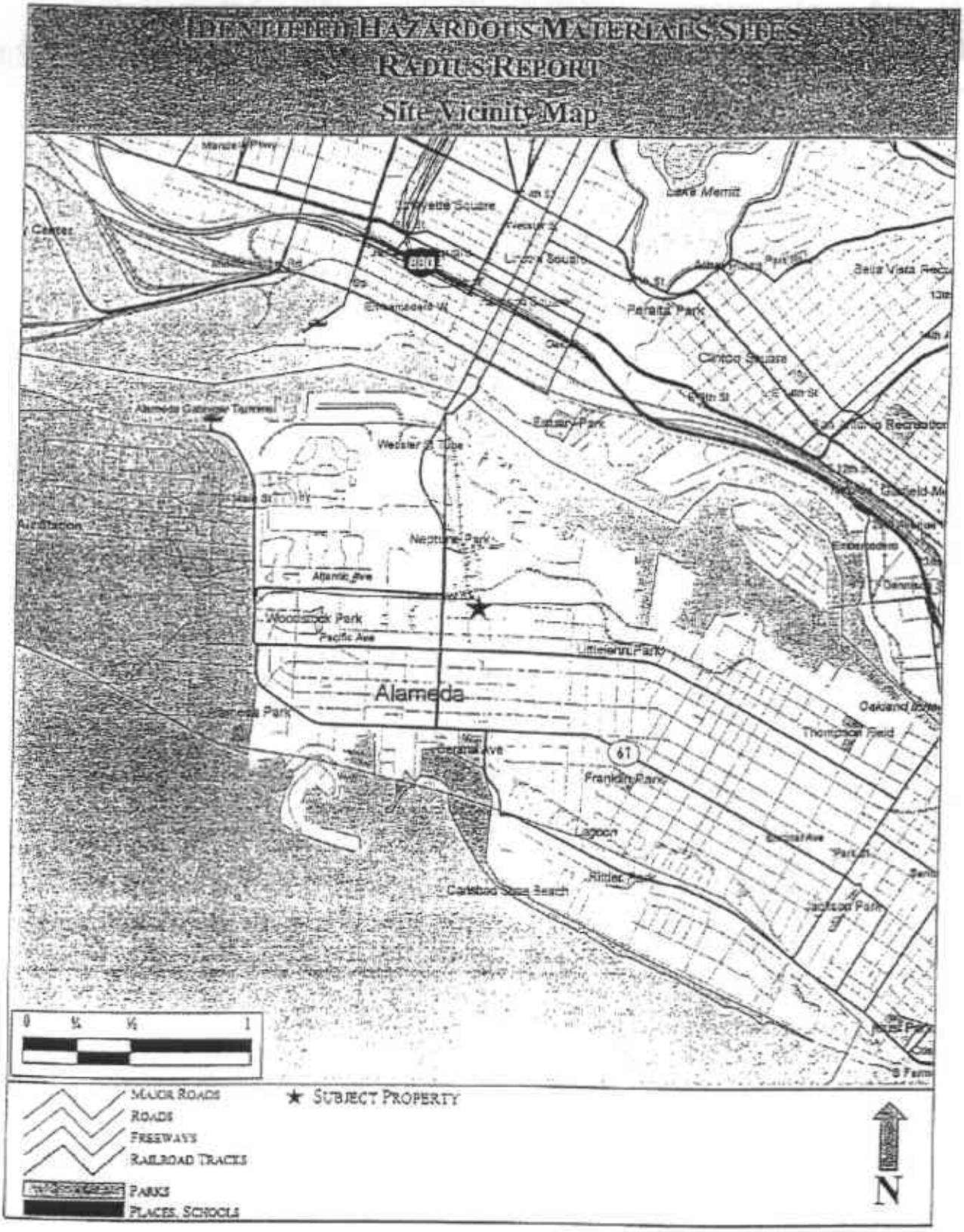


FIGURE 1
PROPERTY VICINITY MAP

762 STEWART COURT
ALAMEDA, CALIFORNIA

NOT TO SCALE
DECEMBER 2002

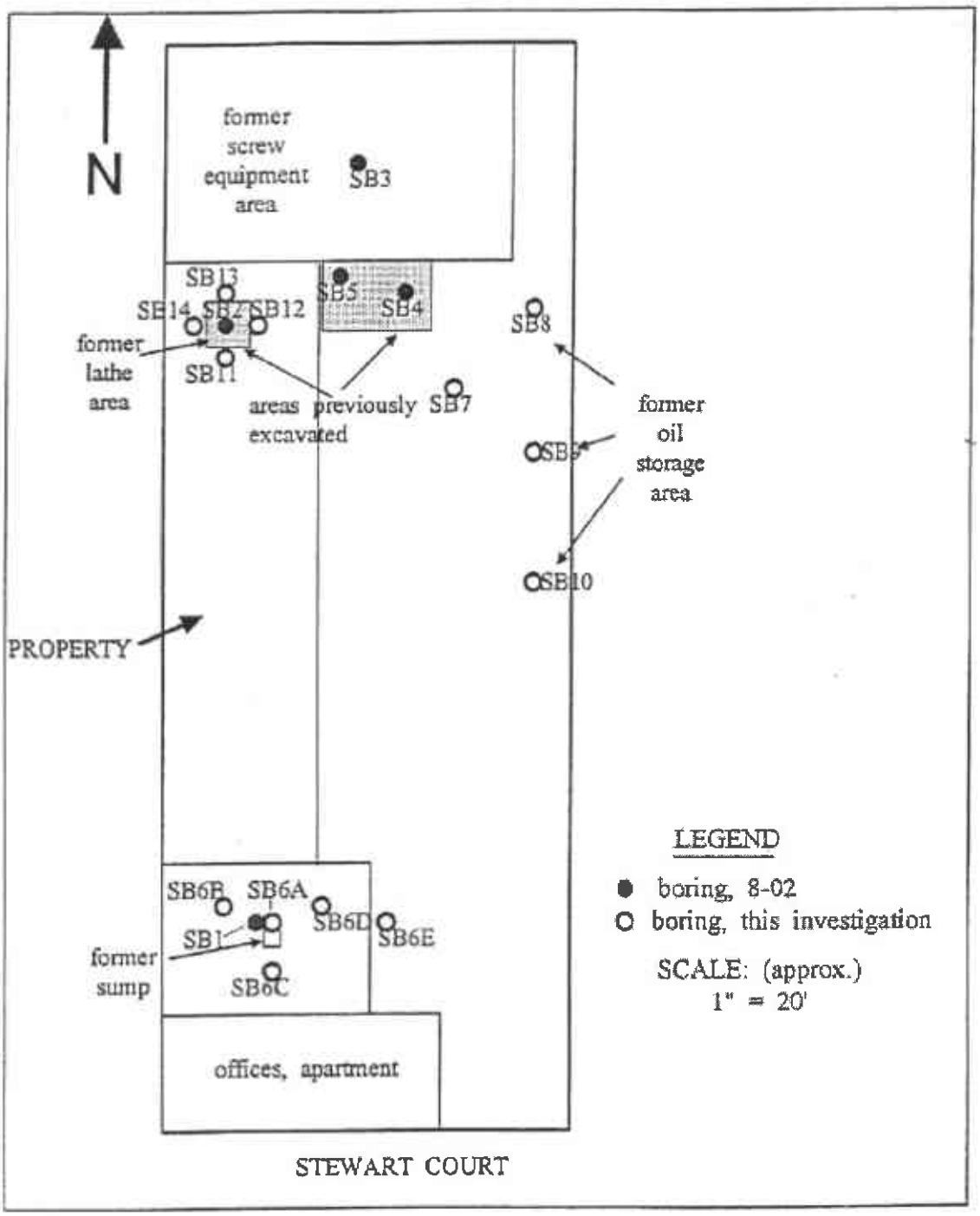


FIGURE 2
PROPERTY SITE PLAN

762 STEWART COURT
ALAMEDA, CALIFORNIA

DECEMBER 2002

PIERS ENVIRONMENTAL SERVICES, INC. 1330 S. BASCOM AVE., SUITE F, SAN JOSE, CA 95128
PHONE: 408-559-1248 FAX: 408-559-1224 WWW.PIERSES.COM

ATTACHMENT A
LABORATORY ANALTYICAL DATA SHEETS
AND CHAIN OF CUSTODY

North State Labs
CA ELAP# 1753
90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560

CERTIFICATE OF ANALYSIS

Lab Number: 02-1738
Client: PIERS Environmental
Project: 762 STEWART CT, ALAMEDA

Date Reported: 12/11/2002

Diesel, Motor Oil Hydrocarbons by Method CATFH
Total Petroleum Hydrocarbons (TPH) as Stoddard Solvent
Lead by Method 6010B ICAP

