

**From:** Blauvelt, Shane <Shane.Blauvelt@parsons.com>  
**Sent:** Monday, January 22, 2018 12:57 PM  
**To:** Spellman, John (DEC)  
**Cc:** Knapp, Eric (DEC); Blazicek, Tracy; Burnham, Anne; Roth, Paul; DHollander, Ray; Prohaska, Ronald; Kessler, Dorian; Rose, Gary; Laurendi, Anthony; 'Adams, Chester'  
**Subject:** Clark Street Supplemental Investigation Report  
**Attachments:** Clark Street Letter Report\_1-22-18\_combined.pdf

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John,

The Clark Street Supplemental Investigation Report is attached for your review.

Please let us know if you have any questions or comments on the attached.

Thank you,  
Shane

**Shane Blauvelt, PE**  
Senior Project Manager  
301 Plainfield Road Suite 350 - Syracuse, NY 13212  
shane.blauvelt@parsons.com - 315-552-9675 Mobile 315-559-9740

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January 22, 2018

John Spellman, P.E.  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway  
Albany, New York 12233-7014

SUBJECT: Clark Street Supplemental Investigation in the Owasco Outlet

Dear John:

This Supplemental Investigation Report summarizes Owasco Outlet investigation activities at the Clark St. Former Manufactured Gas Plant (MGP) Site (the Site) (Site No. 7-06-008) conducted on November 30, 2017 and December 20, 2017. This report has been prepared by Parsons on behalf of NYSEG, in accordance with the Supplemental Investigation Work Plan (SIWP) approved by NYSDEC on October 12, 2017 and with the additional scope presented via e-mail on December 19, 2017

### ***BACKGROUND***

Sediment removal extents at the nearby McMaster Street Site expanded significantly during remedial construction implementation due to the presence of visual impacts beyond the extents shown in the design. Based on the proximity of the McMaster Street Site, a Supplemental Investigation (SI) was conducted at the Clark Street Site to determine if the Phase 4 remedial extents at Clark Street need to be expanded. The work was conducted on November 30, 2017 and December 20, 2017 in order to allow for appropriate revisions to the remedial extents and associated planning over the winter prior to mobilization in the Spring of 2018.

### ***INVESTIGATION ACTIVITIES***

The test pit excavations were conducted using an excavator with rock bucket at the locations shown on Figure 1. Test pits were extended vertically to the top of bedrock. The location and elevation of most of the test pits were surveyed as noted on Figure 2. Prior to and during test pit excavations, oil booms, as well as an oil-philic curtain as a secondary measure, were installed downstream to capture any sheens that were released during test pit excavations.

The excavator and required personal support accessed the outlet from the Clark Street Site and traveled to location on the existing sediment surface in flowing water conditions. Waders were worn by personnel while in the water along with proper PPE (i.e. gloves, hardhats, PFDs). All materials excavated during the test pitting were placed back in the test pit and restored to existing grade. Observations from each test pit were recorded as follows:

- Depth of sediment overlying bedrock
- Presence of visible impacts (sheens, NAPL, tar) and associated depths/thicknesses
- Presence of odors
- PID screening data
- Physical properties of materials with classification for soil type and grain size



Further information can be found in the test pit logs, located in Appendix A of this letter report. Visually impacted materials (i.e., tar and/or NAPL) that were encountered during the test pitting activities were collected for waste characterization purposes, resulting in a total of four samples from three of the test pits.

### ***RESULTS***

Test pits were installed at the locations shown on Figure 1. Visual impacts were observed at three of the in-stream test pits excavated on November 30<sup>th</sup>. Test pits TP-102A, TP-102B, and TP-103 all exhibited the presence of MGP-like odors, sheens, and NAPL in varying amounts. TP-BANK1 was excavated to confirm the presence of MGP material in the recommended bank removal area. Upon excavation, heavy MGP-like odors as well as the presence of NAPL was observed. During the December 20<sup>th</sup> test pit event, MGP related impacts were noted in two additional test pits outside of the designed excavation areas along the south bank. At TP-Bank4, a slight MGP-like odor and NAPL blebs/sheens were noted on the stream-facing edge of the test pit, indicating that impacts are likely present in stream sediments in this vicinity (i.e. not originally from the bank). Additionally, medium to large (6 to 12 inch) pieces of solidified coal tar were noted in TP-Bank5.

