



# ENVIRONMENTAL SERVICES ASSOCIATES, LLC.

ENVIRONMENTAL DUE DILIGENCE SERVICES • ENVIRONMENTAL SUBSURFACE INVESTIGATIONS  
GEOLOGICAL & GEOTECHNICAL CONSULTING • PROPERTY CONDITION SURVEYS

September 12, 2013

2008 TLA, LLC  
820 Fort Wayne Avenue  
Indianapolis, Indiana 46204  
Attn: Mr. Larry Mitchell

Re: Phase II Subsurface Investigation  
Former Wood Preserving Facility  
3605 W. Farnsworth Street  
Indianapolis, Marion County, Indiana  
ESA, LLC Project # 0813-1825

Mr. Mitchell,

In accordance with Environmental Service Associates, LLC (ESA, LLC) Proposal #0813-2241, dated July 17, 2013, Environmental Service Associates, LLC (ESA, LLC), has completed a Phase II Subsurface Investigation (Phase II) at the above referenced subject property. This Phase II was initiated based upon Recognized Environmental Conditions (RECs) identified in the ESA, LLC, Phase I Environmental Site Assessment report completed for the subject site, dated July 23, 2013 (ESA, LLC Project # 0613-1801). Based on the historical use of the site as a wood preserving facility, the data from this investigation will be used to establish a baseline of soil and groundwater data that can be compared to future investigations. A truck mounted Geoprobe unit was used to advance eight (8) soil borings for the collection of representative soil and ground water samples for laboratory analysis of the metals which are found in the treatment chemicals historically used at the site including Arsenic, Boron, Total Chromium, Hexavalent Chromium(6+), and Copper. In addition, Volatile Organic Compounds (VOCs) and Polynuclear Aromatic Hydrocarbons (PAHs) were analyzed for three of the borings in maintenance and storage areas.

Arsenic, Total Chromium, Hexavalent Chromium(6+), and Copper were detected in all of the groundwater samples above the Indiana Department of Environmental Management (IDEM) Remediation Closure Guide (RCG) Residential Screening Levels (RSLs). Arsenic was detected above the RSL in all of the soil samples collected except SB-7. No VOC or PAH parameters were detected above the IDEM RCG RSLs in any of the soil or groundwater samples collected during this investigation.

We trust this document is responsive to your needs. Should you have any questions or comments regarding this report, or if we can be of further service to you, please do not hesitate to contact us at 317-844-7100.

Sincerely,

**ENVIRONMENTAL SERVICES ASSOCIATES, LLC**

Jeffery G. Watkins, EP  
Environmental Professional

## 1.0 INTRODUCTION

In accordance with Environmental Service Associates, LLC (ESA, LLC) Proposal #0813-2241, dated July 17, 2013, Environmental Service Associates, LLC (ESA, LLC), has completed a Phase II Subsurface Investigation (Phase II) at the above referenced subject property. This Phase II was initiated based upon Recognized Environmental Conditions (RECs) identified in the ESA, LLC, Phase I Environmental Site Assessment report completed for the subject site, dated July 23, 2013 (ESA, LLC Project # 0613-1801). The subject property is depicted on the Vicinity Map (**Figure 1**), the Topographic Map (**Figure 1A**), the Site Map (**Figure 2**), and Site Map Legend (**Figure 2A**), provided in **Appendix A**.

Based on the historical use of the site as a wood preserving facility, the data from this investigation will be used to establish a baseline of soil and groundwater data that can be compared to future investigations. A truck mounted Geoprobe unit was used to advance eight (8) soil borings for the collection of representative soil and ground water samples for laboratory analysis of the metals which are found in the treatment chemicals historically used at the site including Arsenic, Boron, Total Chromium, Hexavalent Chromium(6+), and Copper. In addition, Volatile Organic Compounds (VOCs) and Polynuclear Aromatic Hydrocarbons (PAHs) were analyzed for three of the borings in maintenance and storage areas.

The soil borings were advanced in areas identified as RECs in ESA, LLC's Phase I Environmental Assessment Report, dated July 23, 2013 (ESA, LLC Project # 0613-1801), and are depicted on the Boring Location Map provided as **Figure 3** in **Appendix A**.

## 2.0 SOIL BORING METHODOLOGIES

### 2.1 Soil Boring Investigation Methodologies

Eight (8) soil borings (SB-1 through SB-8) were advanced using Geoprobe® soil boring technology using a truck mounted 5410 Geoprobe® direct push drill rig system. The Geoprobe driven soil samples were collected continuously in each soil boring, beginning at the ground surface, to maximum depths ranging from 12 to 20 feet below the ground surface (ft-bgs). Geoprobe core samples were obtained using a two-inch diameter, 48 inch long, acetate lined, stainless steel core barrel sampler. Disposable acetate liners were replaced prior to each sample collection.

### 2.2 Soil Sampling Methodologies

The acetate sleeves were removed from the core barrel sampling tool and split lengthwise using a razor knife. The soil samples were examined in two foot intervals to characterize the lithology, and screen the soil samples for possible contaminants using a Photoionization Detector (PID), which measures total photoionizable vapors (TPVs) in parts per million (ppm). The sample exhibiting the greatest likelihood of containing contaminants was selected for submittal to the laboratory for analysis. The results of the soil sample examination are provided in the Soil Boring Logs provided in **Appendix B**.

