

APPENDIX B

WELL CONSTRUCTION DIAGRAMS

**31 TONAWANDA STREET
SITE NO. C915299**

DRILLING SUMMARY		
Geologist/Technician: Pete Gorton		
Drilling Company: Nature's Way		
Driller: Brett		
Model: Truck Mounted Rig Hollow Stem Auger		
Date: 8/29/2018		
GEOLOGIC LOG		
Depth(ft.)	Description	
	N/A	
WELL DESIGN		
TOC Elevation TOR Elevation Ground Level Flush Mount Protective Casing and Lockable Cap AUGERHOLE 4 inch dia. 20.2 feet length PVC CASING 2 inch dia. 10 feet length PVC SCREEN 2 inch dia. 10 feet length Bottom of Screen 20 feet bgs Bottom of Augerhole 20.2 feet bgs D Top of Seal 7 feet bgs E Top of Sand 9 feet bgs P Top of Screen 10 feet bgs T H		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 2" PVC Slot Size: 0.010"	Type: #0 Sand Setting: 10 to 9 feet bgs
Monitor: N/A	Setting: 20 to 10 feet bgs	SEAL MATERIAL Type: Bentonite Chips Setting: 9 to 7 feet bgs
COMMENTS:		LEGEND
		Cement Grout Bentonite Seal Silica Sandpack
Client: 31 Tonawanda St, LLC	Location: 31 Tonawanda St, Buffalo, NY	Project No.:
	MONITORING WELL CONSTRUCTION DETAILS	Well Number: 31-MW-1

DRILLING SUMMARY																						
Geologist/Technician: Pete Gorton																						
Drilling Company: Nature's Way																						
Driller: Brett																						
Model: Truck Mounted Rig Hollow Stem Auger																						
Date: 8/29/2018																						
GEOLOGIC LOG																						
Depth(ft.)	Description																					
	N/A																					
WELL DESIGN																						
<table border="1"> <thead> <tr> <th>CASING MATERIAL</th> <th>SCREEN MATERIAL</th> <th>FILTER MATERIAL</th> </tr> </thead> <tbody> <tr> <td>Surface: Steel grade box</td> <td>Type: 2" PVC Slot Size: 0.010"</td> <td>Type: #0 Sand Setting: 19 to 30 feet bgs</td> </tr> <tr> <td>Monitor: N/A</td> <td>Setting: 30 to 20 feet bgs</td> <td>SEAL MATERIAL Type: Bentonite Chips Setting: 19 to 16.5 feet bgs</td> </tr> <tr> <td colspan="2">COMMENTS:</td> <td>LEGEND</td> </tr> <tr> <td colspan="2"></td> <td> Cement Grout Bentonite Seal Silica Sandpack </td> </tr> <tr> <td>Client: 31 Tonawanda St, LLC</td> <td>Location: 31 Tonawanda St, Buffalo, NY</td> <td>Project No.:</td> </tr> <tr> <td> </td> <td>MONITORING WELL CONSTRUCTION DETAILS</td> <td>Well Number: 31-MW-2</td> </tr> </tbody> </table>		CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL	Surface: Steel grade box	Type: 2" PVC Slot Size: 0.010"	Type: #0 Sand Setting: 19 to 30 feet bgs	Monitor: N/A	Setting: 30 to 20 feet bgs	SEAL MATERIAL Type: Bentonite Chips Setting: 19 to 16.5 feet bgs	COMMENTS:		LEGEND			Cement Grout Bentonite Seal Silica Sandpack	Client: 31 Tonawanda St, LLC	Location: 31 Tonawanda St, Buffalo, NY	Project No.:		MONITORING WELL CONSTRUCTION DETAILS	Well Number: 31-MW-2
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL																				
Surface: Steel grade box	Type: 2" PVC Slot Size: 0.010"	Type: #0 Sand Setting: 19 to 30 feet bgs																				
Monitor: N/A	Setting: 30 to 20 feet bgs	SEAL MATERIAL Type: Bentonite Chips Setting: 19 to 16.5 feet bgs																				
COMMENTS:		LEGEND																				
		Cement Grout Bentonite Seal Silica Sandpack																				
Client: 31 Tonawanda St, LLC	Location: 31 Tonawanda St, Buffalo, NY	Project No.:																				
	MONITORING WELL CONSTRUCTION DETAILS	Well Number: 31-MW-2																				

DRILLING SUMMARY		
Geologist/Technician: Alex Brennen		
Drilling Company: Nature's Way		
Driller: Brett		
Model: Truck Mounted Rig Hollow Stem Auger		
Date: 8/27/2018		
GEOLOGIC LOG		
Depth(ft.)	Description	
	N/A	
WELL DESIGN		
TOC Elevation TOR Elevation Ground Level Flush Mount Protective Casing and Lockable Cap AUGERHOLE 4 inch dia. 18 feet length PVC CASING 2 inch dia. 8 feet length PVC SCREEN 2 inch dia. 10 feet length Top of Seal 5 feet bgs Top of Sand 7 feet bgs Top of Screen 8 feet bgs Bottom of Screen 18 feet bgs Bottom of Augerhole 18 feet bgs		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 2" PVC Slot Size: 0.010"	Type: #0 Sand Setting: 7 to 18 feet bgs
Monitor: N/A	Setting: 8 to 18 feet bgs	SEAL MATERIAL Type: Bentonite Chips Setting: 7 to 5 feet bgs
COMMENTS:		LEGEND
		Cement Grout Bentonite Seal Silica Sandpack
Client: 31 Tonawanda St, LLC	Location: 31 Tonawanda St, Buffalo, NY	Project No.:
	MONITORING WELL CONSTRUCTION DETAILS	Well Number: 31-MW-3

DRILLING SUMMARY																			
Geologist/Technician: Alex Brennen																			
Drilling Company: Nature's Way																			
Driller: Brett																			
Model: Truck Mounted Rig Hollow Stem Auger																			
Date: 8/28/2018																			
GEOLOGIC LOG																			
Depth(ft.)	Description																		
	N/A																		
WELL DESIGN																			
<table border="1"> <thead> <tr> <th>CASING MATERIAL</th> <th>SCREEN MATERIAL</th> <th>FILTER MATERIAL</th> </tr> </thead> <tbody> <tr> <td>Surface: Steel grade box</td> <td>Type: 2" PVC Slot Size: 0.010"</td> <td>Type: #0 Sand Setting: 8.5 to 20 feet bgs</td> </tr> <tr> <td>Monitor: N/A</td> <td>Setting: 10 to 20 feet bgs</td> <td>SEAL MATERIAL Type: Bentonite Chips Setting: 8.5 to 6.5 feet bgs</td> </tr> <tr> <td colspan="2">COMMENTS:</td> <td>LEGEND Cement Grout Bentonite Seal Silica Sandpack </td> </tr> <tr> <td>Client: 31 Tonawanda St, LLC</td> <td>Location: 31 Tonawanda St, Buffalo, NY</td> <td>Project No.:</td> </tr> <tr> <td> </td> <td>MONITORING WELL CONSTRUCTION DETAILS</td> <td>Well Number: 31-MW-4</td> </tr> </tbody> </table>		CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL	Surface: Steel grade box	Type: 2" PVC Slot Size: 0.010"	Type: #0 Sand Setting: 8.5 to 20 feet bgs	Monitor: N/A	Setting: 10 to 20 feet bgs	SEAL MATERIAL Type: Bentonite Chips Setting: 8.5 to 6.5 feet bgs	COMMENTS:		LEGEND Cement Grout Bentonite Seal Silica Sandpack	Client: 31 Tonawanda St, LLC	Location: 31 Tonawanda St, Buffalo, NY	Project No.:		MONITORING WELL CONSTRUCTION DETAILS	Well Number: 31-MW-4
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL																	
Surface: Steel grade box	Type: 2" PVC Slot Size: 0.010"	Type: #0 Sand Setting: 8.5 to 20 feet bgs																	
Monitor: N/A	Setting: 10 to 20 feet bgs	SEAL MATERIAL Type: Bentonite Chips Setting: 8.5 to 6.5 feet bgs																	
COMMENTS:		LEGEND Cement Grout Bentonite Seal Silica Sandpack																	
Client: 31 Tonawanda St, LLC	Location: 31 Tonawanda St, Buffalo, NY	Project No.:																	
	MONITORING WELL CONSTRUCTION DETAILS	Well Number: 31-MW-4																	

DRILLING SUMMARY	
Geologist/Technician: Pete Gorton	
Contractor: Nature's Way	
Operator: Brett	
Model: Truck Mounted Rig Hollow Stem Auger	
Date: 8/27/2018	
GEOLOGIC LOG	
Depth(ft.)	Description
4 to 6	PID Readings of cuttings 2-15 ppm
WELL DESIGN	

DEPTH

Top of Riser _____ feet

Ground Level _____ feet

Top of Seal _____ 2 feet

Top of Sand Pack _____ 4 feet

Top of Screen _____ 5.5 feet

Bottom of Screen _____ 20.5 feet

Bottom of Borehole _____ 20.5 feet

Top of Casing _____ feet

Ground Level _____

Schedule 40 PVC Casing
2 inch diameter
5.5 feet length bgs

Borehole Diameter
_____ 4 inches

Schedule 40 PVC Screen
2 inch diameter
15 feet length

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: 4" Steel protective cover (Stick Up) Monitor: 2" Schedule 40 PVC	Type: 2" Schedule 40 PVC Slot Size: 0.010" Setting: 6 to 36 fbgs	Type: #0 well sand Setting: 5 to 36 fbgs
		SEAL MATERIAL Type 1: Bentonite chips Setting: 2 to 5 fbgs Type 1: Cement Grout Setting: 0 to 2 fbgs
COMMENTS: Very tight clays noted below fill. Drill depth done until clay softened to ensure water generation		LEGEND Cement Grout Bentonite Seal Sand Pack