### ***RECOMMENDATIONS***

In addition to the removals presented in the 100% Design (Arcadis 2014), supplemental removals to bedrock are recommended in the vicinity of TP-102A, TP-102B, TP-103, and TP-Bank4 (Figure 2). Additionally, it is recommended that the extent of the bank excavations be extended upstream to encompass the impacted materials noted in TP-Bank5. Removals in this area are to be conducted based on visual observations of impacts; during excavations, once visual impacts are no longer observed in the area, excavations in the area will cease. These additional removal areas result in approximately 5,200 cubic yards of material to be excavated. Control points for the additional removal areas are shown on Figure 2.

Based on the additional volume of material recommended for removal discussed above, in addition to past performance during Phases 1 and 3 at the Clark Street Site, we revisited the appropriateness of utilizing a temporary fabric structure (TFS) during Phase 4. The 100% Design Report (Arcadis, 2014) indicated that a TFS would be utilized during the handling of Clark Street sediments. However, as indicated in Specification Section 01110, alternative odor suppression methods may be considered. Based on the lack of odor migration and community air monitoring results (CAMP) during Phases 1 and 3 while handling heavily impacted materials from the source area, it is not anticipated that a TFS would be required for Phase 4. Elimination of the TFS will provide the remedial contractor additional flexibility, especially when considering the increased volume of material to be excavated per the above recommendations, and increase productivity. Based on these factors, alternate odor control methods (i.e., similar to those used during Phases 1 and 3) will be used during Phase 4 in lieu of the TFS. Methods may include biosolve in active areas, and foam or tarps on stockpiled materials, as needed.



John Spellman, P.E.  
NYSDEC  
January 22, 2018  
Page 3

## References

2014, Arcadis. *Final (100%) Remedial Design Report: Clark Street Former Manufactured Gas Plant Site, Auburn NY*. August 2014.

Sincerely,

A handwritten signature in blue ink that reads "Shane R. Blauvelt". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Shane Blauvelt, P.E.



cc:  
Tracy Blazicek, NYSEG  
Paul Roth, Parsons

# FIGURES



**LEGEND:**

- CHAIN LINK FENCE
- EDGE OF WATER
- SEDIMENT REMOVAL AREAS PER APPROVED AUGUST 2014 FINAL DESIGN
- BANK REMOVAL AREAS PER APPROVED AUGUST 2014 FINAL DESIGN
- 2017 SEDIMENT TEST PIT LOCATION
- 2017 BANK TEST PIT LOCATION