A representative portion of the soil interval selected for analysis was immediately placed into a laboratory provided containers with a Teflon lids, sealed, labeled and placed on ice in a cooler to maintain the samples at a maximum storage temperature of 4° C. Samples to be analyzed for VOCs were collected in accordance with US EPA SW-846 Method 5035.

### **2.3 Ground Water Sampling Methodologies**

After the soil samples were collected, the Geoprobe rods were removed and a brand new screened, PVC piezometer inserted into each open borehole. A long section of new 1/8" food grade Teflon tubing was inserted through the piezometer, to the bottom of the screen, and a peristaltic pump or check valve was then used to extract ground water samples through the tubing. At least one-liter of ground water was purged from each borehole prior to sample collection. It should be noted that the engine of the Geoprobe unit was shut down prior to the collection of any ground water samples.

The tubing was crimped and removed from the piezometer. Retained ground water was transferred from the tubing directly into glass vials and bottles, prepared by the testing laboratory with the appropriate chemical preservatives. Latex gloves were worn by sampling personnel and changed between sampling locations. New Teflon tubing and piezometers were used at each ground water sampling location. The samples were then placed on ice in a cooler to maintain the samples at a storage temperature of 4° C.

### **2.4 Laboratory Methodologies**

Soil and Ground water samples collected during the investigation were delivered by ESA, LLC personnel to Pace Analytical Laboratories in Indianapolis, Indiana on August 23, 2013, following strict chain of custody protocols.

The soil and groundwater samples were analyzed for Arsenic, Boron, Total Chromium, and Copper using US EPA Method 6010; Hexavalent Chromium(6+) using US EPA Method 7196; Volatile Organic Compounds (VOCs) using US EPA Method 8260; and Polynuclear Aromatic Hydrocarbons (PAHs) using US EPA Method 8270 SIM. Samples were analyzed in accordance with the U.S. EPA, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986.

## **3.0 INVESTIGATION RESULTS**

### **3.1 Subsurface Geology**

Soils encountered consisted of primarily of dry, gray, silty clay from the surface to 5-6 feet below the ground surface (ft-bgs), underlain by dry, brown, medium sand with some gravel extending to the terminal depth of the borings at 24 ft-bgs. Groundwater was generally encountered at approximately 22 ft-bgs. As previously stated, soil boring logs are provided in **Appendix B**.

### 3.2 Soil and Ground Water Analytical Results

The results of the subsurface soil and groundwater sample analysis were compared against the Indiana Department of Environmental Management (IDEM) Remediation Closure Guide (RCG 3-22-13) Residential Screening Levels (RSLs).

#### Soil Analytical Results

Arsenic was detected above the RSL in all of the soil samples collected except SB-7. No VOC or PAH parameters were detected above the IDEM RCG RSLs in any of the soil samples collected during this investigation. A summary of the soil analytical results is provided in **Table 1** in **Appendix A**. The laboratory certificates of analysis are provided in **Appendix C**.

#### Groundwater Analytical Results

Arsenic, Total Chromium, Hexavalent Chromium (6+), and Copper were detected in all of the groundwater samples above the RCG RSLs. No VOC or PAH parameters were detected above the IDEM RCG RSLs in any of the groundwater samples collected during this investigation. A summary of the groundwater analytical results is provided in **Table 2** in **Appendix A**. The laboratory certificates of analysis are provided in **Appendix C**.

## 4.0 CONCLUSIONS

In accordance with Environmental Service Associates, LLC (ESA, LLC) Proposal #0813-2241, dated July 17, 2013, Environmental Service Associates, LLC (ESA, LLC), has completed a Phase II Subsurface Investigation (Phase II) at the above referenced subject property. This Phase II was initiated based upon Recognized Environmental Conditions (RECs) identified in the ESA, LLC, Phase I Environmental Site Assessment report completed for the subject site, dated July 23, 2013 (ESA, LLC Project # 0613-1801).

Based on the historical use of the site as a wood preserving facility, the data from this investigation will be used to establish a baseline of soil and groundwater data that can be compared to future investigations. Eight (8) soil borings were advanced for the collection of representative soil and ground water samples for laboratory analysis. Analytical parameters included the metals which are found in the treatment chemicals historically used at the site including Arsenic, Boron, Total Chromium, Hexavalent Chromium(6+), and Copper. In addition, Volatile Organic Compounds (VOCs) and Polynuclear Aromatic Hydrocarbons (PAHs) were analyzed for three of the borings in maintenance and storage areas. Arsenic, Total Chromium, Hexavalent Chromium(6+), and Copper were detected in all of the groundwater samples above the Indiana Department of Environmental Management (IDEM) Remediation Closure Guide (RCG) Residential Screening Levels (RSLs). Arsenic was detected above the RSL in all of the soil samples collected except SB-7. No VOC or PAH parameters were detected above the IDEM RCG RSLs in any of the soil or groundwater samples collected during this investigation.