Client: 31 Tonawanda St, LLC	Location: 31 Tonawanda St, Buffalo, NY	Project No.:
 BE3 CORP PANAMERICAN ENVIRONMENT • ENGINEERING • ENERGY	MONITORING WELL CONSTRUCTION DETAILS	Well Number: 31-MW-5

**31 TONAWANDA STREET OFF-SITE
SITE NO. C915299A**

DRILLING SUMMARY			
Geologist: Steve Moeller			
Drilling Company: TREC Environmental			
Driller: Eric Hamman			
Rig Make/Model: Geoprobe 6620 DT			
Date: September 24, 2020			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See log for soil boring SB-100.		
		Ground Surface Top of Riser Top of Seal Top of Sand Pack Top of Screen D E P T H Bottom of Screen Screen Bottom Cap Bottom of Borehole	
		feet 0.27 feet 1 foot 12 feet 13.64 feet 28.64 feet 28.89 feet 29 feet	
		Flush Mount with Lockable Cap Expandable plug with lock Schedule 40 PVC Riser 2 inch dia. 13.37 feet length Borehole Diameter 8 inch dia. Schedule 40 PVC Screen 2 inch dia. 15 feet length End Cap	
WELL DESIGN			
SURFACE COMPLETION Surface: 8-inch diameter steel flush-mount with 12-inch skirt		SCREEN MATERIAL Type: 2-inch ID Schedule 40 PVC, threaded with O-ring seal Slot Size: 0.010" machine slotted Setting: 13.64 - 28.64 feet bgs	
RISER MATERIAL Type: 2-inch ID Schedule 40 PVC threaded with O-ring seal Setting: 0.27 - 13.64 feet bgs		FILTER MATERIAL Type: Filpro #00N Silica Sand Setting: 12 - 29 feet bgs	
		SEAL MATERIAL Type: CETCO PureGold Medium Bentonite Chips Setting: 1 - 12 feet bgs	
COMMENTS: Well is located west of the bike path in a grass strip adjacent to the 57-71 Tonawanda Street BCP Site, Site No. C915024. This well is at the base of the bike path ramp near an asphalt pad.		LEGEND  Cement  Bentonite Chip Seal  Silica Sandpack	
Client: NYSDEC		Location: Bike Path off West Ave. Buffalo, NY	
		MONITORING WELL CONSTRUCTION DETAILS	
Department of Environmental Conservation		Site Name: 31 Tonawanda Off Site Site No.: C915299A Well Number: MW-100	

DRILLING SUMMARY			
Geologist: Steve Moeller			
Drilling Company: TREC Environmental			
Driller: Eric Hamman			
Rig Make/Model: Geoprobe 6620 DT			
Date: September 23, 2020			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See log for soil boring SB-103.		
WELL DESIGN			
SURFACE COMPLETION		SCREEN MATERIAL	
Surface: 8-inch diameter steel flush-mount with 12-inch skirt		Type: 2-inch ID Schedule 40 PVC, threaded with O-ring seal	
RISER MATERIAL		Slot Size: 0.010" machine slotted	
Type: 2-inch ID Schedule 40 PVC threaded with O-ring seal		Setting: 8.63 - 23.63 feet bgs	
Setting: 0.43 - 8.63 feet bgs		Filter Material	
COMMENTS: Well is located west of the bike path in a grass strip adjacent to the 57-71 Tonawanda Street BCP Site, Site No. C915024.		SEAL MATERIAL	
		Type: CETCO PureGold Medium Bentonite Chips	
		Setting: 1 - 7 feet bgs	
		LEGEND	
		Cement	
		Bentonite Chip Seal	
		Silica Sandpack	
Client: NYSDEC		Location: Bike Path off West Ave. Buffalo, NY	Site Name: 31 Tonawanda Off Site Site No.: C915299A
Department of Environmental Conservation		MONITORING WELL CONSTRUCTION DETAILS Well Number: MW-103	

DRILLING SUMMARY		Ground Surface Top of Riser Top of Seal Top of Sand Pack Top of Screen D E P T H Bottom of Screen Screen Bottom Cap Bottom of Borehole feet 0.45 feet 1 foot 7 feet 8.58 feet 23.58 feet 23.83 feet 24 feet Flush Mount with Lockable Cap Expandable plug with lock Schedule 40 PVC Riser 2 inch dia. 8.13 feet length Borehole Diameter 8 inch dia. Schedule 40 PVC Screen 2 inch dia. 15 feet length End Cap	
Geologist: Steve Moeller			
Drilling Company: TREC Environmental			
Driller: Eric Hamman			
Rig Make/Model: Geoprobe 6620 DT			
Date: September 23, 2020			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See log for soil boring SB-106.		
WELL DESIGN			
SURFACE COMPLETION		SCREEN MATERIAL	FILTER MATERIAL
Surface: 8-inch diameter steel flush-mount with 12-inch skirt		Type: 2-inch ID Schedule 40 PVC, threaded with O-ring seal	Type: Filpro #00N Silica Sand Setting: 7 - 24 feet bgs
RISER MATERIAL		Slot Size: 0.010" machine slotted	SEAL MATERIAL
Type: 2-inch ID Schedule 40 PVC threaded with O-ring seal Setting: 0.45 - 8.58 feet bgs		Setting: 8.58 - 23.58 feet bgs	Type: CETCO PureGold Medium Bentonite Chips Setting: 1 - 7 feet bgs
COMMENTS: Well is located west of the bike path in a grass strip adjacent to the former Pratt & Lambert Paint Company, Site No. 915251, at 75 Tonawanda Street. The well is close to where the Scajaquada Expressway crosses the bike path.		LEGEND	
		Cement Bentonite Chip Seal Silica Sandpack	
Client: NYSDEC		Location: Bike Path off West Ave. Buffalo, NY	Site Name: 31 Tonawanda Off Site Site No.: C915299A
NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation		MONITORING WELL CONSTRUCTION DETAILS	Well Number: MW-106

DRILLING SUMMARY			
Geologist: Steve Moeller			
Drilling Company: TREC Environmental			
Driller: Eric Hamman			
Rig Make/Model: Geoprobe 6620 DT			
Date: September 15, 2020			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See log for soil boring 1675-SB-1.		
		Ground Surface Top of Riser Top of Seal Top of Sand Pack Top of Screen D E P T H Bottom of Screen Screen Bottom Cap Bottom of Borehole	
		feet 0.32 feet 1 foot 13 feet 16.5 feet 31.5 feet 31.75 feet 32.0 feet	
		Flush Mount with Lockable Cap Expandable plug with lock Schedule 40 PVC Riser 2 inch dia. 16.18 feet length Borehole Diameter 8 inch dia. Schedule 40 PVC Screen 2 inch dia. 15 feet length End Cap	
WELL DESIGN			
SURFACE COMPLETION Surface: 8-inch diameter steel flush-mount with 12-inch skirt		SCREEN MATERIAL Type: 2-inch ID Schedule 40 PVC, threaded with O-ring seal Slot Size: 0.010" machine slotted Setting: 16.5 - 31.5 feet bgs	
RISER MATERIAL Type: 2-inch ID Schedule 40 PVC threaded with O-ring seal Setting: 0.32 - 16.5 feet bgs		FILTER MATERIAL Type: Filpro #00N Silica Sand Setting: 13 - 32 feet bgs	
		SEAL MATERIAL Type: CETCO PureGold Medium Bentonite Chips Setting: 1 - 13 feet bgs	
COMMENTS: Well is located in front of the easternmost portion of the building in a grass strip between the building and sidewalk.		LEGEND  Cement  Bentonite Chip Seal  Silica Sandpack	
Client: NYSDEC		Location: 1675 Niagara Street Buffalo, NY	
		MONITORING WELL CONSTRUCTION DETAILS	
Department of Environmental Conservation		Site Name: 31 Tonawanda Off Site Site No.: C915299A Well Number: 1675-MW-1	

DRILLING SUMMARY

Geologist:
Steve Moeller

Drilling Company:
TREC Environmental

Driller: Eric Hamman

Rig Make/Model: Geoprobe 6620 DT
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Date:
September 15, 2020

GEOLOGIC LOG

Depth(ft.)	Description
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Depth(ft.)	Description
	See log for soil boring 1675-SB-2.

WELL DESIGN

Well Number: 1675-MW-2

**57-71 TONAWANDA STREET
SITE NO. C915024**

TABLE 2
MONITORING WELL STRATIGRAPHY

<i>Well Description</i>	<i>Depth (BGS)</i>	<i>Material Description</i>
MW1-89	0' - 0.2'	black moist gravelly sand fill
	0.2' - 1.5'	brown dry silty sand fill, with many large stones and some bricks, cinders, concrete rubble, and lumps of silty clay
	1.5' - 6.0'	brown dry clayey silt fill, with some sand, many large stones and some concrete rubble
	6.0' - 10.0'	brown moist clayey silt fill, with some gravel, concrete and asphalt rubble, stones, rocks, and wood fragments
	10.0' - 12.0'	brown moist silty clay fill, with some stones, rocks, gravel, cinders, ash, and wood fragments

Notes:

- static water level 7.0 ft. BGS*
- bottom of well 11.3 ft. BGS
- top of well 2.9 ft. AGS**
- top of sandpack 7.3 ft. BGS
- screened interval 11.0 - 9.0 ft. BGS
- total well length 13.9 ft.

* BGS - below ground surface

** AGS - above ground surface

TABLE 2
MONITORING WELL STRATIGRAPHY

<i>Well Description</i>	<i>Depth (BGS)</i>	<i>Material Description</i>
MW2-89	0' - 0.3'	black moist gravelly sand fill
	0.3' - 1.5'	brown dry silty sand fill, with some gravel, some cinders, stones, rocks, concrete rubble, and trace brick material
	1.5' - 6.0'	brown dry gravelly sand fill, with trace silt, some concrete rubble, asphalt rubble, stones and rocks
	6.0' - 9.0'	brown wet sandy silt fill, with some gravel and clay lumps and trace wood fragments
	9.0' - 11.0'	same as above except soil has an iridescent sheen and diesel odor

Notes:

- static water level 6.0 ft. BGS*
- bottom of well 8.0 ft. BGS
- top of well 2.3 ft. AGS**
- top of sandpack 4.0 ft. BGS
- screened interval 7.7 - 5.7 ft. BGS
- total well length 10.0 ft.