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 02-1738-01 Client ID: SB6C (0.5')				12/02/2002	SO
Diesel Fuel #2	CATFH	120	MG/KG		12/06/2002
Motor Oils	CATFH	276	MG/KG		12/06/2002
Stoddard	CATFH	ND<1	MG/KG		12/06/2002
Sample: 02-1738-02 Client ID: SB6C (2.5')				12/02/2002	SO
Diesel Fuel #2	CATFH	314	MG/KG		12/06/2002
Motor Oils	CATFH	850	MG/KG		12/06/2002
Stoddard	CATFH	ND<1	MG/KG		12/06/2002
Sample: 02-1738-03 Client ID: SB6D (2.5')				12/02/2002	SO
Diesel Fuel #2	CATFH	9290	MG/KG		12/09/2002
Motor Oils	CATFH	4430	MG/KG		12/09/2002
Stoddard	CATFH	ND<25	MG/KG		12/09/2002
Sample: 02-1738-04 Client ID: SB6E WATER				12/02/2002	W
Diesel Fuel #2	CATFH	ND<0.05	MG/L		12/07/2002
Motor Oils	CATFH	ND<0.5	MG/L		12/07/2002
Stoddard	CATFH	ND<0.05	MG/L		12/07/2002

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C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 02-1738
Client: PIERS Environmental
Project: 762 STEWART CT, ALAMEDA

Date Reported: 12/11/2002

Diesel, Motor Oil Hydrocarbons by Method CATFH
Total Petroleum Hydrocarbons (TPH) as Stoddard Solvent
Lead by Method 6010B ICAP

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 02-1738-05 Client ID: SB7 (1')				12/02/2002	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		12/06/2002
Motor Oils	CATFH	1980	MG/KG		12/06/2002
Stoddard	CATFH	ND<1	MG/KG		12/06/2002
Sample: 02-1738-06 Client ID: SB7 (5')				12/02/2002	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		12/06/2002
Motor Oils	CATFH	137	MG/KG		12/06/2002
Stoddard	CATFH	ND<1	MG/KG		12/06/2002
Sample: 02-1738-07 Client ID: SB8 (5')				12/02/2002	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		12/06/2002
Motor Oils	CATFH	ND<10	MG/KG		12/06/2002
Stoddard	CATFH	ND<1	MG/KG		12/06/2002
Sample: 02-1738-08 Client ID: SB9 (1')				12/02/2002	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		12/06/2002
Motor Oils	CATFH	182	MG/KG		12/06/2002
Stoddard	CATFH	ND<1	MG/KG		12/06/2002

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CERTIFICATE OF ANALYSIS

Lab Number: 02-1738
Client: PIERS Environmental
Project: 762 STEWART CT, ALAMEDA

Date Reported: 12/11/2002

Diesel, Motor Oil Hydrocarbons by Method CATFH
Total Petroleum Hydrocarbons (TPH) as Stoddard Solvent
Lead by Method 6010B ICAP

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 02-1738-09 Client ID: SB9 (WATER)				12/02/2002	W
Diesel Fuel #2	CATFH	ND<0.05	MG/L		12/07/2002
Motor Oils	CATFH	ND<0.5	MG/L		12/07/2002
Stoddard	CATFH	ND<0.05	MG/L		12/07/2002
Sample: 02-1738-10 Client ID: SB10 (1')				12/02/2002	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		12/07/2002
Motor Oils	CATFH	471	MG/KG		12/07/2002
Stoddard	CATFH	ND<1	MG/KG		12/07/2002
Sample: 02-1738-11 Client ID: SB10 (5')				12/02/2002	SO
Diesel Fuel #2	CATFH	ND<1	MG/KG		12/07/2002
Motor Oils	CATFH	ND<10	MG/KG		12/07/2002
Stoddard	CATFH	ND<1	MG/KG		12/07/2002
Sample: 02-1738-12 Client ID: SB11 (0.5')				12/02/2002	SO
Lead	SW7420	170	MG/KG		12/10/2002
Diesel Fuel #2	CATFH	1330	MG/KG		12/09/2002
Motor Oils	CATFH	9290	MG/KG		12/09/2002
Stoddard	CATFH	ND<20	MG/KG		12/09/2002

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C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 02-1738
Client: PIERS Environmental
Project: 762 STEWART CT, ALAMEDA