**5.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS:**



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Tad Spaulding  
Project Manager



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Jeffery G. Watkins, EP  
Environmental Professional

# **APPENDIX A**

## **TABLES & FIGURES**

Table 1	Summary of Soil Analytical Results
Table 2	Summary of Groundwater Analytical Results
Figure 1	Vicinity Map
Figure 1A	Topographic Map
Figure 2	Site Map
Figure 2A	Legend for Site Map
Figure 3	Boring Location Map

## **TABLES**

<b>Table 1</b>	<b>Summary of Soil Analytical Results</b>
<b>Table 2</b>	<b>Summary of Groundwater Analytical Results</b>



Table 1  
Summary of Soil Analytical Results  
Former Wood Preserving Facility  
3605 Farnsworth Street  
Indianapolis, Indiana

Soil Sample Identification	Date	Depth (ft-bgs)	METALS					VOLATILE ORGANIC COMPOUNDS (VOCs)					POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)										
			Arsenic (mg/kg)	Boron (mg/kg)	Total Chromium (mg/kg) *	Hexavalent Chromium (6+) (mg/kg)	Copper (mg/kg)	Benzene (mg/kg)	Ethylbenzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	Methyl Tertiary Butyl Ether (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Fluoranthene (mg/kg)	Indeno(1,2,3-cd)pyrene (mg/kg)	1-Methyl naphthalene (mg/kg)	2-Methyl naphthalene (mg/kg)	Naphthalene (mg/kg)	Pyrene (mg/kg)
SB-1	08/22/13	0-2	12.2	9.9	19.1	<2.3	21.9	<0.0055	<0.0055	<0.0055	<0.110	<0.0055	0.0169	0.0173	0.0165	0.0153	0.0189	0.0394	0.0099	<0.006	<0.006	0.0069	0.0310
SB-2	08/22/13	0-2	11.8	8.6	18.1	<2.3	19.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3	08/22/13	0-2	10.9	5.9	16.1	<2.4	16.4	<0.0043	<0.0043	<0.0043	<0.0086	<0.0043	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	0.0074	<0.0059	<0.0059	<0.0059	<0.0059	0.0061
SB-4	08/22/13	0-2	9.5	<5.6	13.8	<2.4	11.3	<0.0044	<0.0044	<0.0044	<0.0089	<0.0044	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059
SB-5	08/22/13	0-2	8.0	10.5	20.8	<2.1	23.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	08/22/13	0-2	44.7	6.4	41.9	<2.4	27.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	08/22/13	0-2	5.1	<5.4	9.6	<2.2	8.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	08/22/13	0-2	9.4	5.6	17.0	<2.3	16.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IDEM RCG Residential Screening Levels (RSLs)			5.5	22,000	10,000*	4.1	4,300	15	76	820	260	600	2.1	0.21	2.1	21	210	3,200	2.1	310	370	50	2,400
IDEM RCG Commercial/Industrial Screening Levels (CSLs)			16	100,000	10,000*	56	41,000	54	270	820	260	2,200	21	2.10	21	210	2,100	22,000	21	390	370	180	170,000

- IDEM = Indiana Department of Environmental Management

- RCG = Remediation Closure Guide

- NA = Not Analyzed

- mg/kg = Milligrams per kilogram = parts per million (ppm)

- Bold concentrations exceed IDEM RCG Residential Screening Levels

- Bold & highlighted concentrations exceed IDEM RCG Commercial/Industrial Screening Levels

- \* IDEM has not established RCG Screening Levels for Total Chromium - Chromium (III) Screening Levels are presented for comparison



**Table 2**  
**Summary of Groundwater Analytical Results**  
**Former Wood Preserving Facility**  
**3605 Farnsworth Street**  
**Indianapolis, Indiana**

Groundwater Sample Identification	Date	METALS					VOLATILE ORGANIC COMPOUNDS (VOCs)					POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)										
		Arsenic (ug/L)	Boron (ug/L)	Total Chromium (ug/L)	Hexavalent Chromium (6+) (ug/L)	Copper (ug/L)	Benzene (ug/L)	Ethylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Benzo(a) anthracene (ug/L)	Benzo(a) pyrene (ug/L)	Benzo(b) fluoranthene (ug/L)	Benzo(k) fluoranthene (ug/L)	Chrysene (ug/L)	Fluoranthene (ug/L)	Indeno(1,2,3-cd)pyrene (ug/L)	1-Methylnaphthalene (ug/L)	2-Methylnaphthalene (ug/L)	Naphthalene (ug/L)	Pyrene (ug/L)
SB-1	08/22/13	<b>1,090</b>	797	<b>1,110</b>	<10	<b>4,340</b>	<5	<5	<5	<10	<5	<0.10	<0.10	<0.10	<0.10	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SB-2	08/22/13	<b>29</b>	343	<b>732</b>	<10	<b>4,480</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3	08/22/13	<b>1,180</b>	407	<b>952</b>	<10	<b>3,150</b>	<5	<5	<5	<10	<5	<0.10	<0.10	<0.10	<0.10	<0.50	<1.0	<0.10	<1.0	<1.0	<1.0	<1.0
SB-4	08/22/13	<b>1,540</b>	227	<b>1,160</b>	<10	<b>3,790</b>	<5	<5	<5	<10	<5	<0.10	<0.10	<0.10	<0.10	<0.50	<1.0	<0.10	<1.0	<1.0	<1.0	<1.0
SB-5	08/22/13	<b>902</b>	529	<b>744</b>	<b>95</b>	<b>1,500</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	08/22/13	<b>1,460</b>	809	<b>888</b>	<10	<b>3,980</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	08/22/13	<b>1,480</b>	789	<b>994</b>	<10	<b>5,060</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8	08/22/13	<b>915</b>	568	<b>802</b>	<10	<b>2,660</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>IDEM RCG Residential Screening Levels</b>		<b>10.0</b>	<b>3,100</b>	<b>100</b>	<b>0.31</b>	<b>1,300</b>	<b>5</b>	<b>700</b>	<b>1000</b>	<b>10000</b>	<b>120</b>	<b>0.29</b>	<b>0.2</b>	<b>0.29</b>	<b>2.9</b>	<b>29</b>	<b>630</b>	<b>0.29</b>	<b>9.7</b>	<b>27</b>	<b>1.4</b>	<b>87</b>