* BGS - below ground surface

** AGS - above ground surface

DATE STARTED <u>9-26-90</u> FINISHED <u>9-26-90</u> SHEET <u>1</u> OF <u>1</u>	 E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG	HOLE NUMBER <u>GW-1</u> SURFACE ELEVATION _____ GROUNDWATER DEPTH _____ ()
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PROJECT <u>Fedders Auto</u> <u>YPLE040</u>	LOCATION <u>NW corner of lot.</u> <u>10 E of 40.20</u>
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DEPTH - FT	WELL DIAGRAM	SAMPLE TYPE	SAMPLE NO.	BLOWS ON SAMPLER	PROFILE SAMPLE ID G S S G	FIELD IDENTIFICATION OF SOILS	NOTES
				0 6 12			
				12 18 24			
5		SS	1	25 35 5 3	SB-1A	SS #1 0-2' 1.3' Recovery	OVA = 0 H _N u = 0 DRY
		SS	2	1 1 2 1	SB-1B	0-0.5' Black gravelly sand fill	
		SS	3	2 1 1 2	SB-1C	0.5-0.65' Red brick.	
		SS	4	2 1 1 2	SB-1D	0.65-1.0' Concrete	
		SS	5	7 14 19 20		1.0-1.3' Black sand fill.	
10	TD=9'	SS	6	15 13 18 16		SS #2 2-4' 1.1' Recovery	OVA > 1000 H _N u = 15 pp MOIST.
	screen 4-9'					0-0.7' Black sandy fill with greasy appearance + oil-like aroma.	
	sand 3.5-9'					0.7'-1.1' reddish brown clay fill w/ brick.	
	seal 2.5-3.5'					SS #3 4-6' 0.7' Recovery	OVA = 10 H _N u = 3 MOIST.
						All moist reddish brown clay. can't see any foreign fragments ∴ perhaps its natural (!)	
						SS #4 6-8' 0.8' Recovery	OVA = 0 H _N u = 0 WET.
						All wet reddish brown clay w/ no visible signs of fill material. Clay (as in #3) Clay is highly cohesive + moderately plastic.	
						SS #5 8-10' 1.1' Recovery	OVA = 0 H _N u = 0 DRY
						All dry reddish brown clay, tight, highly cohesive + plastic. Appears natural. Water is sitting on top of this layer.	
						SS #6 9-11'	OVA H _N u = 0
						Same as #5	
						There is water in the hole.	

DATE STARTED <u>9-26-90</u> FINISHED <u>9-26-90</u> SHEET <u>1</u> OF <u>1</u>	 E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG	HOLE NUMBER <u>GW-2</u> SURFACE ELEVATION _____ GROUNDWATER DEPTH _____ ()
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PROJECT <u>Fedders Auto.</u> <u>YPL040</u>	LOCATION <u>NE corner of lot near</u> <u>Scajacanda Creek.</u>
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DEPTH - FT	WELL DIAGRAM	SAMPLE TYPE	SAMPLE NO.	BLOWS ON SAMPLER	PROFILE SAMPLE ID C I SI Sd Gr	FIELD IDENTIFICATION OF SOILS	NOTES	
				0 6 12				
				12 18 24				
0	0	0	SS 1	6 11	SB-2A	SS #1 0-2' 1.7' Recovery	HNU = 10 ppm OVA = 10 ppm Both only @ very end of spoon. MOIST.	
3	000	00	SS 2	8 4	SB-2B	0-0.6 Black sandy fill w/ brick, glass, slag, etc.		
4			SS 3	3 1	SB-2C	0.6-1.1' Concrete (weathered)		
5			SS 4	4 2	NONE	1.1-1.7' Reddish-brown + black clay fill w/ sand, slag, (foundry material) etc.		
10			SS 5	2 2		SS #2 2-4' 1.6' Recovery		HNU = 0 OVA = 0 Damp
			SS 6	11 16		0-1.0' Dark brown sandy fill w/ brick, slag, a white ceramic material, black glass (foundry)		
			SS 7	4 2		1.0-1.6' Black sandy clay fill, greasy in appearance but not in touch.		
15	TD=14.5							
	Screen 4.5-14.5'							
	sand 4-14.5'							
20	Seal 3-4'							
25								
						SS #3 4-6' 0.4' Recovery	HNU = 0 OVA = 0 Wet.	
						Limited sample volume ∴ will Spoon again. 0-0.4' Wet black sandy fill. 2nd time retrieved nothing but water.		
						SS #4 6-8' 0.4' Recovery		
						Appears to be material that was stuck in bit. Auger cuttings indicate saturated black sandy fill, spoon shows damp sandy clay fill.		
						SS #5 8-10' No recovery.	HNU = 0 OVA = 0 Saturated.	
						Try again - 2nd spoon is saturated gravelly sand fill.		
						SS #6 10-12' 1.0' Recovery		
						All wood, as in GW-3b.	OVA = 10 HNU N/A	
						SS #7 12-14' 1.0' Recovery		
						0-0.4' Reddish brown sandy clay	OVA = 100 HNU = 0	
						Fill w/ brick fragments		
						0.4-0.9' Wood 0.9-1.0' Black clay w/ wood.		

640088

C-3

CLASSIFICATION/BY R. Watt

DATE STARTED <u>9-25-90</u> FINISHED <u>9-26-90</u> SHEET <u>1</u> OF <u>1</u>	 E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG	HOLE NUMBER <u>GW-3</u> SURFACE ELEVATION _____ GROUNDWATER DEPTH _____ ()
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PROJECT <u>Fedders Auto</u> <u>4P6040</u>	LOCATION <u>SE corner of lot near</u> <u>Scajarcanda Creek.</u>
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DEPTH - FT	WELL DIAGRAM	SAMPLE TYPE	SAMPLE NO.	BLOWS ON SAMPLER				PROFILE	FIELD IDENTIFICATION OF SOILS	NOTES
				0	6	6	12			
				12	18	18	24			
5										
		SS	1	2	1				Third try @ GW-3 Auger to 4' then split spoon.	
				1	2				SS #1 1.2' Recovery. 4-6'	HNu = 0 OVA < 1 ppm water table near 5'
		SS	2	1	1				All black sandy fill as we've seen before. Contains limestone gravel, brick, wood, etc.	
				1	2				Wet below 5'	
10		SS	3	1	1					
				1	0				SS #2 6-8' 1.2' Recovery.	HNu = 0 OVA < 1 ppm
		SS	4	1	1				Reddish brown + black clayey fill with slag + coke fragments moist to wet.	
				1	0					
		SS	5	2	1				SS #3 8-10' 1.8' Recovery	HNu = 0 OVA < 1 ppm SATURATED
				1	1				Saturated.	
15	TD: 14.5'								0-0.5' Sandy clayey fill (black)	
	screen 4.5-14.5'								0.5-1.1' Reddish brown + black clay	
	sand 4-14.5'								Fill with gravel.	
20									1.1-1.8' coarse sand + coke/slag fill material.	
	seal 3-4'									
25									SS #4 10-12' 0.6' Recovery	HNu = 0 OVA = 5.6 ppm Saturated.
									Saturated black sandy clay fill	
30									SS #5 12-14' No recovery but spoon is all wet. Will run another spoon + try to get something...	HNu = 0 OVA = 0 wet to saturated.
									... now recovered 1.8' to about 14.5'. Contains:	
									0-0.5 Brown sandy fill w/ clay + brick fragments.	
									0.5-1.1 Black organic-rich clay	
									1.1-1.4 clayey peat moss	
									1.4-1.8 Brown sandy clay, organic rich w/ ~30% intact shells of gastropods.	
40										

