APPENDIX B
POST-DEMOLITION SOIL INVESTIGATION

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The Remedial Investigation (Hart Crowser 2000) defined the extent of contamination occurring on the 10 Broad Street property except underneath the RC's Billiards building. This building was demolished during the week of January 7, 2002. In accordance with the CAP, Hart Crowser performed a soil investigation underneath the building footprint on January 22, 2002 to determine the extent of contaminated soil occurring in this area. This section describes the procedures and results of the soil investigation.

Soil Sampling Procedures

Ten Strataprobe borings were advanced at locations shown on Figure B-1. Boring logs are included at the end of this appendix on Figures B-3 through B-13. Figure B-2 presents a key to the exploration logs. All borings were advanced to 20 feet with the exception of HC-9, which met refusal at a depth of 10 feet. Soil samples were collected at continuous 4-foot intervals. Soils were screened in the field for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID).

Soils samples were submitted for chemical analysis of gasoline-range petroleum hydrocarbons by Ecology Method NWTPH-Gx, diesel-, and oil-range petroleum hydrocarbons by Ecology Method NWTPH-Dx, and VOCs by EPA Method 8260. Soil samples from the approximate depth of the water table were selected for chemical analysis. Up to three additional soils samples from each boring were selected based on PID readings and observations made in the field.

Chemical Results

Twenty-eight soil samples were submitted for chemical analysis as summarized in Table B-1. Detected chemical occurrences are as follows:

Gasoline. Gasoline-range petroleum hydrocarbons were detected at a concentration of 25 mg/kg in HC8-S5, sampled at a depth from 16 to 20 feet. This concentration is below the cleanup level of 30 mg/kg. Gasoline-range petroleum hydrocarbons were not detected in any other samples.

Diesel/Fuel Oil. Diesel-range petroleum hydrocarbons were detected in two soil samples from boring HC13. The detected concentrations were 50 mg/kg at 0 to 4 feet and 1,400 mg/kg at 8 to 12 feet. Both values are below the Method A cleanup level of 2,000 mg/kg. Diesel- and oil-range hydrocarbons were not

detected in the sample submitted from the same boring from 16 to 20 feet or in samples from the other borings.

VOCs. Benzene was detected in three soil samples, HC8-S5, HC11-S5, and HC12-S5, from 16 to 20 feet depth. Concentrations detected in these samples were below the cleanup level of 0.5 mg/kg. Toluene, ethylbenzene, and xylenes were detected below cleanup levels in HC8-S5 and were not detected in any of the other soil samples.

Napthalene was detected in several soil samples at concentrations below the Method A cleanup level. 1,2,4-trichlorobenzene, hexachloro-1,3-butadiene, and 1,2,3-trichlorobenzene were detected in soil sample HC10-S2 from 4 to 8 feet at concentrations below Method B direct contact cleanup levels. These chemicals have not been detected in soil or groundwater in any other samples collected from the site and are not considered to be constituents of concern.

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Table B-1 - Analytical Results for Soil Samples

Sample ID:	Cleanup	HC7-S1	HC7-S3	HC7-S4	HC8-S1	HC8-S2	HC8-S4	HC8-S5	HC9-S1
Sample Depth (in Feet)	Criteria[1]	0-4	12-16	16-20	0-4	4-8	12-16	16-20	0-4
NWTPH-Gx in mg/kg									
Mineral spirits/Stoddard solvent	100[2]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Gasoline	100[2]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**25**	5.0 U
NWTPH-Dx in mg/kg									
Kerosene/Jet fuel	2000[3]	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Diesel/Fuel oil	2000[3]	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Heavy oil	2000[3]	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Volatiles in mg/kg									
Benzene	34.5[4]/0.5[2]	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.17**	0.02 U
Toluene	16,000[4]/40[2]	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.094**	0.05 U
Ethylbenzene	8,000[4]/20[2]	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.39**	0.05 U
Xylenes	160,000[4]/20[2]	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.3**	0.05 U
n-Propylbenzene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.21**	0.05 U
1,3,5-Trimethylbenzene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.34**	0.05 U
tert-Butylbenzene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.13**	0.05 U
1,2,4-Trimethylbenzene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.1**	0.05 U
Isopropyltoluene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.19**	0.05 U	0.05 U
1,2,4-Trichlorobenzene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Naphthalene		0.05 U	**0.24**	0.05 U	0.05 U	**1.7**	**0.13**	**0.32**	0.05 U
Hexachloro-1,3-butadiene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,3-Trichlorobenzene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Table B-1 - Analytical Results for Soil Samples