- IDEM = Indiana Department of Environmental Management
- RCG = Remediation Closure Guide
- NA = Not Analyzed
- ug/L = Micrograms per Liter = parts per billion (ppb)
- Bold concentrations exceed IDEM RCG Residential Screening Levels
- IDEM has not established RCG Commercial/Industrial Screening Levels for Groundwater

# FIGURES

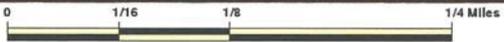
- Figure 1** Vicinity Map
- Figure 1A** Topographic Map
- Figure 2** Site Map
- Figure 2A** Legend for Site Map
- Figure 3** Boring Location Map



### DETAIL MAP - 3633426.2s



Site Location



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Oil & Gas pipelines from USGS
-  National Wetland Inventory



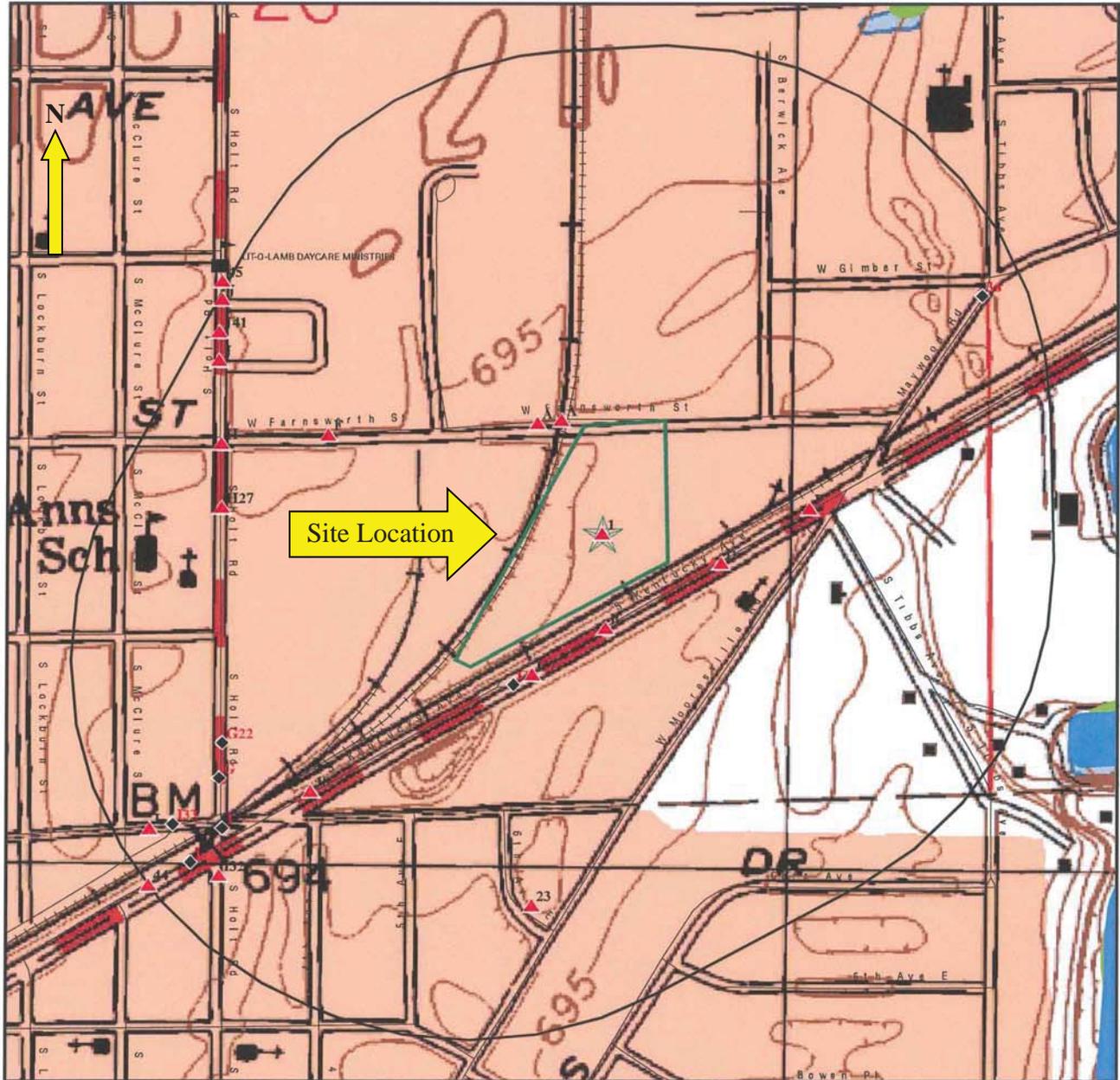
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.