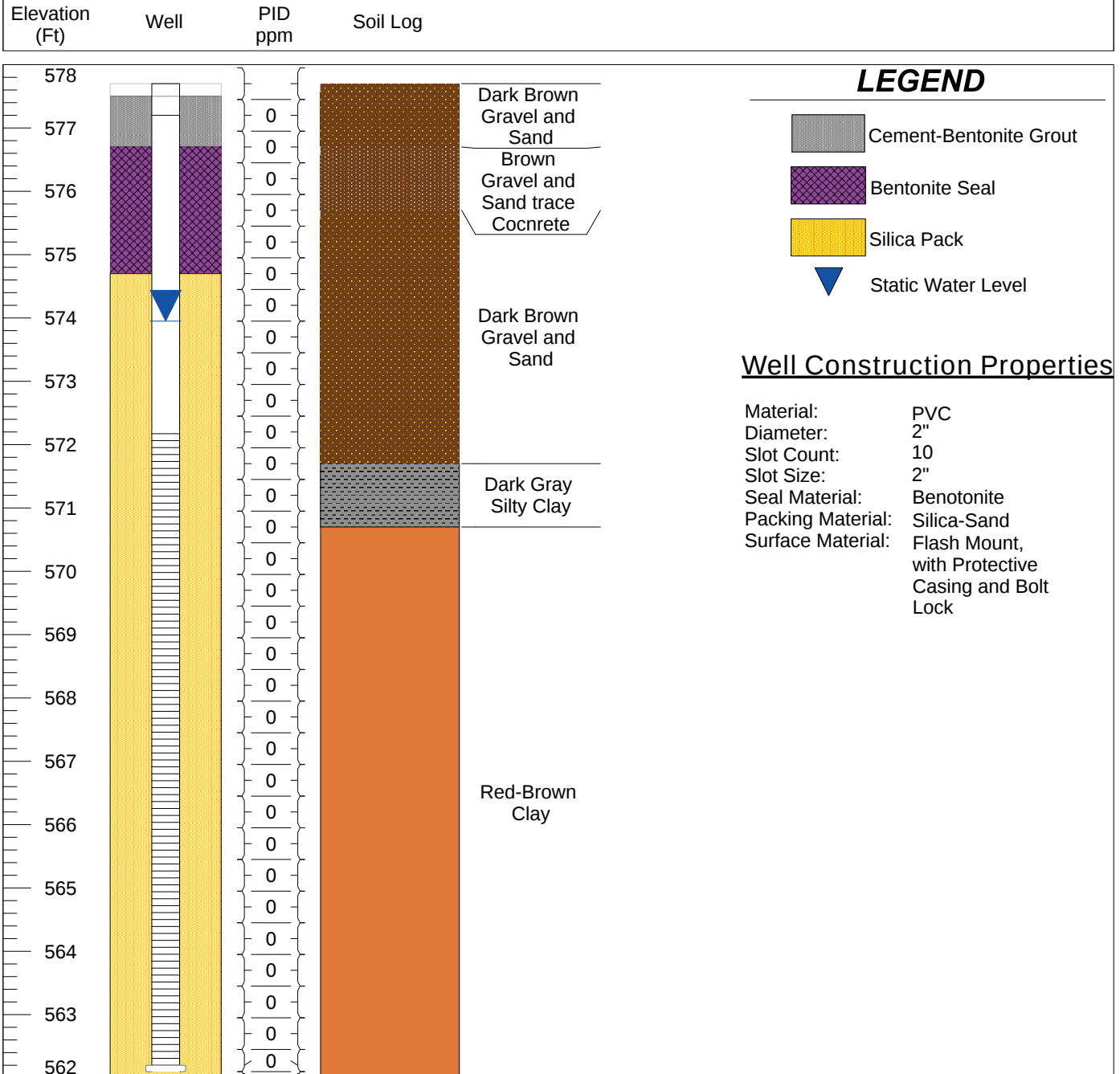
640088

CLASSIFICATION/BY R. Watts

Well Construction Log

Project: Fedder Lofts
 Location: 57 Tonawanda Street
 Client: Eran Epstein
 Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
 Drill Type: 6" Hollow Stem Auger
 Driller: Nate
 Drill Date: 1/13/2020



Monitoring Well Designation: MW-01
 Latitude: 42.9304808°
 Longitude: -78.8957223°
 Elevation: 577.70 Feet

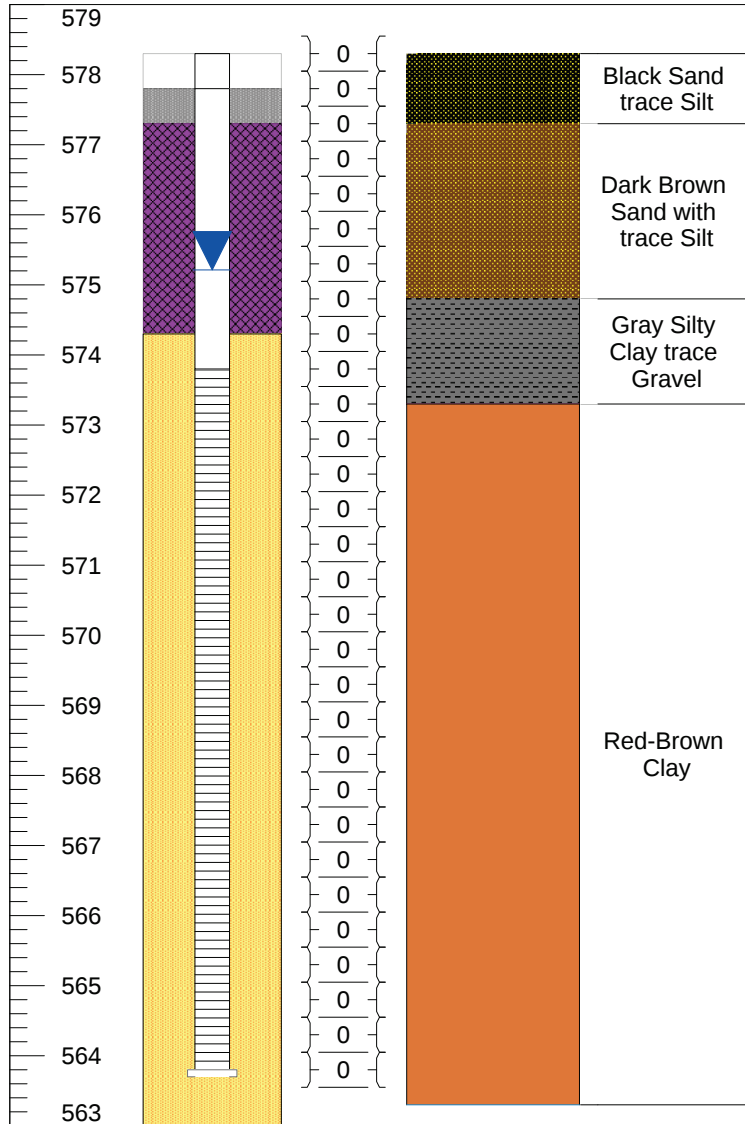
BE3CORP
 BRIDGES ENGINEERING IN ENVIRONMENT & ENERGY
 1270 Niagara Street
 Buffalo, New York, 14213

Well Construction Log

Project: Fedder Lofts
 Location: 57 Tonawanda Street
 Client: Eran Epstein
 Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
 Drill Type: 6" Hollow Stem Auger
 Driller: Nate
 Drill Date: 1/13/2020

Elevation (Ft)	Well	PID ppm	Soil Log
----------------	------	---------	----------



LEGEND



Well Construction Properties

Material: PVC
 Diameter: 2"
 Slot Count: 10
 Slot Size: 2"
 Seal Material: Benotonite
 Packing Material: Silica-Sand
 Surface Material: Flash Mount, with Protective Casing and Bolt Lock

Monitoring Well Designation: MW-02
 Latitude: 42.9308709°
 Longitude: -78.8951537°
 Elevation: 578.33 Feet

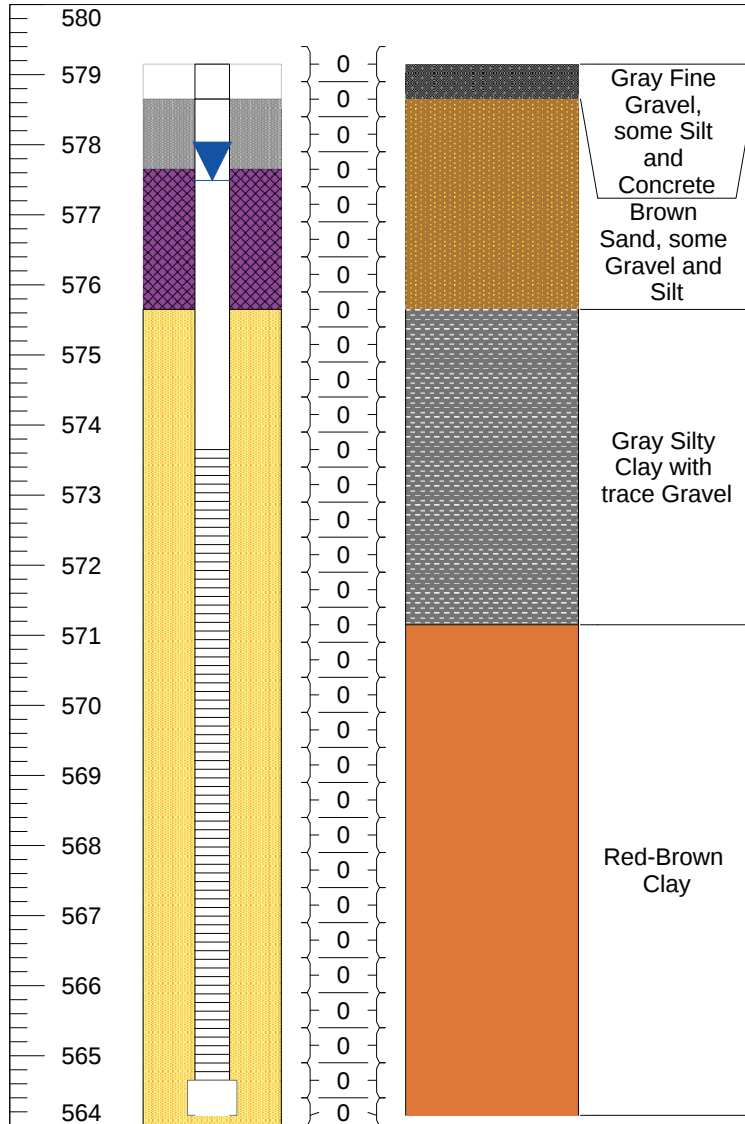
BE3CORP
 BRIDGES ENGINEERING IN ENVIRONMENT & ENERGY
 1270 Niagara Street
 Buffalo, New York, 14213

Well Construction Log

Project: Fedder Lofts
 Location: 57 Tonawanda Street
 Client: Eran Epstein
 Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
 Drill Type: 6" Hollow Stem Auger
 Driller: Nate
 Drill Date: 1/13/2020

Elevation (Ft)	Well	PID ppm	Soil Log
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LEGEND

- Cement-Bentonite Grout
- Bentonite Seal
- Silica Pack
- Static Water Level

Well Construction Properties

Material: PVC
 Diameter: 2"
 Slot Count: 10
 Slot Size: 2"
 Seal Material: Benotonite
 Packing Material: Silica-Sand
 Surface Material: Flash Mount, with Protective Casing and Bolt Lock