**NOTE:**

1. LOCATIONS OF TP-BANK3, TP-BANK4, TP-BANK5, AND TP-BANK6 ARE APPROXIMATE AND NOT BASED ON SURVEY DATA.



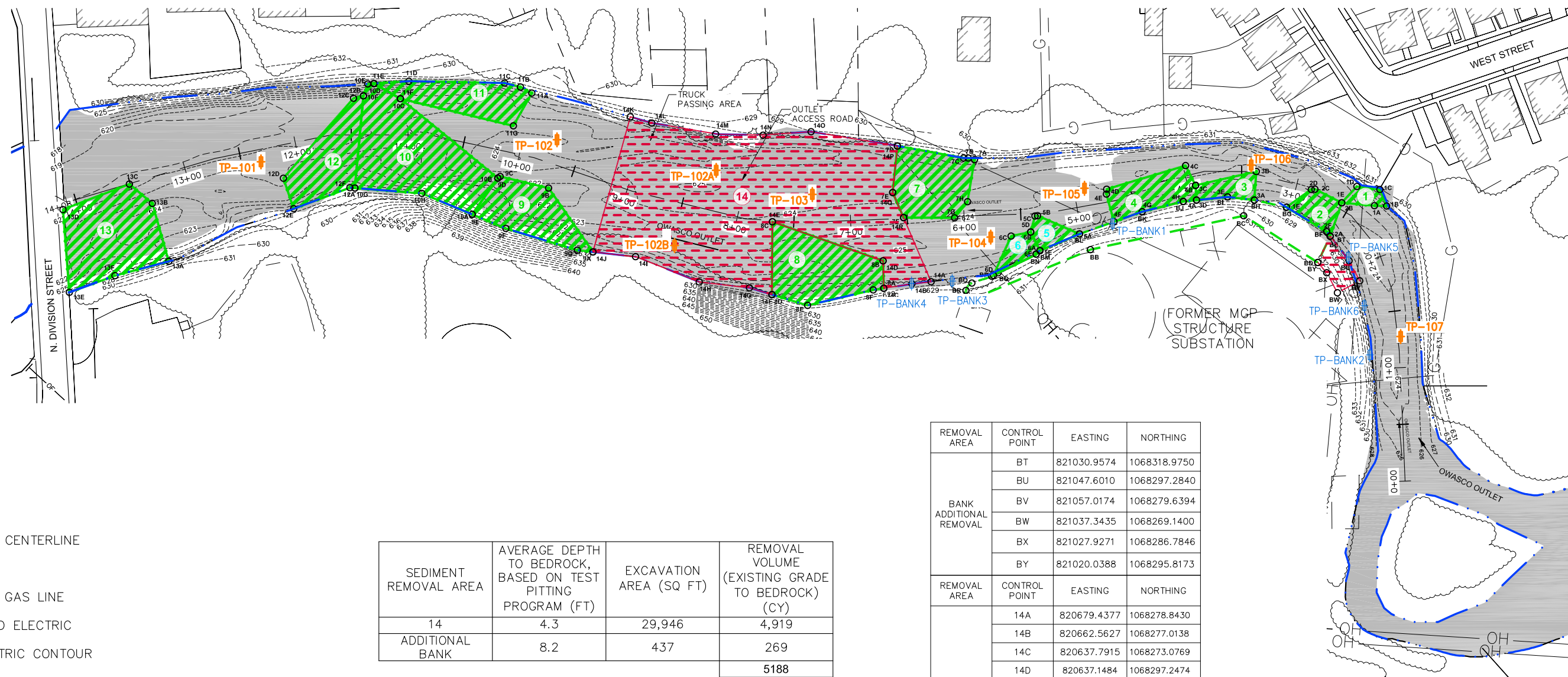
**FIGURE 1**

NYSEG  
CLARK STREET FORMER MGP SITE  
AUBURN, NEW YORK

TEST PIT LOCATIONS

**PARSONS**

301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 \* 315-451-9560



**LEGEND:**

- CHANNEL CENTERLINE
- OUTFALL
- NATURAL GAS LINE
- OVERHEAD ELECTRIC
- BATHYMETRIC CONTOUR
- EXISTING UTILITY POLE
- EXISTING BUILDING
- EDGE OF WATER
- BANK REMOVAL AREA PER APPROVED AUGUST 2014 FINAL DESIGN
- SEDIMENT REMOVAL AREA NUMBER
- SURVEY CONTROL POINT
- 2017 SEDIMENT TEST PIT LOCATION
- 2017 BANK TEST PIT LOCATION
- SEDIMENT REMOVAL AREA PER APPROVED AUGUST 2014 FINAL DESIGN
- ADDITIONAL REMOVAL AREAS (BASED ON 2017 TEST PITS)\*

SEDIMENT REMOVAL AREA	AVERAGE DEPTH TO BEDROCK, BASED ON TEST PITTING PROGRAM (FT)	EXCAVATION AREA (SQ FT)	REMOVAL VOLUME (EXISTING GRADE TO BEDROCK) (CY)
14	4.3	29,946	4,919
ADDITIONAL BANK	8.2	437	269
			<b>5188</b>

**TABLE NOTES:**

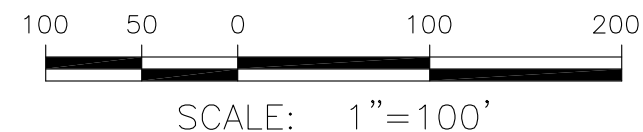
1. ESTIMATED DEPTH TO BEDROCK IS BASED ON TEST PITTING CONDUCTED IN THE FALL/WINTER 2017.
2. VOLUMES FOR EACH SEDIMENT REMOVAL AREA REPRESENT IN-SITU VOLUME ESTIMATES AND WERE CALCULATED USING THE ESTIMATED DEPTH TO BEDROCK. A 2:1 SLOPE WAS ASSUMED FOR EXCAVATION BOUNDARIES WITHIN THE CHANNEL.

**NOTE:**

1. LOCATIONS OF TP-BANK3, TP-BANK4, TP-BANK5, AND TP-BANK6 ARE APPROXIMATE AND NOT BASED ON SURVEY DATA.

\* THE ADDITIONAL REMOVAL AREA IS APPROXIMATE. ACTUAL REMOVALS WILL BE BASED ON VISUAL EXTENTS OF IMPACTS OBSERVED IN THE FIELD.