**Vicinity Map**  
3605 Farnsworth Avenue  
Indianapolis, Indiana 46241

**FIGURE**  
**1**

DETAIL MAP - 3633426.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- National Wetland Inventory

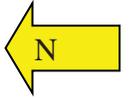
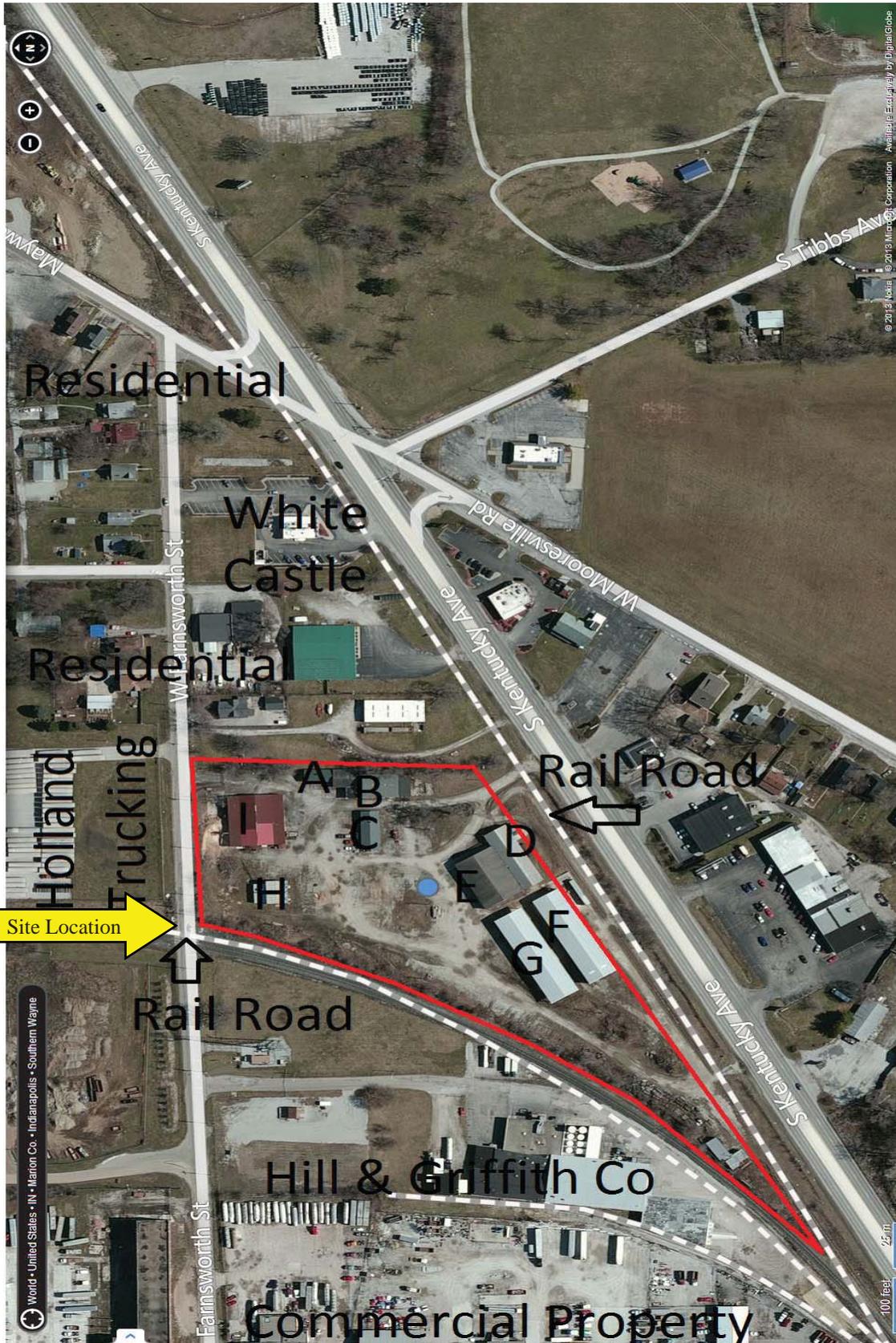
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.