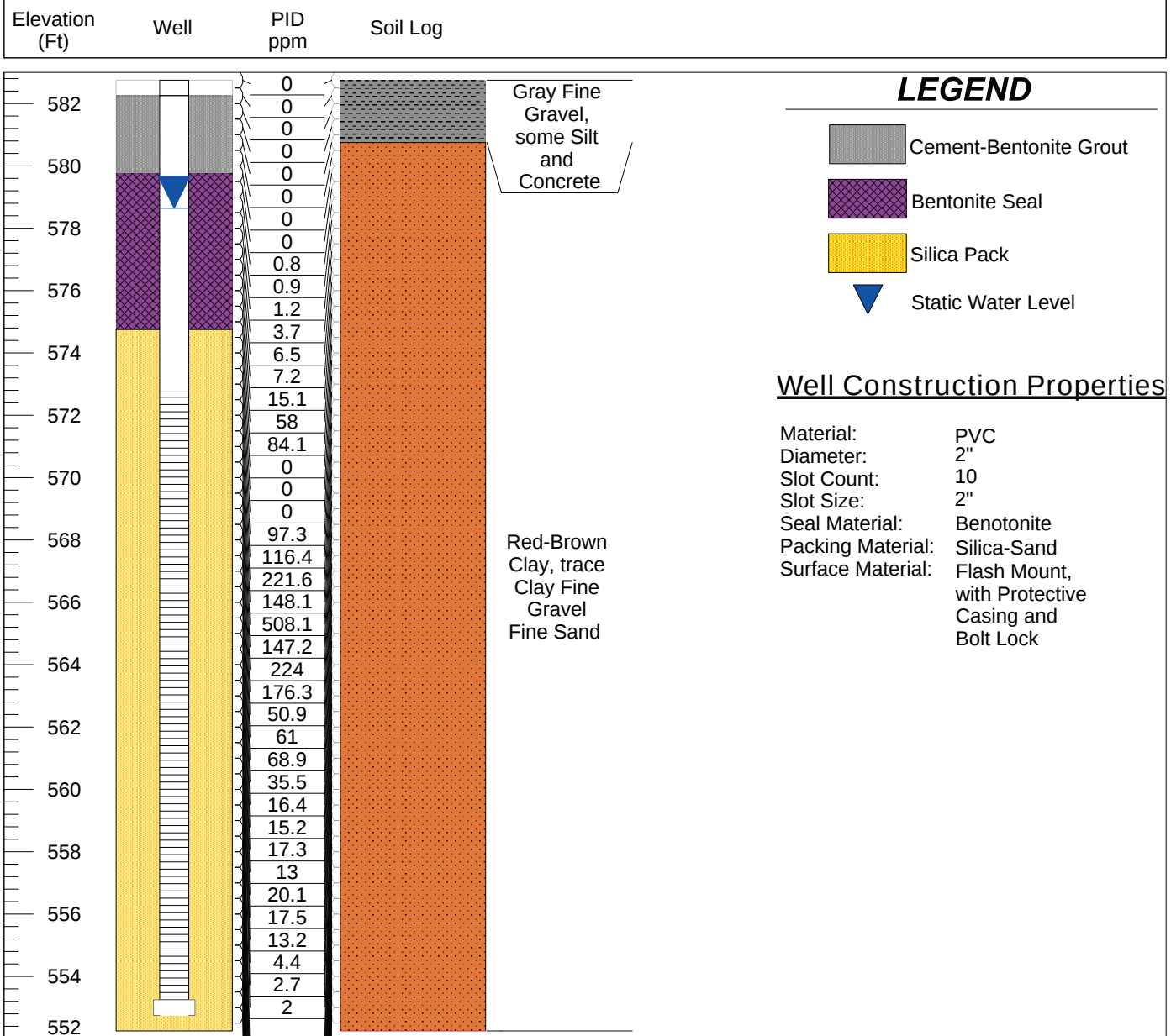
Monitoring Well Designatio:MW-03
 Latitude: 42.9306862°
 Longitude: -78.8958226°
 Elevation: 579.15 Feet

BE3CORP
 BRIDGES ENGINEERING IN ENVIRONMENT & ENERGY
 1270 Niagara Street
 Buffalo, New York, 14213

Well Construction Log

Project: Fedder Lofts
 Location: 57 Tonawanda Street
 Client: Eran Epstein
 Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
 Drill Type: 6" Hollow Stem Auger
 Driller: Nate
 Drill Date: 1/14/2020



Monitoring Well Designation: MW-04
 Latitude: 42.930726°
 Longitude: -78.8971051°
 Elevation: 582.75 Feet



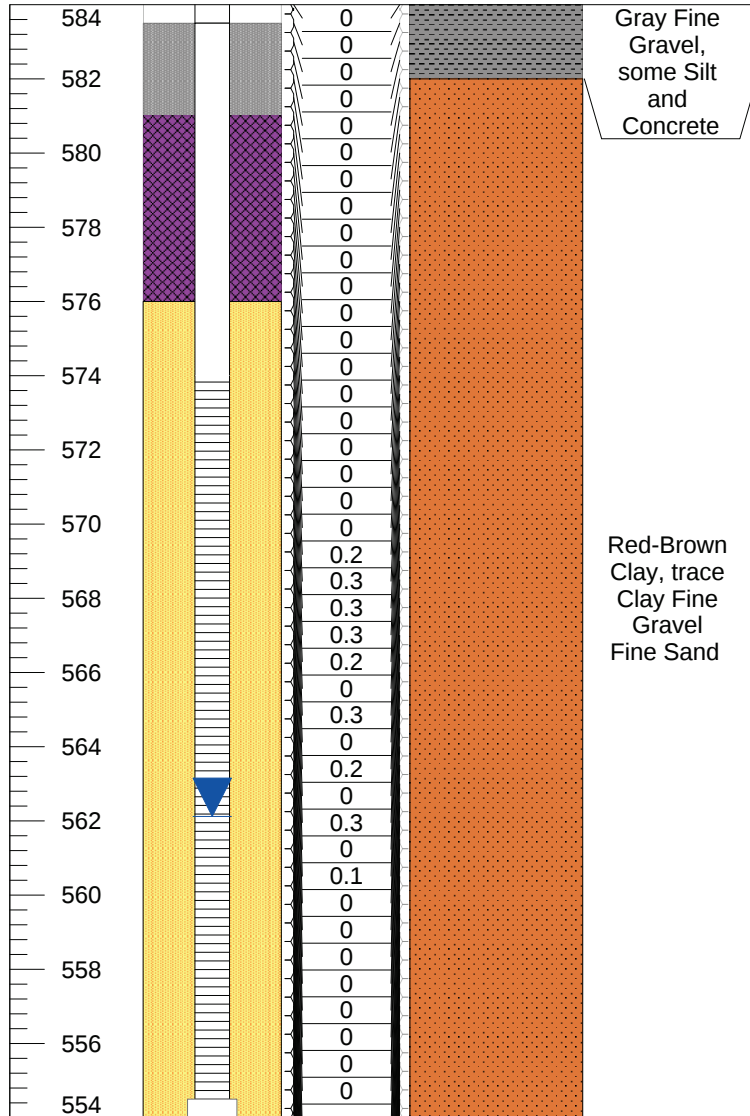
1270 Niagara Street
 Buffalo, New York, 14213

Well Construction Log

Project: Fedder Lofts
 Location: 57 Tonawanda Street
 Client: Eran Epstein
 Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
 Drill Type: 6" Hollow Stem Auger
 Driller: Nate
 Drill Date: 1/15/2020

Elevation (Ft)	Well	PID ppm	Soil Log
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LEGEND

-  Cement-Bentonite Grout
-  Bentonite Seal
-  Silica Pack
-  Static Water Level

Well Construction Properties

Material: PVC
 Diameter: 2"
 Slot Count: 10
 Slot Size: 2"
 Seal Material: Benotonite
 Packing Material: Silica-Sand
 Surface Material: Flash Mount, with Protective Casing and Bolt Lock

Monitoring Well Designation: MW-05
 Latitude: 42.9311924°
 Longitude: -78.8970434°
 Elevation: 584.0 Feet



1270 Niagara Street
 Buffalo, New York, 14213

**BIKE PATH ADJACENT TO
57-71 TONAWANDA STREET**

DRILLING SUMMARY			
Geologist: Steve Moeller			
Drilling Company: TREC Environmental			
Driller: Eric Hamman			
Rig Make/Model: Geoprobe 6620 DT			
Date: September 24, 2020			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See log for soil boring SB-100.		
		Ground Surface Top of Riser Top of Seal Top of Sand Pack Top of Screen D E P T H Bottom of Screen Screen Bottom Cap Bottom of Borehole	
		feet 0.27 feet 1 foot 12 feet 13.64 feet 28.64 feet 28.89 feet 29 feet	
		Flush Mount with Lockable Cap Expandable plug with lock Schedule 40 PVC Riser 2 inch dia. 13.37 feet length Borehole Diameter 8 inch dia. Schedule 40 PVC Screen 2 inch dia. 15 feet length End Cap	
WELL DESIGN			
SURFACE COMPLETION Surface: 8-inch diameter steel flush-mount with 12-inch skirt		SCREEN MATERIAL Type: 2-inch ID Schedule 40 PVC, threaded with O-ring seal Slot Size: 0.010" machine slotted Setting: 13.64 - 28.64 feet bgs	
RISER MATERIAL Type: 2-inch ID Schedule 40 PVC threaded with O-ring seal Setting: 0.27 - 13.64 feet bgs		FILTER MATERIAL Type: Filpro #00N Silica Sand Setting: 12 - 29 feet bgs	
		SEAL MATERIAL Type: CETCO PureGold Medium Bentonite Chips Setting: 1 - 12 feet bgs	
COMMENTS: Well is located west of the bike path in a grass strip adjacent to the 57-71 Tonawanda Street BCP Site, Site No. C915024. This well is at the base of the bike path ramp near an asphalt pad.		LEGEND  Cement  Bentonite Chip Seal  Silica Sandpack	
Client: NYSDEC		Location: Bike Path off West Ave. Buffalo, NY	
		MONITORING WELL CONSTRUCTION DETAILS	
Department of Environmental Conservation		Site Name: 31 Tonawanda Off Site Site No.: C915299A Well Number: MW-100	