Sample ID:	HC10-S2	HC10-S4	HC10-S5	HC11-S2	HC11-S4	HC11-S5	HC12-S2	HC12-S4	HC12-S5
Sample Depth (in Feet)	4-8	12-16	16-20	4-8	12-16	16-20	4-8	12-16	16-20
NWTPH-Gx in mg/kg									
Mineral spirits/Stoddard solvent	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Gasoline	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
NWTPH-Dx in mg/kg									
Kerosene/Jet fuel	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Diesel/Fuel oil	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Heavy oil	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Volatiles in mg/kg									
Benzene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.16**	0.02 U	0.02 U	**0.14**
Toluene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Ethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Xylenes	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,3,5-Trimethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
tert-Butylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trimethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Isopropyltoluene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trichlorobenzene	**0.22**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Naphthalene	**0.44**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Hexachloro-1,3-butadiene	**0.54**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,3-Trichlorobenzene	**0.40**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Table B-1 - Analytical Results for Soil Samples

Sample ID:	HC13-S1	HC13-S3	HC13-S5	HC14A-S2	HC14A-S4	HC14A-S5
Sample Depth (in Feet)	0-4	8-12	16-20	4-8	12-16	16-20
NWTPH-Gx in mg/kg						
Mineral spirits/Stoddard solvent	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Gasoline	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
NWTPH-Dx in mg/kg						
Kerosene/Jet fuel	20 U	20 U	20 U	20 U	20 U	20 U
Diesel/Fuel oil	**49**	**1400**	20 U	20 U	20 U	20 U
Heavy oil	50 U	50 U	50 U	50 U	50 U	50 U
Volatiles in mg/kg						
Benzene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Ethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Xylenes	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,3,5-Trimethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
tert-Butylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trimethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Isopropyltoluene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trichlorobenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Naphthalene	0.05 U	0.05 U	**0.18**	0.05 U	0.05 U	0.05 U
Hexachloro-1,3-butadiene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,3-Trichlorobenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Table B-1 - Analytical Results for Soil Samples

Sample ID:	HC15-S3	HC15-S4	HC15-S5	HC16-S4	HC16-S5
Sample Depth (in Feet)	8-12	12-16	16-20	12-16	16-20
NWTPH-Gx in mg/kg					
Mineral spirits/Stoddard solvent	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Gasoline	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
NWTPH-Dx in mg/kg					
Kerosene/Jet fuel	20 U	20 U	20 U	20 U	20 U
Diesel/Fuel oil	20 U	20 U	20 U	20 U	20 U
Heavy oil	50 U	50 U	50 U	50 U	50 U
Volatiles in mg/kg					
Benzene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Ethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Xylenes	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,3,5-Trimethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
tert-Butylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trimethylbenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Isopropyltoluene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trichlorobenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Naphthalene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Hexachloro-1,3-butadiene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,3-Trichlorobenzene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Detected results presented in bold.

Notes:

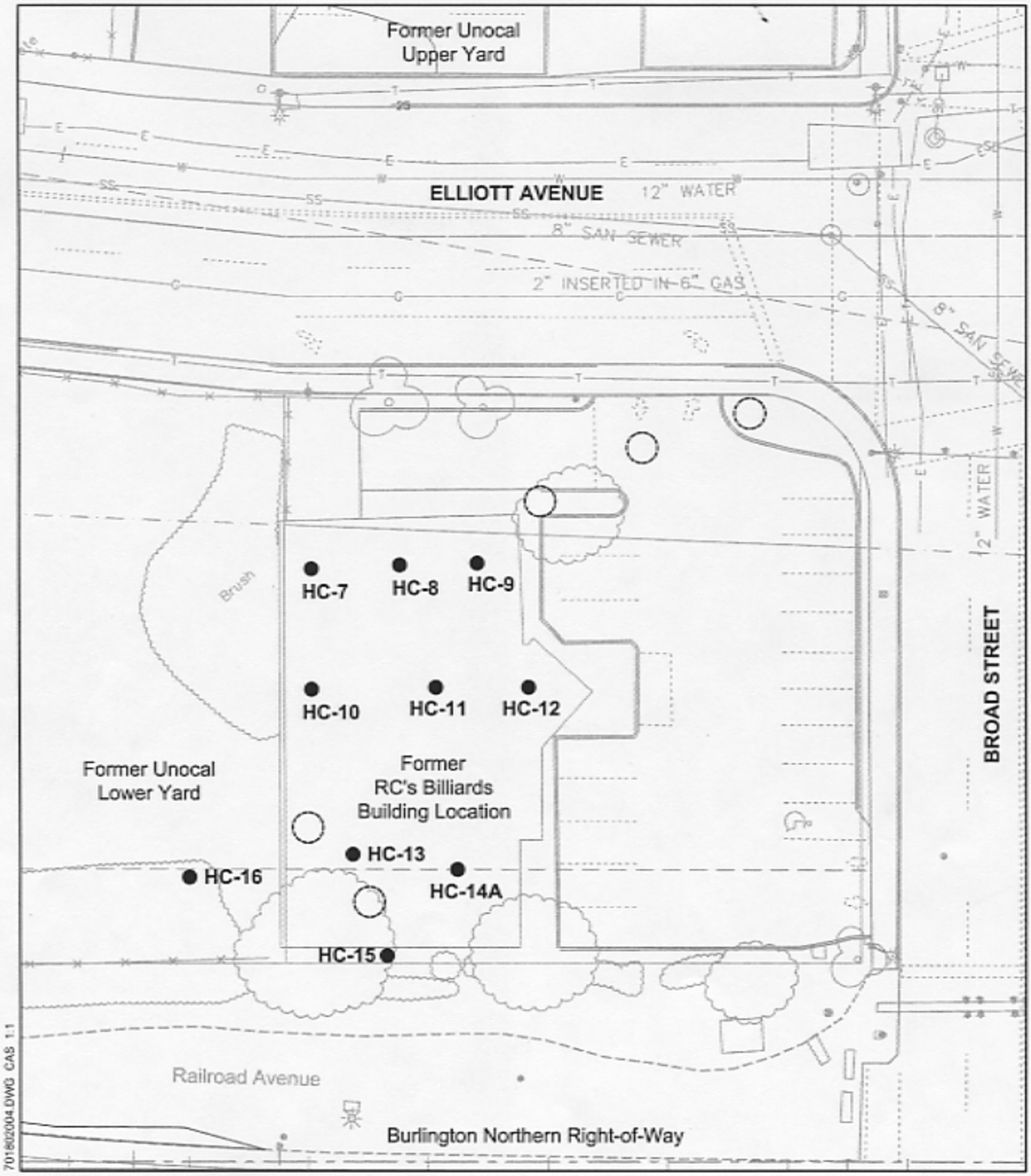
[1] From Table 1, Cleanup Action Plan, Hart Crowser 2001.

[2] Soil to groundwater/soil to air cleanup levels.

[3] Soil to groundwater cleanup levels

[4] Direct contact cleanup levels

Exploration Plan



● HC-7 Stratoprobe Boring Location and Number

○ Approximate Former Tank Location

0 30 60
Scale in Feet

True
Site

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Figure B-1

Key to Exploration Logs

Sample Description

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:
Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance.
Soil density/consistency in test pits is estimated based on visual observation and is presented parenthetically on the test pit logs.