Date Reported: 12/11/2002

Diesel, Motor Oil Hydrocarbons by Method CATFH
Total Petroleum Hydrocarbons (TPH) as Stoddard Solvent
Lead by Method 6010B ICAP

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 02-1738-13 Client ID: SB12 (0.5')				12/02/2002	SO
Lead	SW7420	112	MG/KG		12/10/2002
Diesel Fuel #2	CATFH	2070	MG/KG		12/09/2002
Motor Oils	CATFH	15600	MG/KG		12/09/2002
Stoddard	CATFH	ND<25	MG/KG		12/09/2002
Sample: 02-1738-14 Client ID: SB10+11 COMP				12/02/2002	SO
Diesel Fuel #2	CATFH	333	MG/KG		12/07/2002
Motor Oils	CATFH	2450	MG/KG		12/07/2002
Stoddard	CATFH	ND<1	MG/KG		12/07/2002

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CERTIFICATE OF ANALYSIS

Quality Control/Quality Assurance

Lab Number: 02-1738
Client: PIERS Environmental
Project: 762 STEWART CT, ALAMEDA

Date Reported: 12/11/2002
Diesel, Motor Oil Hydrocarbons by Method CATFH
Total Petroleum Hydrocarbons (TPH) as Stoddard Solvent
Lead by Method 6010B ICAP

Analyte	Method	Reporting Limit	Unit	Blank	Avg MS/MSD Recovery	RPD
Diesel Fuel #2	CATFH	1	MG/KG	ND	94/100	6
Stoddard	CATFH	1	MG/KG	ND	NA	NA
Motor Oils	CATFH	10	MG/KG	ND	NA	NA
Diesel Fuel #2	CATFH	0.05	MG/L	ND	94/100	6
Stoddard	CATFH	0.05	MG/L	ND	NA	NA
Motor Oils	CATFH	0.5	MG/L	ND	NA	NA
Lead	SW7420	1.0	MG/KG	ND<1.0	100/103	3

ELAP Certificate NO:1753
Reviewed and Approved

John A. Murphy, Laboratory Director

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C E R T I F I C A T E O F A N A L Y S I S

Job Number: 02-1738
Client : PIERS Environmental
Project : 762 STEWART CT. ALAMEDA

Date Sampled : 12/02/2002
Date Analyzed: 12/09/2002
Date Reported: 12/11/2002

Volatile Organics by GC/MS Method 8260

Laboratory Number	02-1738-01	02-1738-14
Client ID	SB6C (0.5')	SB10+11 COMP
Matrix	SO	SO
Analyte	UG/KG	UG/KG
Bromochloromethane	ND<25	ND<25
Dichlorodifluoromethane	ND<25	ND<25
Chloromethane	ND<50	ND<50
Vinyl chloride	ND<25	ND<25
Bromomethane	ND<25	ND<25
Chloroethane	ND<25	ND<25
Trichlorofluoromethane	ND<25	ND<25
1,1-Dichloroethene	ND<5	ND<5
Acetone	ND<250	ND<250
Methylene chloride	ND<250	ND<250
trans-1,2-Dichloroethene	ND<5	ND<5
Methyl-tert-butyl ether	ND<5	ND<5
1,1-Dichloroethane	ND<5	ND<5
2,2-Dichloropropane	ND<5	ND<5
cis-1,2-Dichloroethene	ND<5	ND<5
2-Butanone	ND<50	ND<50
Chloroform	ND<5	ND<5
Carbon tetrachloride	ND<5	ND<5
1,1-Dichloropropene	ND<5	ND<5
Benzene	ND<5	ND<5
1,2-Dichloroethane	ND<5	ND<5
Trichloroethene	ND<5	ND<5
1,2-Dichloropropane	ND<5	ND<5
Dibromomethane	ND<5	ND<5
Bromodichloromethane	ND<5	ND<5
trans-1,3-Dichloropropene	ND<5	ND<5
4-Methyl-2-pentanone	ND<50	ND<50
Toluene	64	ND<5
cis-1,3-Dichloropropene	ND<5	ND<5
1,1,2-Trichloroethane	ND<5	ND<5
Tetrachloroethene	ND<5	ND<5
1,3-Dichloropropane	ND<5	ND<5
2-Hexanone	ND<50	ND<50
Dibromochloromethane	ND<5	ND<5
1,2-Dibromoethane	ND<5	ND<5

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CERTIFICATE OF ANALYSIS

Job Number: 02-1738
Client : PIERS Environmental
Project : 762 STEWART CT, ALAMEDA