**68 TONAWANDA STREET
SITE NO. C915316**

DRILLING SUMMARY Geologist: John Boyd Contractor: Nature's Way Operators: Steve Gingritol Nate Gingritol Model: Track Mounted Rig Date: 2/14/2018		Top of Riser Top of Bentonite Grout Top of Fine Sand Pack Top of Seal Top of Fine Sand Pack Top of No. 0 Sand Pack Top of Screen Bottom of Screen Bottom of Borehole Top of Casing Ground Level Concrete Pad Bentonite-Cement Grout Schedule 40 PVC Casing 2 inch diameter 22 feet length bgs Borehole Diameter 7.50 inches Bentonite Chip Seal Schedule 40, 10 Slot PVC Screen 2 inch diameter 10 feet length					
GEOLOGIC LOG <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>N/A</td> </tr> </tbody> </table>		Depth(ft.)	Description		N/A		
Depth(ft.)	Description						
	N/A						
WELL DESIGN							
CASING MATERIAL Surface: 4" Steel protective cover (Stick Up) Monitor: 2" Schedule 40 PVC		SCREEN MATERIAL Type: 2" Schedule 40 PVC Slot Size: 0.010" Setting: 22 to 32 feet bgs					
		LEGEND Bentonite-Cement Grout Fine Sand Bentonite Chip Seal No. 0 Sand Pack					
COMMENTS: Ground elevations and well/casing elevations not measured.							
Client: Yots & Frizlen		Location: 68 Tonawanda St					
Project No.:							
		MONITORING WELL CONSTRUCTION DETAILS Well Number: MW-1					

DRILLING SUMMARY			
Geologist:		Top of Riser Top of Bentonite Grout Top of Fine Sand Pack Top of Seal Top of Fine Sand Pack Top of No. 0 Sand Pack Top of Screen Bottom of Screen Bottom of Borehole	
Contractor:			
Operators:			
Model:			
Date:			
GEOLOGIC LOG			
Depth(ft.)	Description		
	N/A		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	
Surface: 4" Steel protective cover (Stick Up)		Type: 2" Schedule 40 PVC	
Monitor: 2" Schedule 40 PVC		Slot Size: 0.010"	
		Setting: 24.5 to 34.5 feet bgs	
COMMENTS:		FILTER MATERIAL	
		Type: #0 well sand Setting: 22.5 to 34.5 feet bgs	
Ground elevations and well/casing elevations not measured.		SEAL MATERIAL	
		Type 1: Bentonite-Cement Grout Setting: 1 to 18 feet bgs Type 1: Bentonite Chip Seal Setting: 18.5 to 21.5 feet bgs	
		LEGEND	
		Bentonite-Cement Grout	
		Fine Sand	
		Bentonite Chip Seal	
		No. 0 Sand Pack	
Client: Yots & Frizlen		Location: 68 Tonawanda St	
		Project No.:	
		Well Number: MW-2	
MONITORING WELL CONSTRUCTION DETAILS			

DRILLING SUMMARY			
Geologist:		Top of Riser Top of Bentonite Grout Top of Fine Sand Pack Top of Seal Top of Fine Sand Pack Top of No. 0 Sand Pack Top of Screen Bottom of Screen Bottom of Borehole Top of Casing Ground Level Concrete Pad Bentonite-Cement Grout Schedule 40 PVC Casing 2 inch diameter 28 feet length bgs Borehole Diameter 7.50 inches Bentonite Chip Seal Schedule 40, 10 Slot PVC Screen 2 inch diameter 10 feet length	