REMOVAL AREA	CONTROL POINT	EASTING	NORTHING
BANK ADDITIONAL REMOVAL	BT	821030.9574	1068318.9750
	BU	821047.6010	1068297.2840
	BV	821057.0174	1068279.6394
	BW	821037.3435	1068269.1400
	BX	821027.9271	1068286.7846
	BY	821020.0388	1068295.8173
REMOVAL AREA	CONTROL POINT	EASTING	NORTHING
14	14A	820679.4377	1068278.8430
	14B	820662.5627	1068277.0138
	14C	820637.7915	1068273.0769
	14D	820637.1484	1068297.2474
	14E	820539.6378	1068331.6261
	14F	820539.2686	1068267.5323
	14G	820519.4630	1068273.5250
	14H	820475.1910	1068278.6390
	14I	820419.1091	1068300.9349
	14J	820381.5815	1068305.0830
	14K	820414.5053	1068424.1067
	14L	820433.4093	1068418.6349
	14M	820489.6573	1068408.8653
	14N	820531.3979	1068407.9272
	14O	820573.7120	1068410.9900
	14P	820649.7913	1068398.3752
	14Q	820645.6120	1068357.4174
	14R	820655.2196	1068335.3245



NOT FOR CONSTRUCTION

**FIGURE 2**

**NYSEG  
CLARK STREET FORMER MGP SITE  
AUBURN, NEW YORK**

**SEDIMENT REMOVAL PLAN  
(PHASE 4)**

**PARSONS**  
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 \* 315-451-9560

**APPENDIX A**

**TEST PIT LOGS**



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site, Auburn, NY  
 PROJECT NUMBER: 449523  
 WEATHER: Partly cloudy, windy, temperature in the 50s  
 DATE/TIME START: 11/30/17 1330  
 DATE/TIME FINISH: 11/30/17 1345  
 CONTRACTOR: Sevenson  
 INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID:** TP-BANK-1  
**LOCATION:** Iberdrola Auburn, NY  
 Approximate L X W X D  
 = 10' X 5' X 5'  
 Located Against south bank,  
 off back side of upland site

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-1 ft) Dark brown fine to coarse SAND, some fine gravel, some silt, trace organics (TOPSOIL).	Grass at surface, roots to 6"
1	(1-5 ft) Brown with black inclusions fine to moist coarse sand, some gravel, little sand, trace cobbles. Moist.	(2-5 ft) Heavy MGP odors and NAPL
2		
3	Becomes saturated.	
4		
5	Terminated test pit at 5'; did not reach bedrock	

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1330  
DATE/TIME FINISH: 11/30/17 1345  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-BANK-1**

**LOCATION:** Iberdrola Auburn, NY  
Approximate L X W X D  
= 10' X 5' X 5'  
Located Against south bank,  
off back side of upland site

**PHOTOGRAPHS**

TP-BANK-1  
Picture  
looking into  
bank test pit  
from North



TP-BANK-1  
Picture of  
material from  
bank test pit  
looking East



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>	<b>TEST PIT ID:</b> <u>TP-BANK-2</u>
PROJECT NUMBER: <u>449523</u>	<b>LOCATION:</b> <u>Iberdrola Auburn, NY</u>
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>	Approximate L X W X D = 8' X 5' X 7'
DATE/TIME START: <u>11/30/17 1430</u>	Located Against south bank, ~40 ft downstream of gas line
DATE/TIME FINISH: <u>11/30/17 1445</u>	
CONTRACTOR: <u>Sevenson</u>	
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>	

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-5 ft) COBBLES and medium to coarse dark gray sand, trace gravel. Moist.	No odors or sheens. Woody debris in top 6".
1		
2		
3		
4		
5	Saturated. Terminated test pit at 5', did not reach bedrock.	

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1430  
DATE/TIME FINISH: 11/30/17 1445  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-BANK-2**

**LOCATION:** Iberdrola Auburn, NY  
Approximate L X W X D  
= 8' X 5' X 7'  
Located Against south bank,  
~40 ft downstream of gas line

**PHOTOGRAPHS**

TP-BANK-2  
Picture  
looking into  
bank test pit



TP-BANK-2  
Picture of  
material from  
bank test pit



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>	<b>TEST PIT ID:</b> TP-101
PROJECT NUMBER: <u>449523</u>	<b>LOCATION:</b> Iberdrola Auburn, NY
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>	Approximate L X W X D = 9' X 6' X 3'
DATE/TIME START: <u>11/30/17 1140</u>	Located Lower extent of site, floodplain, just upstream of bridge
DATE/TIME FINISH: <u>11/30/17 1150</u>	
CONTRACTOR: <u>Sevenson</u>	
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>	

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-3 ft) Dark brown fine to coarse SAND, little medium gravel, trace organics.  Becomes moist.  Top of bedrock at ~3'. TP terminated at 3' due to excavator refusal.	In floodplain, bedrock visible in channel. Grass at surface, roots to 6". No odors/sheens.
1		
2		
3		

Bottom of test pit at 3.0 ft bgs

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1140  
DATE/TIME FINISH: 11/30/17 1150  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-101**