Date Sampled : 12/02/2002
Date Analyzed: 12/09/2002
Date Reported: 12/11/2002

Volatile Organics by GC/MS Method 8260

Laboratory Number	02-1738-01	02-1738-14
Client ID	SB6C (0.5')	SB10+11 COMP
Matrix	SO	SO
Analyte	UG/KG	UG/KG
Chlorobenzene	ND<10	ND<10
1,1,1,2-Tetrachloroethane	ND<5	ND<5
Ethylbenzene	39	16
Xylene, Isomers m & p	188	14
o-Xylene	56	ND<5
Styrene	ND<5	ND<5
Bromoform	ND<5	ND<5
Isopropylbenzene	ND<5	ND<5
Bromobenzene	ND<5	ND<5
1,1,2,2-Tetrachloroethane	ND<5	ND<5
n-Propylbenzene	ND<5	ND<5
2-Chlorotoluene	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5
1,3,5-Trimethylbenzene	ND<5	7
tert-Butylbenzene	ND<5	ND<5
1,2,4-Trimethylbenzene	6	ND<5
1,3-Dichlorobenzene	ND<5	ND<5
1,4-Dichlorobenzene	ND<5	ND<5
sec-Butylbenzene	ND<5	ND<5
1,2-Dichlorobenzene	ND<5	ND<5
n-Butylbenzene	ND<5	6
Naphthalene	11	ND<10
1,2,4-Trichlorobenzene	ND<5	ND<5
Hexachlorobutadiene	ND<5	ND<5
1,2,3-Trichlorobenzene	ND<5	ND<5
1,2,3-Trichloropropane	ND<5	ND<5
Acetonitrile	ND<250	ND<250
Acrylonitrile	ND<250	ND<250
Isobutanol	ND<250	ND<250
1,1,1-Trichloroethane	ND<5	ND<5
SUR-Dibromofluoromethane	96	99
SUR-Toluene-d8	99	89
SUR-4-Bromofluorobenzene	90	95

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C E R T I F I C A T E O F A N A L Y S I S

Job Number: 02-1738
Client : PIERS Environmental
Project : 762 STEWART CT, ALAMEDA

Date Sampled : 12/02/2002
Date Analyzed: 12/09/2002
Date Reported: 12/11/2002

Volatile Organics by GC/MS Method 8260
Quality Control/Quality Assurance Summary

Laboratory Number	02-1738	MS/MSD	RPD	Recovery	RPD
Client ID	Blank	Recovery		Limit	Limit
Matrix	SO	SO			
Analyte	Results UG/KG	%Recoveries			
Bromochloromethane	ND<25				
Dichlorodifluoromethane	ND<25				
Chloromethane	ND<50				
Vinyl chloride	ND<5				
Bromomethane	ND<25				
Chloroethane	ND<25				
Trichlorofluoromethane	ND<25				
1,1-Dichloroethene	ND<5	78/77	1	54-155	27
Acetone	ND<250				
Methylene chloride	ND<250				
trans-1,2-Dichloroethene	ND<5				
Methyl-tert-butyl ether	ND<5				
1,1-Dichloroethane	ND<5				
2,2-Dichloropropane	ND<5				
cis-1,2-Dichloroethene	ND<5				
2-Butanone	ND<50				
Chloroform	ND<5				
Carbon tetrachloride	ND<5				
1,1-Dichloropropene	ND<5				
Benzene	ND<5	110/112	2	72-122	22
1,2-Dichloroethane	ND<5				
Trichloroethene	ND<5	106/112	6	68-122	20
1,2-Dichloropropane	ND<5				
Dibromomethane	ND<5				
Bromodichloromethane	ND<5				
trans-1,3-Dichloropropene	ND<5				
4-Methyl-2-pentanone	ND<50				
Toluene	ND<5	112/118	5	73-125	27
cis-1,3-Dichloropropene	ND<5				
1,1,2-Trichloroethane	ND<5				
Tetrachloroethene	ND<5				
1,3-Dichloropropane	ND<5				
2-Hexanone	ND<50				
Dibromochloromethane	ND<5				
1,2-Dibromoethane	ND<5				
Chlorobenzene	ND<10	134/133	3	80-135	21
1,1,1,2-Tetrachloroethene	ND<5				
Ethylbenzene	ND<5				
Xylene, Isomers m & p	ND<10				
o-Xylene	ND<5				
Styrene	ND<5				