SAND or GRAVEL Density	Standard Penetration Resistance (N) in Blows/Foot	SILT or CLAY Consistency	Standard Penetration Resistance (N) in Blows/Foot	Approximate Shear Strength in TSF
Very loose	0 – 4	Very soft	0 – 2	<0.125
Loose	4 – 10	Soft	2 – 4	0.125 – 0.25
Medium dense	10 – 30	Medium stiff	4 – 8	0.25 – 0.5
Dense	30 – 50	Stiff	8 – 15	0.5 – 1.0
Very dense	>50	Very stiff	15 – 30	1.0 – 2.0
		Hard	>30	>2.0

Moisture

Dry	Little perceptible moisture
Damp	Some perceptible moisture, probably below optimum
Moist	Probably near optimum moisture content
Wet	Much perceptible moisture, probably above optimum

Minor Constituents

	Estimated Percentage
Not identified in description	0 – 5
Slightly (clayey, silty, etc.)	5 – 12
Clayey, silty, sandy, gravelly	12 – 30
Very (clayey, silty, etc.)	30 – 50

Legends

Sampling Test Symbols

BORING SAMPLES

- ☒ Split Spoon
- ⧅ Shelby Tube
- ▥ Cuttings
- ◫ Core Run
- ✳ No Sample Recovery
- P Tube Pushed, Not Driven

TEST PIT SAMPLES

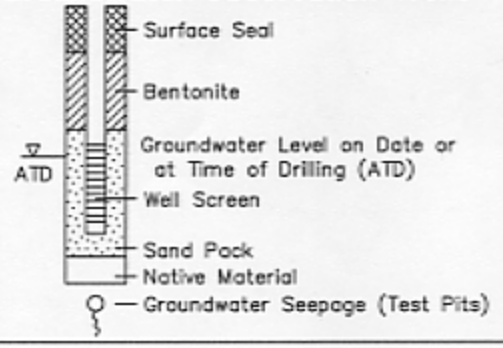
- ☒ Grab (Jar)
- ⧄ Bag
- ⧅ Shelby Tube

Test Symbols

GS	Grain Size Classification
CN	Consolidation
UU	Unconsolidated Undrained Triaxial
CU	Consolidated Undrained Triaxial
CD	Consolidated Drained Triaxial
QU	Unconfined Compression
DS	Direct Shear
K	Permeability
PP	Pocket Penetrometer Approximate Compressive Strength in TSF
TV	Torvane Approximate Shear Strength in TSF
CBR	California Bearing Ratio
MD	Moisture Density Relationship
AL	Atterberg Limits
PID	Photoionization Detector Reading
CA	Chemical Analysis
DT	In Situ Density Test

Atterberg Limits:
Water Content in Percent
Liquid Limit
Natural
Plastic Limit

Groundwater Observation Wells



HC Standards\Standard Report Figures\A-1\A-1 Standard

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Figure B-2

Strataprobe Boring Log HC-7

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

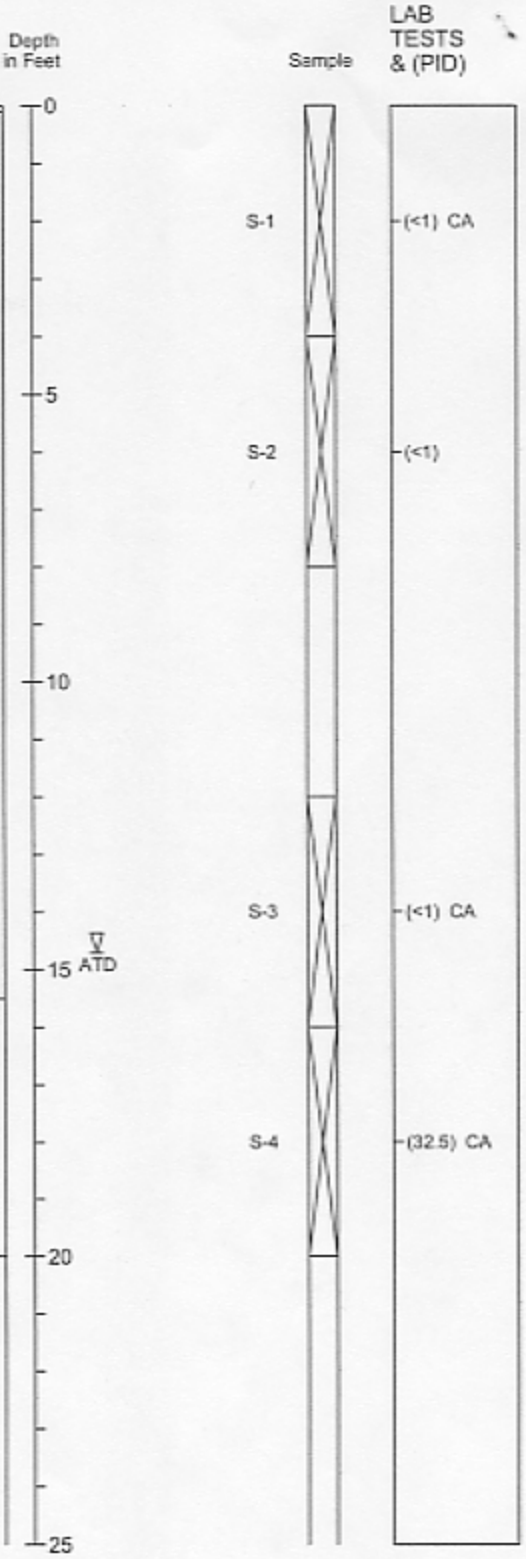
3 inches of concrete over damp, brown, slightly gravelly, silty, fine SAND to slightly gravelly, sandy SILT.