**LOCATION:** Iberdrola Auburn, NY

Approximate L X W X D  
= 9' X 6' X 3'

Located Lower extent of site, floodplain,  
just upstream of bridge

**PHOTOGRAPHS**

TP-101  
Picture  
looking into  
test pit looking  
south



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>	<b>TEST PIT ID:</b> TP-102
PROJECT NUMBER: <u>449523</u>	<b>LOCATION:</b> Iberdrola Auburn, NY
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>	Approximate L X W X D = 8' X 5' X 3'
DATE/TIME START: <u>11/30/17 1120</u>	Located Center of channel downstream of upland site
DATE/TIME FINISH: <u>11/30/17 1135</u>	
CONTRACTOR: <u>Sevenson</u>	
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>	

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-1 ft) Dark gray coarse SAND, some coarse gravel. Wet	
1	(1-3 ft) Angular to sub-angular boulders and cobbles with a matrix of gravel, trace sand, some silt. Wet	No odors or sheens. PID Reading 0.7 PPM
2		
3		
Bedrock. TP terminated at 3' due to excavator refusal.		
Bottom of test pit at 3.0 ft bgs		
Test pit was advanced using an excavator		

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1100  
DATE/TIME FINISH: 11/30/17 1115  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-102**  
**LOCATION:** Iberdrola Auburn, NY  
Approximate L X W X D  
= 8' X 5' X 3'  
Located Center of channel  
downstream of upland site

**PHOTOGRAPHS**

TP-102  
Picture of  
material from  
test pit looking  
north





**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>	<b>TEST PIT ID:</b> TP-102A
PROJECT NUMBER: <u>449523</u>	<b>LOCATION:</b> Iberdrola Auburn, NY
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>	Approximate L X W X D = 8' X 5' X 3'
DATE/TIME START: <u>11/30/17 1100</u>	Located Against north bank, downstream of upland site
DATE/TIME FINISH: <u>11/30/17 1115</u>	
CONTRACTOR: <u>Sevenson</u>	
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>	

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-3 ft) BOULDERS and cobbles, little coarse gravel, trace coarse sand. Wet.	Elevations based on channel elevation not edge of island
1		
2		(2-3 ft) strong odors/sheens. NAPL and pure product observed.
3		Sample collected for analysis.

Bottom of test pit at 3.0 ft bgs

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1100  
DATE/TIME FINISH: 11/30/17 1115  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-102A**  
**LOCATION:** Iberdrola Auburn, NY  
Approximate L X W X D  
= 8' X 5' X 3'  
Located Against north bank,  
downstream of upland site

**PHOTOGRAPHS**

TP-102A  
Picture of  
material from  
test pit looking  
north



TP-102A  
Picture of  
NAPL blebs  
from test pit



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>		<b>TEST PIT ID:</b> TP-102B
PROJECT NUMBER: <u>449523</u>		<b>LOCATION:</b> Iberdrola Auburn, NY
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>		Approximate L X W X D
DATE/TIME START: <u>11/30/17 1157</u>		= 8' X 5' X 3'
DATE/TIME FINISH: <u>11/30/17 1215</u>		Located Against south bank,
CONTRACTOR: <u>Sevenson</u>		downstream of upland site
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>		
DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-2 ft) Sub-angular to sub-rounded COBBLES and coarse gravel, some sand, trace brick. Wet.	Strong petroleum odor/sheens, PID Reading 2.7 PPM
1		(1-2 ft) Strong petroleum odor/sheens, Staining prominent Sample collected. PID Reading 9.5 PPM
2	(2-3 ft) Sub-angular COBBLE, and coarse gravel, some sand, little boulders.	Strong MGP odor, NAPL. PID reading 14.2 PPM
3	Top of bedrock. TP terminated due to excavator refusal.	Sample collected
Bottom of test pit at 3.0 ft bgs		
Test pit was advanced using an excavator		

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1157  
DATE/TIME FINISH: 11/30/17 1215  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-102B**

**LOCATION:** Iberdrola Auburn, NY

Approximate L X W X D  
= 8' X 5' X 3'

Located Against south bank,  
downstream of upland site

**PHOTOGRAPHS**

TP-102B  
Picture of  
material from  
test pit with  
NAPL present



TP-102B  
Picture of  
sheens on  
material from  
test pit



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>	<b>TEST PIT ID:</b> TP-103
PROJECT NUMBER: <u>449523</u>	<b>LOCATION:</b> Iberdrola Auburn, NY
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>	Approximate L X W X D = 8' X 5' X 4.5'
DATE/TIME START: <u>11/30/17 1040</u>	Located Against north bank, 150 ft downstream of upland site
DATE/TIME FINISH: <u>11/30/17 1100</u>	
CONTRACTOR: <u>Sevenson</u>	
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>	