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Job Number: 02-1738
Client : PIERS Environmental
Project : 762 STEWART CT, ALAMEDA

Date Sampled : 12/02/2002
Date Analyzed: 12/09/2002
Date Reported: 12/11/2002

Volatile Organics by GC/MS Method 8260
Quality Control/Quality Assurance Summary

Laboratory Number	02-1738	MS/MSD	RPD	Recovery	RPD
Client ID	Blank	Recovery		Limit	Limit
Matrix	SO	SO			
Analyte	Results UG/KG	%Recoveries			
Bromoform	ND<5				
Isopropylbenzene	ND<5				
Bromobenzene	ND<5				
1,1,2,2-Tetrachloroethane	ND<5				
n-Propylbenzene	ND<5				
2-Chlorotoluene	ND<5				
4-Chlorotoluene	ND<5				
1,3,5-Trimethylbenzene	ND<5				
tert-Butylbenzene	ND<5				
1,2,4-Trimethylbenzene	ND<5				
1,3-Dichlorobenzene	ND<5				
1,4-Dichlorobenzene	ND<5				
sec-Butylbenzene	ND<5				
1,2-Dichlorobenzene	ND<5				
n-Butylbenzene	ND<5				
Naphthalene	ND<10				
1,2,4-Trichlorobenzene	ND<5				
Hexachlorobutadiene	ND<5				
1,2,3-Trichlorobenzene	ND<5				
1,2,3-Trichloropropane	ND<5				
Acetonitrile	ND<250				
Acrylonitrile	ND<250				
Isobutanol	ND<250				
1,1,1-Trichloroethane	ND<5				
SUR-Dibromofluoromethane	98	90/89	1	54-145	23
SUR-Toluene-d8	87	95/98	3	81-138	14
SUR-4-Bromofluorobenzene	99	93/97	4	82-118	18

Reviewed and Approved

John A. Murphy
Laboratory Director

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CERTIFICATE OF ANALYSIS

Job Number: 02-1738
Client : PIERS Environmental
Project : 762 STEWART CT. ALAMEDA

Date Sampled : 12/02/2002
Date Analyzed: 12/07/2002
Date Reported: 12/11/2002

Volatile Organics by GC/MS Method 8260

Laboratory Number	02-1738-04
Client ID	SB6S WATER
Matrix	W
Analyte	UG/L
Bromochloromethane	ND<5
Dichlorodifluoromethane	ND<5
Chloromethane	ND<10
Vinyl chloride	ND<5
Bromomethane	ND<5
Chloroethane	ND<5
Trichlorofluoromethane	ND<5
1,1-Dichloroethene	ND<1
Acetone	ND<50
Methylene chloride	ND<50
trans-1,2-Dichloroethene	ND<1
Methyl-tert-butyl ether	ND<1
1,1-Dichloroethane	ND<1
2,2-Dichloropropane	ND<1
cis-1,2-Dichloroethene	ND<1
2-Butanone	ND<10
Chloroform	ND<1
Carbon tetrachloride	ND<1
1,1-Dichloropropene	ND<1
Benzene	ND<1
1,2-Dichloroethane	ND<1
Trichloroethene	ND<2
1,2-Dichloropropane	ND<1
Dibromomethane	ND<1
Bromodichloromethane	ND<1
trans-1,3-Dichloropropene	ND<1
4-Methyl-2-pentanone	ND<10
Toluene	1.
cis-1,3-Dichloropropene	ND<1
1,1,2-Trichloroethane	ND<1
Tetrachloroethene	ND<1
1,3-Dichloropropane	ND<1
2-Hexanone	ND<10
Dibromochloromethane	ND<1
1,2-Dibromoethane	ND<1

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Job Number: 02-1738
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Project : 762 STEWART CT, ALAMEDA