Pieces of burnt wood from 6 to 8 feet.

Wet, gray, slightly silty, slightly gravelly SAND with two 2-inch Silt layers.

Petroleum-like odor noted.

Bottom of Boring at 20.0 Feet.
Completed 01/22/02.



STRATAPROBE 701802.GPJ HC_CORP.GDT 2/21/02

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure B-3

Strataprobe Boring Log HC-8

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
3 inches of concrete over damp, gray/brown, slightly gravelly, sandy SILT with pieces of wood. Slight petroleum-like odor from 0 to 4 feet. Mothball-like odor from 4 to 8 feet.	0		
		S-1	(<1) CA
	5		
		S-2	(<1) CA
	10	S-3	(<1)
Damp, gray, slightly gravelly, very silty SAND.			
Wood chunks.		S-4	(<1) CA
	15		
Wet, gray, silty, fine SAND with petroleum-like odor.	ATD		
		S-5	(248) CA
Bottom of Boring at 20.0 Feet. Completed 01/22/02.	20		
	25		

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Figure B-4

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Strataprobe Boring Log HC-9

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
4 inches of concrete over damp, brown, gravelly, silty SAND.	0		
		S-1	(<1) CA
	5		
Bits of wood and rootlets.		S-2	(<1)
Moist, gray, slightly gravelly, sandy SILT with wood chunks.			
Bottom of Boring at 10.0 Feet. Completed 01/22/02.	10		
	15		
	20		
	25		

STRATAPROBE 701602.GPJ HC_CORP.GDT 2/21/02

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure B-5

Strataprobe Boring Log HC-10

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

Soil Description	Depth in Feet	Sample	LAB TESTS & (PID)
3 inches of concrete over damp, brown, slightly gravelly, silty, fine SAND with brick bits.	0		
		S-1	(<1)
Rootlets from 4 to 8 feet.	5		
		S-2	(<1) CA
Damp, dark brown, slightly sandy SILT.	10	S-3	(<1)
Damp, grayish brown, slightly gravelly, sandy to very sandy SILT.		S-4	(2.5) CA
	15		
	▽ ATD		
Moist to wet, gray, slightly gravelly, silty, medium to fine SAND with petroleum-like odor.		S-5	(151) CA
Bottom of Boring at 20.0 Feet. Completed 01/22/02.	20		
	25		

STRATAPROBE 7018/02.GPJ HC_CORP.GDT 2/21/02

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure B-6

Strataprobe Boring Log HC-11

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

Soil Description	Depth in Feet	Sample	LAB TESTS & (PID)
4 inches of concrete over damp, brown, gravelly, silty, fine SAND.	0		
		S-1	(<1)
Damp, grayish brown, slightly gravelly, sandy SILT to silty SAND.	5		
		S-2	(5.0) CA
Damp to moist, gray/brown, slightly gravelly, very silty SAND.	10	S-3	(5.0)
Moist to wet, gray, very sandy SILT.		S-4	(5.0) CA
	15 ▽ ATD		
Wet, gray, silty, fine SAND with petroleum-like odor.		S-5	(30.0) CA
Bottom of Boring at 20.0 Feet. Completed 01/22/02.	20		
	25		