**Topographic Map**

3605 Farnsworth Avenue  
Indianapolis Indiana 46241

**FIGURE  
1A**



### Site Map

3605 Farnsworth Street  
 Indianapolis, Indiana  
 See Next Page for Legend

FIGURE  
 2

## Legend for Site Map

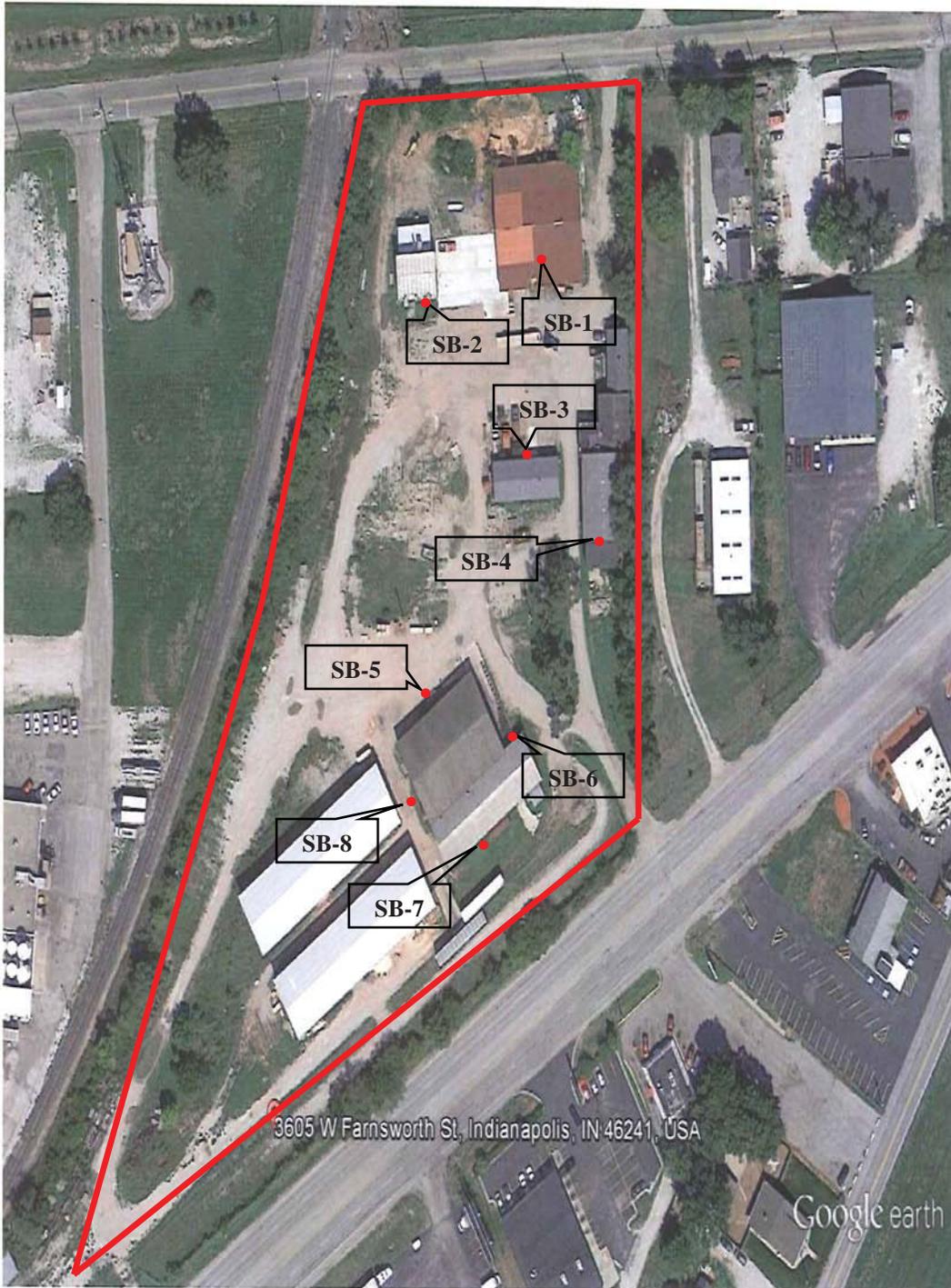
- Building A – Office Building
- Building B – Maintenance/Shop Building
- Building C – DOT Building
- Building D – Wood Treatment Building
- Building E – Covered Drip Pad Structure
- Building F – South Outside Storage Building
- Building G – North Outside Storage Building
- Building H – Kiln Drying Building
- Building I – Wood Stacker Building



### Site Map

3605 Farnsworth Street  
Indianapolis, Indiana

**FIGURE**  
**2A**



Google earth

feet  
meters



ENVIRONMENTAL  
SERVICES ASSOCIATES, LLC.

## Boring Location Map

3605 W. Farnsworth Street  
Indianapolis, Indiana  
ESA, LLC Project # 0813-1825

FIGURE  
3

# **APPENDIX B**

## **SOIL BORING LOGS**



234 West Main Street  
Carmel, Indiana 46032

Project Name: Former Wood Preserving Facility  
Site Address: 3605 W. Farnsworth Street  
City, State: Indianapolis, IN

Date: 8/22/13  
Client: 2008 TLA, LLC

SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
0		Ground Surface				
0-2*		Dry, gray, silty clay	0-2*	100	<1.0	<p>2" Diameter Sched 40 PVC Casing</p> <p>Bentonite</p> <p>Silica Quartz Sand Pack</p> <p>2-in Diameter, 0.010-in Slot Well Screen</p>
2-4			2-4	100	<1.0	
4-6			4-6	100	<1.0	
6-8		Dry, brown, medium sand with some gravel	6-8	100	<1.0	
8-10			8-10	100	<1.0	
10-12			10-12	100	<1.0	

Note: \* Sample Submitted for laboratory analysis.