Date Sampled : 12/02/2002
Date Analyzed: 12/07/2002
Date Reported: 12/11/2002

Volatile Organics by GC/MS Method 8260

Laboratory Number	02-1738-04
Client ID	S26E WATER
Matrix	W
Analyte	UG/L
Chlorobenzene	ND<2
1,1,1,2-Tetrachloroethane	ND<1
Ethylbenzene	ND<1
Xylene. Isomers m & p	ND<2
o-Xylene	ND<1
Styrene	ND<1
Bromoform	ND<1
Isopropylbenzene	ND<1
Bromobenzene	ND<1
1,1,2,2-Tetrachloroethane	ND<1
n-Propylbenzene	ND<1
2-Chlorotoluene	ND<1
4-Chlorotoluene	ND<1
1,3,5-Trimethylbenzene	ND<1
tert-Butylbenzene	ND<1
1,2,4-Trimethylbenzene	2
1,3-Dichlorobenzene	ND<1
1,4-Dichlorobenzene	ND<1
sec-Butylbenzene	ND<1
1,2-Dichlorobenzene	ND<1
n-Butylbenzene	ND<1
Naphthalene	1
1,2,4-Trichlorobenzene	ND<1
Hexachlorobutadiene	ND<1
1,2,3-Trichlorobenzene	ND<1
1,2,3-Trichloropropane	ND<1
Acetonitrile	ND<50
Acrylonitrile	ND<50
Isobutanol	ND<50
1,1,1 Trichloroethane	ND<0.5
SUR-Dibromofluoromethane	117
SUR-Toluene-d8	102
SUR-4-Bromofluorobenzene	103

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Job Number: 02-1738
Client : PIERS Environmental
Project : 762 STEWART CT, ALAMEDA

Date Sampled : 12/02/2002
Date Analyzed: 12/07/2002
Date Reported: 12/11/2002

Volatile Organics by GC/MS Method 8260
Quality Control/Quality Assurance Summary

Laboratory Number	02-1738	MS/MSD	RPD	Recovery	RPD
Client ID	Blank	Recovery		Limit	Limit
Matrix	W	W			
Analyte	Results UG/L	%Recoveries			
Bromochloromethane	ND<5				
Dichlorodifluoromethane	ND<5				
Chloromethane	ND<10				
Vinyl chloride	ND<1				
Bromomethane	ND<5				
Chloroethane	ND<5				
Trichlorofluoromethane	ND<5				
1,1-Dichloroethene	ND<1	92/82	11	61-121	25
Acetone	ND<50				
Methylene chloride	ND<50				
trans-1,2-Dichloroethene	ND<1				
Methyl-tert-butyl ether	ND<1				
1,1-Dichloroethane	ND<1				
2,2-Dichloropropane	ND<1				
cis-1,2-Dichloroethene	ND<1				
2-Butanone	ND<10				
Chloroform	ND<1				
Carbon tetrachloride	ND<1				
1,1-Dichloropropene	ND<1				
Benzene	ND<1	108/100	8	74-135	21
1,2-Dichloroethane	ND<1				
Trichloroethene	ND<2	98/92	6	69-129	20
1,2-Dichloropropane	ND<1				
Dibromomethane	ND<1				
Bromodichloromethane	ND<1				
trans-1,3-Dichloropropene	ND<1				
4-Methyl-2-pentanone	ND<10				
Toluene	ND<1	114/102	11	61-141	19
cis-1,3-Dichloropropene	ND<1				
1,1,2-Trichloroethane	ND<1				
Tetrachloroethene	ND<1				
1,3-Dichloropropane	ND<1				
2-Hexanone	ND<10				
Dibromochloromethane	ND<1				
1,2-Dibromoethane	ND<1				
Chlorobenzene	ND<2	106/102	4	70-139	19
1,1,1,2-Tetrachloroethane	ND<1				
Ethylbenzene	ND<1				
Xylene, Isomers m & p	ND<2				
o-Xylene	ND<1				
Styrene	ND<1				

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C E R T I F I C A T E O F A N A L Y S I S

Job Number: 02-1738
Client : PIERS Environmental
Project : 762 STEWART CT. ALAMEDA

Date Sampled : 12/02/2002
Date Analyzed: 12/07/2002
Date Reported: 12/11/2002

Volatile Organics by GC/MS Method 8260
Quality Control/Quality Assurance Summary

Laboratory Number	02-1738	MS/MSD	RPD	Recovery	RPD
Client ID	Blank	Recovery		Limit	Limit
Matrix	W	W			
Analyte	Results UG/L	%Recoveries			
Bromoform	ND<1				
Isopropylbenzene	ND<1				
Bromobenzene	ND<1				
1,1,2,2-Tetrachloroethane	ND<1				
n-Propylbenzene	ND<1				
2-Chlorotoluene	ND<1				
4-Chlorotoluene	ND<1				
1,3,5-Trimethylbenzene	ND<1				
tert-Butylbenzene	ND<1				
1,2,4-Trimethylbenzene	ND<1				
1,3-Dichlorobenzene	ND<1				
1,4-Dichlorobenzene	ND<1				
sec-Butylbenzene	ND<1				
1,2-Dichlorobenzene	ND<1				
n-Butylbenzene	ND<1				
Naphthalene	ND<2				
1,2,4-Trichlorobenzene	ND<1				
Hexachlorobutadiene	ND<1				
1,2,3-Trichlorobenzene	ND<1				
1,2,3-Trichloropropane	ND<1				
Acetonitrile	ND<50				
Acrylonitrile	ND<50				
Isobutanol	ND<50				
1,1,1-Trichloroethane	ND<0.5				
SUR-Dibromofluoromethane	91	109/112	3	67-129	21
SUR-Toluene-d8	101	101/101	0	72-119	16
SUR-4-Bromofluorobenzene	90	105/109	4	78-121	19