1 feet bgs

22 feet bgs

22.5 feet bgs

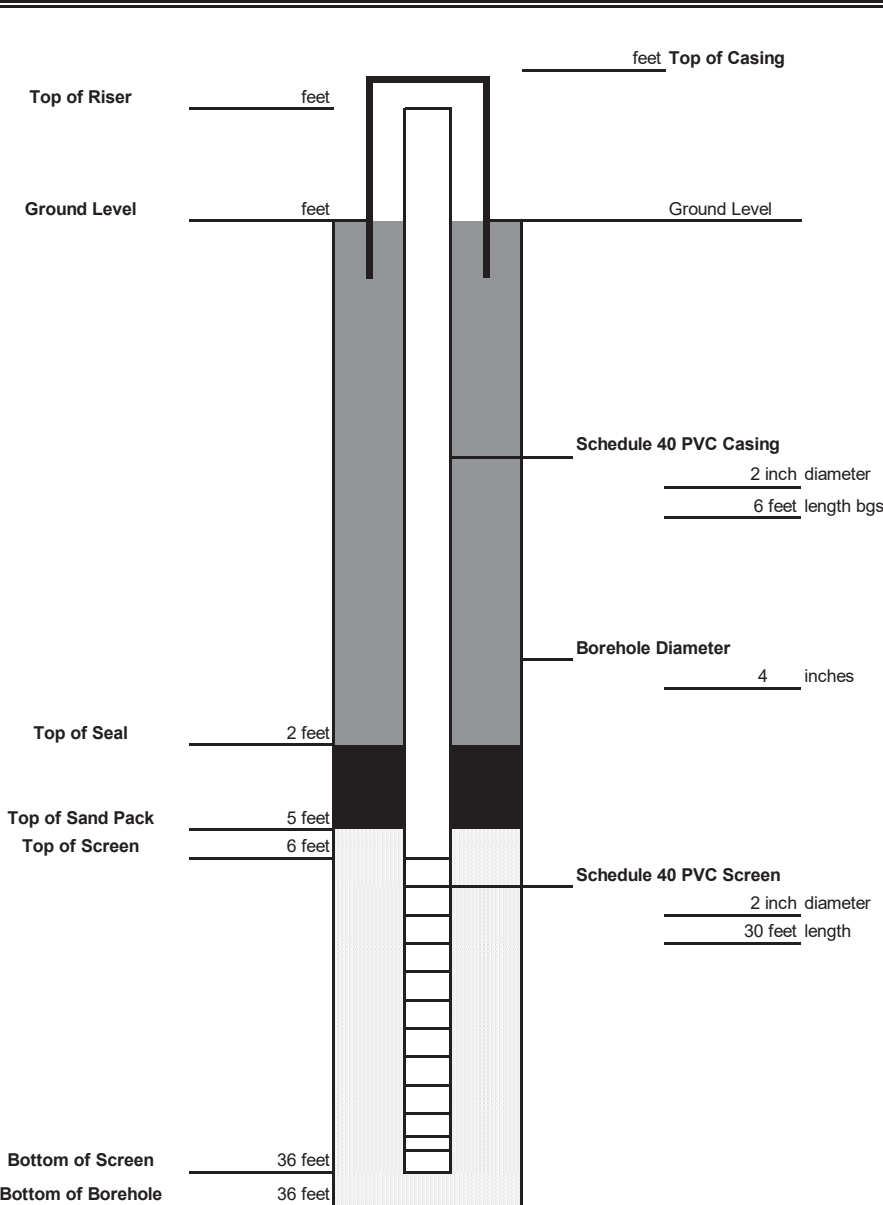
25.5 feet bgs

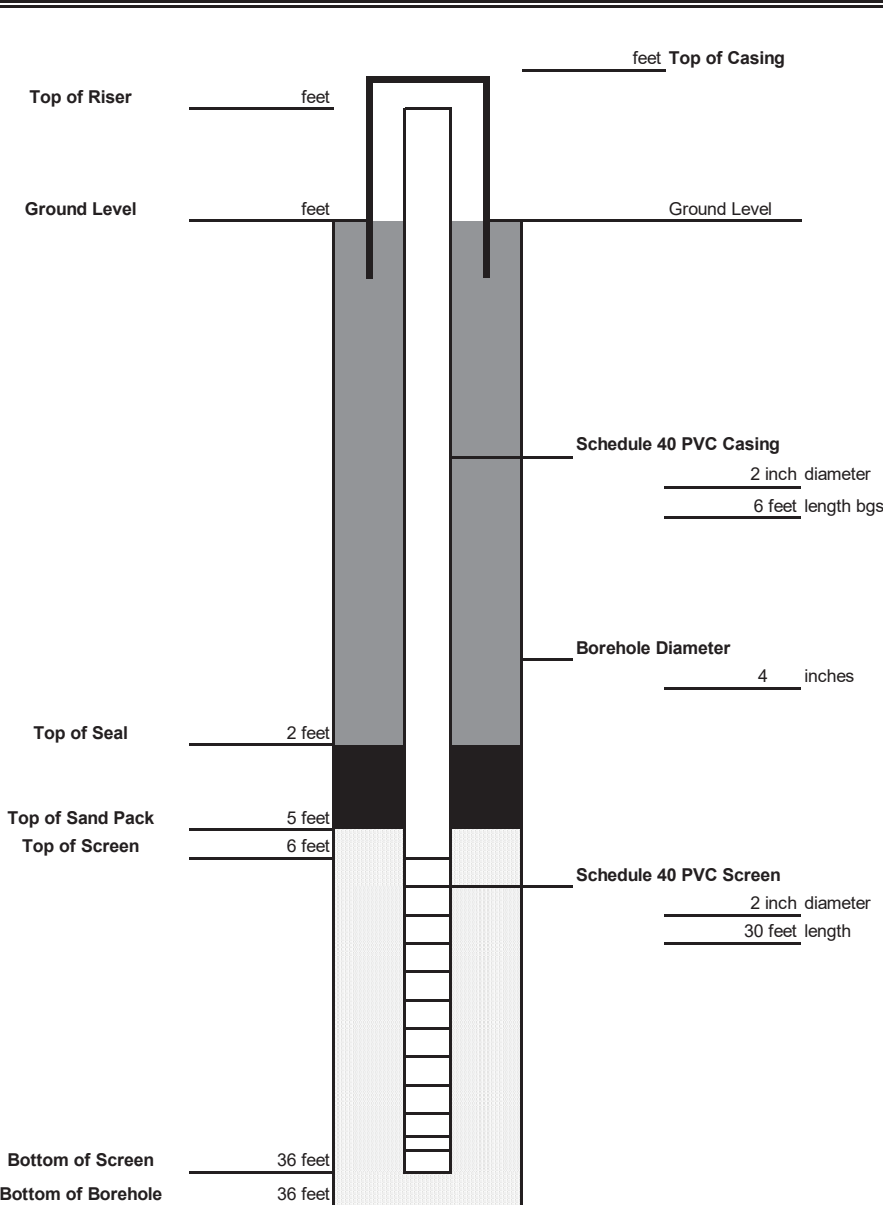
26 feet bgs
26 feet bgs

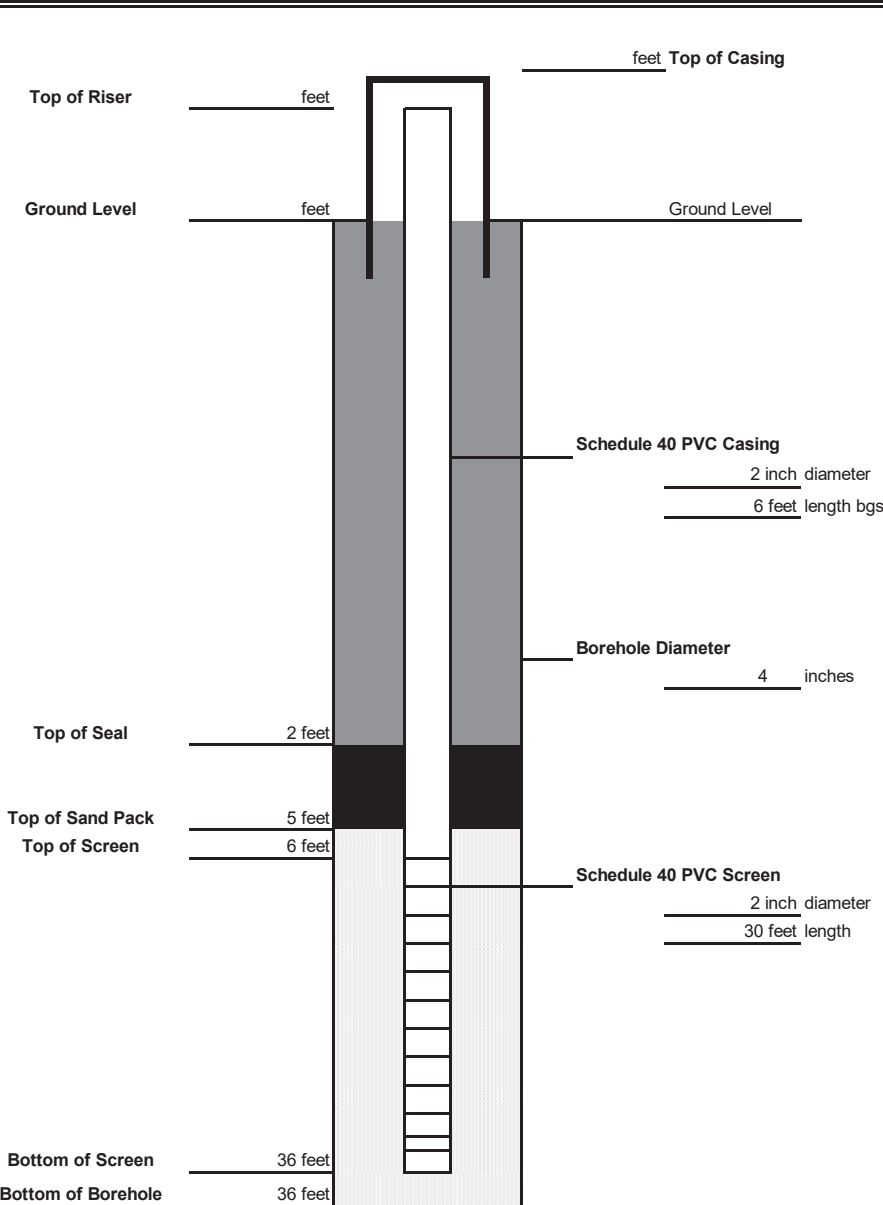
38 feet bgs
38 feet bgs

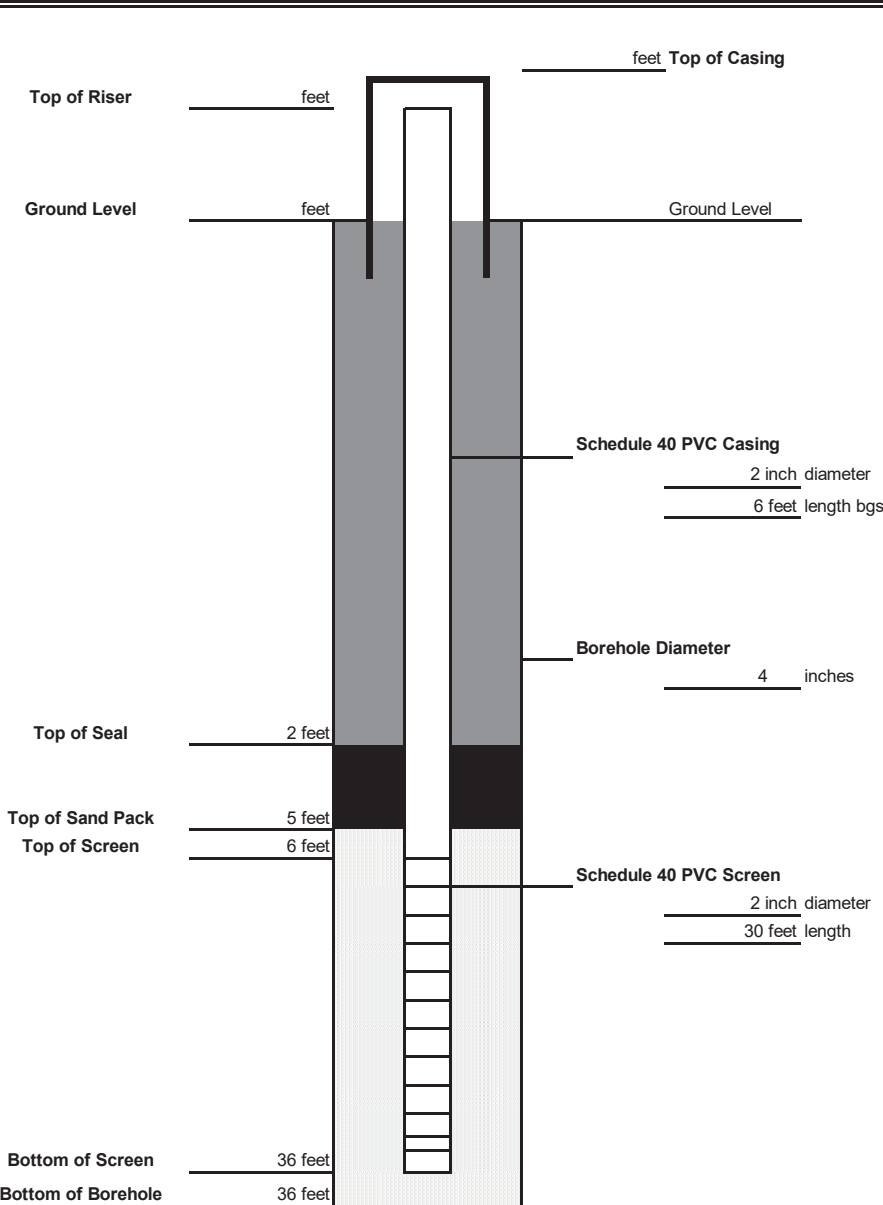
DRILLING SUMMARY			
Geologist:		Top of Riser Top of Bentonite Grout Top of Fine Sand Pack Top of Seal Top of Fine Sand Pack Top of No. 0 Sand Pack Top of Screen Bottom of Screen Bottom of Borehole	
Contractor:			
Operators:			
Model:			
Date:			
GEOLOGIC LOG			
Depth(ft.)	Description		
	N/A		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	
Surface: 4" Steel protective cover (Stick Up) Monitor: 2" Schedule 40 PVC		Type: 2" Schedule 40 PVC Slot Size: 0.010" Setting: 29 to 39 feet bgs	
		FILTER MATERIAL	
		Type: #0 well sand Setting: 27 to 39 feet bgs	
		SEAL MATERIAL	
		Type 1: Bentonite-Cement Grout Setting: 1 to 23 feet bgs Type 1: Bentonite Chip Seal Setting: 23.5 to 26.5 feet bgs	
COMMENTS: Ground elevations and well/casing elevations not measured.		LEGEND	
		Bentonite-Cement Grout Fine Sand Bentonite Chip Seal No. 0 Sand Pack	
Client: Yots & Frizlen		Location: 68 Tonawanda St	
		MONITORING WELL CONSTRUCTION DETAILS	
		Project No.:	
		Well Number: MW-4	

**150 TONAWANDA STREET
SITE NO. C915299**

DRILLING SUMMARY		 feet Top of Casing Top of Riser _____ feet Ground Level _____ feet Schedule 40 PVC Casing 2 inch diameter 6 feet length bgs Borehole Diameter 4 inches Top of Seal _____ 2 feet Top of Sand Pack _____ 5 feet Top of Screen _____ 6 feet Schedule 40 PVC Screen 2 inch diameter 30 feet length Bottom of Screen _____ 36 feet Bottom of Borehole _____ 36 feet	
Geologist: John Boyd			
Contractor: Nature's Way			
Operator: Brett			
Model: Truck Mounted Rig Hollow Stem Auger			
Date: 8/23/2018			
GEOLOGIC LOG		D E P T H	
Depth(ft.)	Description		
	N/A		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	
Surface: 4" Steel protective cover (Stick Up)		Type: 2" Schedule 40 PVC	
Monitor: 2" Schedule 40 PVC		Slot Size: 0.010"	
		Setting: 6 to 36 fbgs	
COMMENTS: Very tight clays noted below fill. Drill depth done until clay softened to ensure water generation		FILTER MATERIAL	
		Type: #0 well sand	
		Setting: 5 to 36 fbgs	
		SEAL MATERIAL	
		Type 1: Bentonite chips	
		Setting: 2 to 5 fbgs	
		Type 1: Cement Grout	
		Setting: 0 to 2 fbgs	
		LEGEND	
		Cement Grout Bentonite Seal Sand Pack	
Client: 31 Tonawanda St, LLC	Location: 150 Tonawanda St, Buffalo, NY	Project No.:	
		MONITORING WELL CONSTRUCTION DETAILS	
		Well Number: MW-1	