Boring Diameter: 2.0 inches

Boring Depth: 24 ft

Well Diameter: N/A

Screen Material: N/A

Screen Length: N/A

▼ - Indicates depth to groundwater during development.

Casing Length: N/A

Casing Material: N/A

Sampling Method: Geoprobe

Drill Method: Direct Push

Drilled By: Geobore, LLC

Geologist: Tad Spaulding

NM: Not Measured



234 West Main Street  
Carmel, Indiana 46032

Project Name: Former Wood Preserving Facility  
Site Address: 3605 W. Farnsworth Street  
City, State: Indianapolis, IN

Date: 8/22/13  
Client: 2008 TLA, LLC

SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
12		Dry, brown, medium sand with some gravel	12-14	100	<1.0	
13						
14						
15						
16						
17		Becomes wet, brown, medium sand with some gravel	14-16	100	<1.0	
18						
19						
20						
21		Bottom of the boring at 24 ft	16-18	100	<1.0	
22						
23						
			18-20	100	<1.0	
			20-22	100	<1.0	
			22-24	100	<1.0	

Note: \* Sample Submitted for laboratory analysis.

Boring Diameter: 2.0 inches

Boring Depth: 24 ft

Well Diameter: N/A

Screen Material: N/A

Screen Length: N/A

▼ - Indicates depth to groundwater during development.

Casing Length: N/A

Casing Material: N/A

Sampling Method: Geoprobe

Drill Method: Direct Push

Drilled By: Geobore, LLC

Geologist: Tad Spaulding

NM: Not Measured



234 West Main Street  
Carmel, Indiana 46032

Project Name: Former Wood Preserving Facility  
Site Address: 3605 W. Farnsworth Street  
City, State: Indianapolis, IN

Date: 8/22/13  
Client: 2008 TLA, LLC

SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
0		Ground Surface				
0-2*		Dry, gray, silty clay	0-2*	100	<1.0	<p>Bentonite</p> <p>2" Diameter Sched 40 PVC Casing</p> <p>2-in Diameter, 0.010-in Slot Well Screen</p> <p>Silica Quartz Sand Pack</p>
2-4			2-4	100	<1.0	
4-6			4-6	100	<1.0	
6-8		Dry, brown, medium sand with some gravel	6-8	100	<1.0	
8-10			8-10	100	<1.0	
10-12			10-12	100	<1.0	

Note: \* Sample Submitted for laboratory analysis.

Boring Diameter: 2.0 inches

Boring Depth: 24 ft

Well Diameter: N/A

Screen Material: N/A

Screen Length: N/A

▼ - Indicates depth to groundwater during development.

Casing Length: N/A

Casing Material: N/A

Sampling Method: Geoprobe

Drill Method: Direct Push

Drilled By: Geobore, LLC

Geologist: Tad Spaulding

NM: Not Measured



234 West Main Street  
Carmel, Indiana 46032

Project Name: Former Wood Preserving Facility  
Site Address: 3605 W. Farnsworth Street  
City, State: Indianapolis, IN

Date: 8/22/13  
Client: 2008 TLA, LLC

SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
12		Dry, brown, medium sand with some gravel	12-14	100	<1.0	
13						
14						
15						
16						
17		Becomes wet, brown, medium sand with some gravel	14-16	100	<1.0	
18						
19						
20						
21						
22		Bottom of the boring at 24 ft	16-18	100	<1.0	
23						
			18-20	100	<1.0	
			20-22	100	<1.0	
			22-24	100	<1.0	

Note: \* Sample Submitted for laboratory analysis.

Boring Diameter: 2.0 inches

Boring Depth: 24 ft

Well Diameter: N/A

Screen Material: N/A

Screen Length: N/A

▼ - Indicates depth to groundwater during development.

Casing Length: N/A

Casing Material: N/A

Sampling Method: Geoprobe

Drill Method: Direct Push

Drilled By: Geobore, LLC

Geologist: Tad Spaulding

NM: Not Measured



234 West Main Street  
Carmel, Indiana 46032

**Project Name: Former Wood Preserving Facility**  
Site Address: 3605 W. Farnsworth Street  
City, State: Indianapolis, IN

**Date: 8/22/13**  
**Client: 2008 TLA, LLC**

SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
0		Ground Surface				
0-1		Dry, gray, silty clay	0-2*	100	<1.0	
1-2			2-4	100	<1.0	
2-3			4-6	100	<1.0	
3-4		Dry, brown, medium sand with some gravel	6-8	100	<1.0	
4-5			8-10	100	<1.0	
5-6			10-12	100	<1.0	
6-7						
7-8						
8-9						
9-10						
10-11						
11						