STRATAPROBE 701802.GPJ HC_CORP.GDT 2/21/02

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Figure B-7

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Strataprobe Boring Log HC-12

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
3 inches of concrete over moist, dark brown, slightly gravelly, very silty SAND.	0	S-1	(<1)
Moist, gray/brown, sandy SILT.	5	S-2	(5.0) CA
Moist, gray/brown, slightly gravelly, silty SAND to silty SAND.	10	S-3	(<1)
Wood from 12.5 to 13.5 feet.			
Moist, gray, sandy SILT with slight petroleum-like odor.		S-4	(15.0) CA
Moist, gray, slightly gravelly, silty SAND.	15 ATD		
3-inch sandy SILT lens.		S-5	(70.0) CA
Bottom of Boring at 20.0 Feet. Completed 01/22/02.	20		
	25		

STRATAPROBE 701802.GPJ HC_CORP.GDT 2/21/02

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure B-8

Strataprobe Boring Log HC-13

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
4 inches of concrete over damp, brown, slightly silty SAND.	0		
		S-1	(<1) CA
Damp, brown, slightly gravelly, sandy SILT with brick fragments.			
	5		
		S-2	(<1)
Wood chunks.			
Damp, gray/brown, slightly gravelly, sandy SILT.	10	S-3	(65.0) CA
		S-4	(7.5)
Moist, gray/brown, slightly gravelly, silty SAND to sandy SILT.	15		
	ATD		
Petroleum-like odor noted.		S-5	(876) CA
Moist, black, sandy SILT.			
Bottom of Boring at 20.0 Feet. Completed 01/22/02.	20		
	25		

STRATAPROBE 701802.GPJ HC_COMP.GDT 2/21/02

HARTCROWSER

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure B-9

Strataprobe Boring Log HC-14 A

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
4 inches of concrete over damp, brown, silty SAND.	0		
		S-1	(<1)
Damp, gray/brown, slightly gravelly, sandy SILT.			
	5		
		S-2	(2.0) CA
Wood chunks.			
	10	S-3	(2.5)
		S-4	(2.5) CA
2-inch moist SAND lense with petroleum-like odor.	15		
Damp to moist, gray, gravelly, sandy SILT with occasional cobbles and slight petroleum-like odor.	▽ ATD		
		S-5	(5.0) CA
Bottom of Boring at 20.0 Feet. Completed 01/22/02.	20		
	25		

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1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure B-10

Strataprobe Boring Log HC-15

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 23

Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
Damp, brown, very sandy SILT with brick and wood bits.	0		
		S-1	(<1)
Damp, brown, gravelly to slightly gravelly, sandy SILT.	5		
		S-2	(<1)
	10	S-3	(2.5) CA
		S-4	(2.5) CA
	15		
Moist, gray, gravelly, very sandy SILT.			
	ATD	S-5	(<1) CA
Bottom of Boring at 20.0 Feet. Completed 01/22/02.	20		
	25		

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Figure B-11

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Strataprobe Boring Log HC-16

Soil Descriptions
Approximate Ground Surface Elevation in Feet: 20

Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
Damp, brown, gravelly, sandy SILT.	0		
		S-1	(<1)
Damp, brown/gray, slightly gravelly, sandy SILT with slight petroleum-like odor.	5		
		S-2	(255)
Black gritty flecks with petroleum-like odor.			
	10	S-3	(2.5)
	ATD	S-4	(<1) CA
Moist, gray, slightly gravelly, very sandy SILT grading to silty SAND at 18 feet.	15		
		S-5	(<1) CA
Bottom of Boring at 20.0 Feet. Completed 01/22/02.	20		
	25		

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Figure B-12

1. Refer to Figure B-2 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.