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-3.0 ft) Angular to sub-rounded GRAVEL, some angular to sub-rounded cobble with some sand, trace silt. Wet	No odors or sheens.
2		
3	(3.0 -4.0 ft) Sub-angular COBBLE with some angular limestone boulders, little coarse gravel, trace sand	(3-4 ft) Odors/sheens present, some NAPL blebs. PID Reading 1.4 PPM
4		
5	(4.5 ft) Top of bedrock. TP terminated at 4.5' due to excavator refusal.	Little odor, PID Reading 0.4 PPM

Bottom of test pit at 4.5 ft bgs

Test pit was advanced using an excavator

# PARSONS TEST PIT RECORD

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1040  
DATE/TIME FINISH: 11/30/17 1100  
CONTRACTOR: Severson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID:** TP-103  
**LOCATION:** Iberdrola Auburn, NY  
Approximate L X W X D  
= 8' X 5' X 4.5'  
Located Against north bank,  
150 ft downstream of  
upland site

## PHOTOGRAPHS

TP-103  
Picture of  
material from  
test pit looking  
east



TP-103  
Picture of  
sheens/NAPL  
blebs from test  
pit



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site, Auburn, NY  
 PROJECT NUMBER: 449523  
 WEATHER: Partly cloudy, windy, temperature in the 50s  
 DATE/TIME START: 11/30/17 1020  
 DATE/TIME FINISH: 11/30/17 1035  
 CONTRACTOR: Sevenson  
 INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID:** TP-104  
**LOCATION:** Iberdrola Auburn, NY  
 Approximate L X W X D  
 = 8' X 6' X 4'  
 Located Against south bank,  
 just downstream of  
 upland site

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0  1  2	(0-3 ft) sub-angular COBBLE and angular boulders, some brick, little gravel.	No sheen or odor.
3  4	(3-4 ft) Sub-angular to sub-rounded BOULDERS and cobbles, some coarse gravel, trace sand. Wet.  Top of fractured rock at ~4 feet. TP terminated at 4' due to excavator refusal.	(3-4 ft) Intermittent odors, no sheens PID Reading 0.2 PPM

Bottom of test pit at 4.0 ft bgs

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1040  
DATE/TIME FINISH: 11/30/17 1100  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID:** TP-104

**LOCATION:** Iberdrola Auburn, NY

Approximate L X W X D  
= 8' X 6' X 4'

Located Against south bank,  
just downstream of  
upland site

**PHOTOGRAPHS**

TP-104  
Picture of  
material from  
test pit looking  
west





**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>		<b>TEST PIT ID:</b> TP-105
PROJECT NUMBER: <u>449523</u>		<b>LOCATION:</b> Iberdrola Auburn, NY
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>		Approximate L X W X D = 10' X 6' X 2'
DATE/TIME START: <u>11/30/17 1345</u>		Located Middle of channel, just downstream of bend of channel next to upland site
DATE/TIME FINISH: <u>11/30/17 1355</u>		
CONTRACTOR: <u>Sevenson</u>		
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>		
DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-1) Very angular BOULDERS and angular to sub-angular cobbles	no sheens or odors observed
1	(1-2) Little medium gravel, trace fine gravel.	
2	Bedrock at ~2'. TP terminated at 2' due to excavator refusal.	
Bottom of test pit at 2.0 ft bgs		
Test pit was advanced using an excavator		

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1345  
DATE/TIME FINISH: 11/30/17 1355  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-105**

**LOCATION:** Iberdrola Auburn, NY

Approximate L X W X D  
= 10' X 6' X 2'

Located Middle of channel, just  
just downstream of bend  
of channel next to upland site

**PHOTOGRAPHS**

TP-105  
Picture of  
material from  
test pit looking  
north



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>	<b>TEST PIT ID:</b> TP-106
PROJECT NUMBER: <u>449523</u>	<b>LOCATION:</b> Iberdrola Auburn, NY
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>	Approximate L X W X D = 10' X 6' X 1.5'
DATE/TIME START: <u>11/30/17 1400</u>	Located Middle of channel,
DATE/TIME FINISH: <u>11/30/17 1415</u>	bend of channel near
CONTRACTOR: <u>Sevenson</u>	next to upland site
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>	

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	Angular BOULDERS and angular to sub-angular cobbles, little coarse gravel.	No odor or sheen
1		
	Bedrock at ~1.5 feet TP terminated at 1.5' due to excavator refusal.	
2		