**Note: \* Sample Submitted for laboratory analysis.**

**Boring Diameter: 2.0 inches**

**Boring Depth: 24 ft**

**Well Diameter: N/A**

**Screen Material: N/A**

**Screen Length: N/A**

**▼ - Indicates depth to groundwater during development.**

**Casing Length: N/A**

**Casing Material: N/A**

**Sampling Method: Geoprobe**

**Drill Method: Direct Push**

**Drilled By: Geobore, LLC**

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SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
12		Dry, brown, medium sand with some gravel	12-14	100	<1.0	
13						
14						
15						
16						
17		Becomes wet, brown, medium sand with some gravel	14-16	100	<1.0	
18						
19						
20						
21		Bottom of the boring at 24 ft	16-18	100	<1.0	
22						
23						
			18-20	100	<1.0	
			20-22	100	<1.0	
			22-24	100	<1.0	

**Note: \* Sample Submitted for laboratory analysis.**

**Boring Diameter: 2.0 inches**

**Boring Depth: 24 ft**

**Well Diameter: N/A**

**Screen Material: N/A**

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SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
0		Ground Surface				
0-2*		Dry, gray, silty clay	0-2*	100	<1.0	<p>2" Diameter Sched 40 PVC Casing</p> <p>2-in Diameter, 0.010-in Slot Well Screen</p> <p>Bentonite</p> <p>Silica Quartz Sand Pack</p>
2-4			2-4	100	<1.0	
4-6			4-6	100	<1.0	
6		Dry, brown, medium sand with some gravel				
6-8			6-8	100	<1.0	
8-10			8-10	100	<1.0	
10-12			10-12	100	<1.0	

Note: \* Sample Submitted for laboratory analysis.

Boring Diameter: 2.0 inches

Boring Depth: 24 ft

Well Diameter: N/A

Screen Material: N/A

Screen Length: N/A

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Casing Length: N/A

Casing Material: N/A

Sampling Method: Geoprobe

Drill Method: Direct Push

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23						
			18-20	100	<1.0	
			20-22	100	<1.0	
			22-24	100	<1.0	

Note: \* Sample Submitted for laboratory analysis.

Boring Diameter: 2.0 inches

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SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
0		Ground Surface				
0-1		Dry, gray, silty clay	0-2*	100	<1.0	<p>2" Diameter Sched 40 PVC Casing</p> <p>Bentonite</p> <p>Silica Quartz Sand Pack</p> <p>2-in Diameter, 0.010-in Slot Well Screen</p>
1-2			2-4	100	<1.0	
2-3			4-6	100	<1.0	
3-4			6-8	100	<1.0	
4-5		Dry, brown, medium sand with some gravel	8-10	100	<1.0	
5-6			10-12	100	<1.0	
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SUBSURFACE PROFILE			SAMPLE			Well Completion Details: N/A
DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
0		Ground Surface				
0-1		Dry, gray, silty clay	0-2*	100	<1.0	<p>2" Diameter Sched 40 PVC Casing</p> <p>2-in Diameter, 0.010-in Slot Well Screen</p> <p>Bentonite</p> <p>Silica Quartz Sand Pack</p>
1-2			2-4	100	<1.0	
2-3			4-6	100	<1.0	
3-4			6-8	100	<1.0	
4-5		Dry, brown, medium sand with some gravel	8-10	100	<1.0	
5-6			10-12	100	<1.0	
6-7						
7-8						
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Note: \* Sample Submitted for laboratory analysis.

Boring Diameter: 2.0 inches

Boring Depth: 24 ft

Well Diameter: N/A

Screen Material: N/A

Screen Length: N/A

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Casing Length: N/A

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22		Becomes wet, brown, medium sand with some gravel	18-20	100	<1.0	
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22		Becomes wet, brown, medium sand with some gravel	20-22	100	<1.0	
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24		Bottom of the boring at 24 ft	22-24	100	<1.0	

**Note: \* Sample Submitted for laboratory analysis.**

**Boring Diameter: 2.0 inches**

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**Casing Length: N/A**

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DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
0		Ground Surface				
0-1		Dry, gray, silty clay	0-2*	100	<1.0	<p>2" Diameter Sched 40 PVC Casing</p> <p>2-in Diameter, 0.010-in Slot Well Screen</p> <p>Bentonite</p> <p>Silica Quartz Sand Pack</p>
1-2			2-4	100	<1.0	
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4-5		Dry, brown, medium sand with some gravel	8-10	100	<1.0	
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DEPTH (ft)	SYMBOL	GEOLOGIC DESCRIPTION	SAMPLE INTERVAL	RECOVERY	PID (ppm)	
12		Dry, brown, medium sand with some gravel				
13			12-14	100	<1.0	
14			14-16	100	<1.0	
15			16-18	100	<1.0	
16			18-20	100	<1.0	
17		Becomes wet, brown, medium sand with some gravel	20-22	100	<1.0	
18			22-24	100	<1.0	
19						
20		Bottom of the boring at 24 ft				

Note: \* Sample Submitted for laboratory analysis.

Boring Diameter: 2.0 inches

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