Reviewed and Approved

John W. Murphy
Laboratory Director

02-1738

North State Labs

90 South Spruce Avenue, Suite W, South San Francisco, CA 94080
Phone: (650) 266-4563 Fax: (650) 266-4560

Chain of Custody / Request for Analysis
Lab Job No.: ______ Page 1 of 2

Client: Piers Environmental	Report to: Joel Gregor	Phone 408 559/248	Turnaround Time: Regular
Mailing Address: 1330 S. Bascom Ave Suite F San Jose CA 95128	Billing to: Piers	Fax 408 559/1224	
		email:	Date: 12-2-02
		PO# 02343	Sampler: J. Gregor

Project / Site Address / Global ID: 762 Stewart Ct. Alameda

Analysis Requested: 8015 diesel, ... (col. 1); 8010* (col. 2); EDF No

	Sample ID	Sample Type	Container No. / Type	Pres.	Sampling Date / Time	8015 diesel ...		8010*					Field Point ID
	SB6B (1')	soil	liner	ice	12-2-02 Am	hold							hold
	SB6B (2.5')	↓	↓	↓	↓	hold							hold
1	SB6C (0.5')					X		X					
2	SB6C (2.5')					X							
	SB6D (1')					hold							hold
3	SB6D (2.5')					X							
	SB6E (6')	↓	↓	↓									hold
4	SB6E water	water	1-L 3-V	ice, HCL		X		X					
5	SB7 (1')	soil	liner	ice		X							
6	SB7 (5')	↓	↓	↓		X							
	SB8 (1')												hold
7	SB8 (5')					X							
8	SB9 (1')					X							
	SB9 (5')	↓	↓	↓	↓	hold							hold

Relinquished by: Joel [signature]	Date: 12-3-02	Time: 225 pm	Received by: [signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Lab Comments/ Hazards

* Please notify PIERS if compounds not reportable by 8010 are encountered.

Dec 17 02 02:55p North State Environmental 6502664560 p.16

024788 cont

North State Labs
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Phone: (650) 266-4563 Fax: (650) 266-4560

Chain of Custody / Request for Analysis
Lab Job No.: ________ Page 2 of 2

Client: PIERS ENVIRONMENTAL	Report to: Joel Gregor	Phone: 408 559 1248	Turnaround Time: Regular
Mailing Address: 1330 S. Bascom Ave Suite F San Jose CA 95128	Billing to: PIERS	Fax: 408 559 1224	Date: 12-3-02
		email:	
		PO# 02343	Sampler: Joel Gregor

Project / Site Address / Global ID: 762 Stewart Ct. Alameda

Analysis Requested: TPH diesel, TPH motor oil + mineral spirits | Total Lead | PCB *

NO EDF

	Sample ID	Sample Type	Container No. / Type	Pres.	Sampling Date / Time	TPH diesel, motor oil + mineral spirits	Total Lead	PCB *					Field Point ID
9	SB9 (water)	Water	1 liter	ice	12-2-02 Am	X							
10	SB 10 (1')	Soil	liner (1)	ice	12-2-02 Am	X	X						
11	SB10 (5')	↓	↓	↓	↓	X	X						
12	SB11 (0.5')	↓	↓	↓	↓	X	X						
13	SB12 (0.5')	↓	↓	↓	↓	X	X						
	SB13 (0.5')	↓	↓	↓	↓								
	SB14 (0.5')	↓	↓	↓	↓								hold
14	SB10+11 Comp	↓	(2 liners)	ice	↓	X		X					hold Composite SB10 & SB11

Relinquished by: Joel Gr	Date: 12-3-02	Time: 12:15pm	Received by: [signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Lab Comments/ Hazards

* Please note the pipes of components not neatly bundled are asbestos!