Bottom of test pit at 1.5 ft bgs

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1400  
DATE/TIME FINISH: 11/30/17 1415  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-106**

**LOCATION:** Iberdr.  
Approximate L X W X D  
= 10' X 6' X 1.5'  
Located Middle of channel,  
bend of channel  
next to upland site

**PHOTOGRAPHS**

TP-106  
Picture of  
material from  
test pit looking  
north



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u>	<b>TEST PIT ID:</b> TP-107
PROJECT NUMBER: <u>449523</u>	<b>LOCATION:</b> Iberdrola Auburn, NY
WEATHER: <u>Partly cloudy, windy, temperature in the 50s</u>	Approximate L X W X D = 10' X 6' X 4'
DATE/TIME START: <u>11/30/17 1415</u>	Located Middle of channel, just downstream of gas line
DATE/TIME FINISH: <u>11/30/17 1425</u>	
CONTRACTOR: <u>Sevenson</u>	
INSPECTOR: <u>Shane Blauvelt/Paul Roth/Ray D'Hollander</u>	

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0  1  2	(0-2.5 ft) Very angular to angular BOULDERS and cobbles, little fine to medium gravel.	No sheen or odor.
3  4	(2.5-4 ft) Angular to sub-angular COBBLES, some coarse gravel, little low plasticity clay.  Bedrock at ~4 feet. TP terminated at 4' due to excavator refusal.	

Bottom of test pit at 4.0 ft bgs

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Partly cloudy, windy, temperature in the 50s  
DATE/TIME START: 11/30/17 1415  
DATE/TIME FINISH: 11/30/17 1425  
CONTRACTOR: Sevenson  
INSPECTOR: Shane Blauvelt/Paul Roth/Ray D'Hollander

**TEST PIT ID: TP-107**

**LOCATION:** Iberdr.  
Approximate L X W X D  
= 10' X 6' X 4'  
Located Middle of channel,  
just downstream of  
gas line

**PHOTOGRAPHS**

TP-107  
Picture of  
clay from test  
pit



TP-107  
Picture of  
material from  
test pit looking  
north



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site, Auburn, NY  
 PROJECT NUMBER: 449523  
 WEATHER: Cloudy, temperature in the low 30s  
 DATE/TIME START: 12/20/17 0855  
 DATE/TIME FINISH: 12/20/17 0910  
 CONTRACTOR: Sevenson  
 INSPECTOR: Anne Burnham/Dorian Kessler

**TEST PIT ID:** TP-BANK-3

**LOCATION:** Iberdrola Auburn, NY  
 Approximate L X W X D  
 = 12' X 5' X 6'  
 Located Against south bank,  
 just downstream of the edge  
 of upland work

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-3 ft) Fine to coarse brown SAND and medium gravel, little brick.	
1		
2		
3	(3-6 ft) Sub-angular to sub-rounded COBBLES and coarse gravel, some sand, little silt. Gray, moist.	
4		
5		
6	(6 ft) Bedrock, terminated test pit at 6' due to excavator refusal	

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Cloudy, temperature in the low 30s  
DATE/TIME START: 12/20/17 0855  
DATE/TIME FINISH: 12/20/17 0910  
CONTRACTOR: Sevenson  
INSPECTOR: Anne Burnham/Dorian Kessler

**TEST PIT ID: TP-BANK-3**

**LOCATION:** Iberdrola Auburn, NY  
Approximate L X W X D  
= 12' X 5' X 6'  
Located Against south bank,  
just downstream of the edge  
of upland work

**PHOTOGRAPHS**

TP-BANK-3  
Picture of  
looking into  
bank test pit  
from north



TP-BANK-3  
Picture of  
material from  
bank test pit  
from north





**PARSONS  
TEST PIT RECORD**

PROJECT NAME: <u>Iberdrola Clark Street Site, Auburn, NY</u> PROJECT NUMBER: <u>449523</u> WEATHER: <u>Cloudy, temperature in the low 30s</u> DATE/TIME START: <u>12/20/17 0915</u> DATE/TIME FINISH: <u>12/20/17 0925</u> CONTRACTOR: <u>Sevenson</u> INSPECTOR: <u>Anne Burnham/Dorian Kessler</u>	<b>TEST PIT ID: TP-BANK-4</b> <b>LOCATION:</b> Iberdrola Auburn, NY Approximate L X W X D = 8' X 5' X 5' Located Against south bank, ~100 ft downstream of extent of upland work
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DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	(0-4 ft) Dark brown fine to coarse SAND and coarse gravel, little silt, trace brick.	
1		
2		
3		
4	(4-4.5 ft) Dark brown fine to coarse SAND and coarse gravel, trace clay. (4.5 ft) bedrock, terminated test pit at 4.5' due to excavator refusal	Sheens and NAPL blebs present. PID reading 1.0 ppm
5		

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Cloudy, temperature in the low 30s  
DATE/TIME START: 12/20/17 0915  
DATE/TIME FINISH: 12/20/17 0925  
CONTRACTOR: Severson  
INSPECTOR: Anne Burnham/Dorian Kessler

**TEST PIT ID: TP-BANK-4**

**LOCATION:** Iberdrola Auburn, NY

Approximate L X W X D  
= 8' X 5' X 5'

Located Against south bank,  
~100 ft downstream of  
extent of upland work

**PHOTOGRAPHS**

TP-BANK-4  
Picture of  
material from  
bank test pit



TP-BANK-4  
Picture of  
sheens on  
bank test pit  
material



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site, Auburn, NY  
 PROJECT NUMBER: 449523  
 WEATHER: Cloudy, temperature in the low 30s  
 DATE/TIME START: 12/20/17 0935  
 DATE/TIME FINISH: 12/20/17 0945  
 CONTRACTOR: Sevenson  
 INSPECTOR: Anne Burnham/Dorian Kessler

**TEST PIT ID:** TP-BANK-5  
**LOCATION:** Iberdrola Auburn, NY  
 Approximate L X W X D  
 = 8' X 7' X 10'  
 Located Against south bank,  
 just above the upstream  
 extent of upland work, outside  
 of the ISS wall

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0 1 2	(0-3 ft) Brown fine to coarse SAND, some cobbles, little medium gravel	
3 4 5 6 7 8 9	(3-9 ft) Brown fine to coarse SAND, some cobbles with angular, cobble-sized hardened coal tar.	
10	(9.5 ft) Coarse GRAVEL and coarse sand, little clay (10 ft) Test pit terminated. Did not reach bedrock.	
11		

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Cloudy, temperature in the low 30s  
DATE/TIME START: 12/20/17 0935  
DATE/TIME FINISH: 12/20/17 0945  
CONTRACTOR: Sevenson  
INSPECTOR: Anne Burnham/Dorian Kessler

**TEST PIT ID: TP-BANK-5**

**LOCATION:** Iberdrola Auburn, NY

Approximate L X W X D  
= 8' X 7' X 10'

Located Against south bank,  
just above the upstream  
extent of upland work, outside  
of the ISS wall

**PHOTOGRAPHS**

TP-BANK-5  
Picture of  
material from  
bank test pit



TP-BANK-5  
Picture of broken  
piece of solid  
coal tar



**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site, Auburn, NY  
 PROJECT NUMBER: 449523  
 WEATHER: Cloudy, temperature in the low 30s  
 DATE/TIME START: 12/20/17 0950  
 DATE/TIME FINISH: 12/20/17 1000  
 CONTRACTOR: Sevenson  
 INSPECTOR: Anne Burnham/Dorian Kessler

**TEST PIT ID:** TP-BANK-6

**LOCATION:** Iberdrola Auburn, NY

Approximate L X W X D  
 = 8' X 7' X 10'

Located Against south bank,  
 just above the upstream  
 extent of upland work, outside  
 of the ISS wall

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0  1	(0-2 ft) Fine to coarse dark brown SAND, little gravel. Dry.	
2  3  4  5  6  7  8  9	(2-10 ft) Fine to coarse gray SAND, some cobbles. Wet.	
10  11	(10 ft) Fine to coarse SAND and cobbles, little gray clay. Test pit terminated, did not reach bedrock.	

Test pit was advanced using an excavator

**PARSONS  
TEST PIT RECORD**

PROJECT NAME: Iberdrola Clark Street Site Auburn, NY  
PROJECT NUMBER: 449523  
WEATHER: Cloudy, temperature in the low 30s  
DATE/TIME START: 12/20/17 0935  
DATE/TIME FINISH: 12/20/17 0945  
CONTRACTOR: Severson  
INSPECTOR: Anne Burnham/Dorian Kessler

**TEST PIT ID: TP-BANK-6**

**LOCATION:** Iberdrola Auburn, NY

Approximate L X W X D

= 8' X 7' X 10'

Located Against south bank,  
just above the upstream  
extent of upland work, outside  
of the ISS wall

**PHOTOGRAPHS**

TP-BANK-5  
Picture of  
material from  
bank test pit



TP-BANK-5  
Picture of  
material from  
test pit