DRILLING SUMMARY		 feet Top of Casing Top of Riser _____ feet Ground Level _____ feet Schedule 40 PVC Casing 2 inch diameter 6 feet length bgs Borehole Diameter 4 inches Top of Seal _____ 2 feet Top of Sand Pack _____ 5 feet Top of Screen _____ 6 feet Schedule 40 PVC Screen 2 inch diameter 30 feet length Bottom of Screen _____ 36 feet Bottom of Borehole _____ 36 feet	
Geologist: John Boyd			
Contractor: Nature's Way			
Operator: Brett			
Model: Truck Mounted Rig Hollow Stem Auger			
Date: 8/24/2018			
GEOLOGIC LOG		D E P T H	
Depth(ft.)	Description		
	N/A		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	
Surface: 4" Steel protective cover (Stick Up) Monitor: 2" Schedule 40 PVC		Type: 2" Schedule 40 PVC Slot Size: 0.010" Setting: 6 to 36 fbgs	
FILTER MATERIAL		SEAL MATERIAL	
COMMENTS: Very tight clays noted below fill. Drill depth done until clay softened to ensure water generation		Type: #0 well sand Setting: 5 to 36 fbgs	
		Type 1: Bentonite chips Setting: 2 to 5 fbgs Type 1: Cement Grout Setting: 0 to 2 fbgs	
		LEGEND	
		Cement Grout Bentonite Seal Sand Pack	
Client: 31 Tonawanda St, LLC		Location: 150 Tonawanda St, Buffalo, NY	
		MONITORING WELL CONSTRUCTION DETAILS	
		Project No.: Well Number: MW-2	

DRILLING SUMMARY		 feet Top of Casing Top of Riser _____ feet Ground Level _____ feet Schedule 40 PVC Casing 2 inch diameter 6 feet length bgs Borehole Diameter 4 inches Top of Seal _____ 2 feet Top of Sand Pack _____ 5 feet Top of Screen _____ 6 feet Schedule 40 PVC Screen 2 inch diameter 30 feet length Bottom of Screen _____ 36 feet Bottom of Borehole _____ 36 feet	
Geologist: John Boyd			
Contractor: Nature's Way			
Operator: Brett			
Model: Truck Mounted Rig Hollow Stem Auger			
Date: 8/27/2018			
GEOLOGIC LOG		D E P T H	
Depth(ft.)	Description		
	N/A		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	FILTER MATERIAL
Surface: 4" Steel protective cover (Stick Up) Monitor: 2" Schedule 40 PVC		Type: 2" Schedule 40 PVC Slot Size: 0.010" Setting: 6 to 36 fbgs	Type: #0 well sand Setting: 5 to 36 fbgs
			SEAL MATERIAL
COMMENTS: Very tight clays noted below fill. Drill depth done until clay softened to ensure water generation			Type 1: Bentonite chips Setting: 2 to 5 fbgs Type 1: Cement Grout Setting: 0 to 2 fbgs
		LEGEND	
		Cement Grout Bentonite Seal Sand Pack	
Client: 31 Tonawanda St, LLC	Location: 150 Tonawanda St, Buffalo, NY	Project No.:	
	MONITORING WELL CONSTRUCTION DETAILS		Well Number: MW-3

DRILLING SUMMARY		 feet Top of Casing Top of Riser _____ feet Ground Level _____ feet Schedule 40 PVC Casing 2 inch diameter 6 feet length bgs Borehole Diameter 4 inches Top of Seal _____ 2 feet Top of Sand Pack _____ 5 feet Top of Screen _____ 6 feet Schedule 40 PVC Screen 2 inch diameter 30 feet length Bottom of Screen _____ 36 feet Bottom of Borehole _____ 36 feet	
Geologist: John Boyd			
Contractor: Nature's Way			
Operator: Brett			
Model: Truck Mounted Rig Hollow Stem Auger			
Date: 8/27/2018			
GEOLOGIC LOG		D E P T H	
Depth(ft.)	Description		
	N/A		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	FILTER MATERIAL
Surface: 4" Steel protective cover (Stick Up) Monitor: 2" Schedule 40 PVC		Type: 2" Schedule 40 PVC Slot Size: 0.010" Setting: 6 to 36 fbgs	Type: #0 well sand Setting: 5 to 36 fbgs
			SEAL MATERIAL
COMMENTS: Very tight clays noted below fill. Drill depth done until clay softened to ensure water generation			Type 1: Bentonite chips Setting: 2 to 5 fbgs Type 1: Cement Grout Setting: 0 to 2 fbgs
		LEGEND	
		Cement Grout Bentonite Seal Sand Pack	
Client: 31 Tonawanda St, LLC	Location: 150 Tonawanda St, Buffalo, NY	Project No.:	
 MONITORING WELL CONSTRUCTION DETAILS		Well Number: MW-4	

**1660 NIAGARA STREET
SITE NO. C915311**



300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

Buffalo Niagara Riverkeeper
1660 Niagara Street, Buffalo, New York

BORING: TPMW1
SHEET 1 OF 3
JOB # 2151177
CHKD. BY: CK

CONTRACTOR: Nature's Way Environmental

DRILLER:

LABELLA REPRESENTATIVE: Chris Kibler

BORING LOCATION: SB1

GROUND SURFACE ELEVATION:

DATUM:

START DATE: 12/11/2015

END DATE:

TYPE OF DRILL RIG:

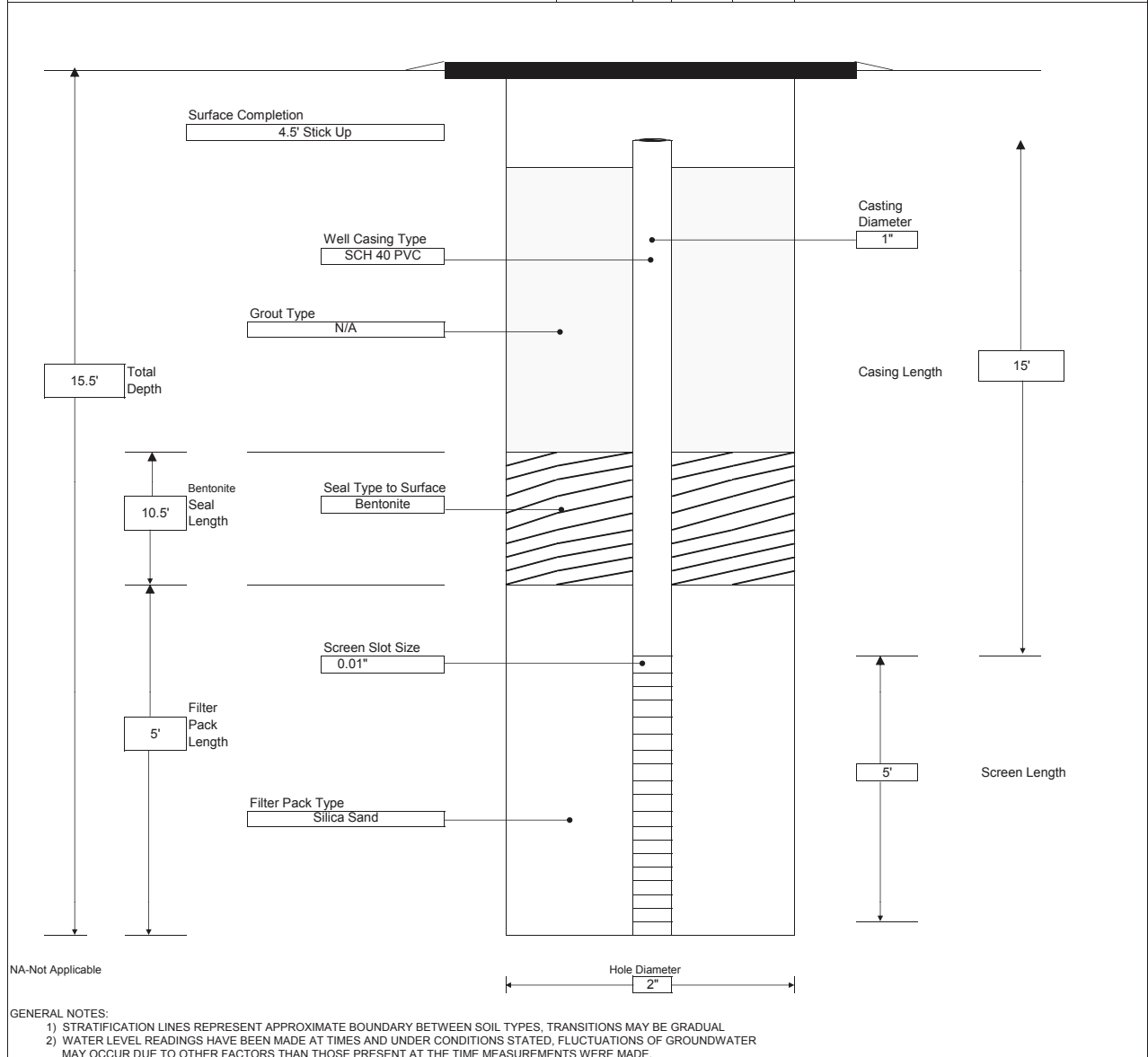
AUGER SIZE AND TYPE: N/A

OVERBURDEN SAMPLING METHOD: Direct-Push

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS





300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

Buffalo Niagara Riverkeeper
1660 Niagara Street, Buffalo, New York

BORING: TPMW2

SHEET 2 OF 3

JOB # 2151177

CHKD. BY: CK

CONTRACTOR: Nature's Way Environmental

DRILLER:

LABELLA REPRESENTATIVE: Chris Kibler

BORING LOCATION: SB4

GROUND SURFACE ELEVATION:

DATUM:

START DATE: 12/11/2015

END DATE:

TYPE OF DRILL RIG:

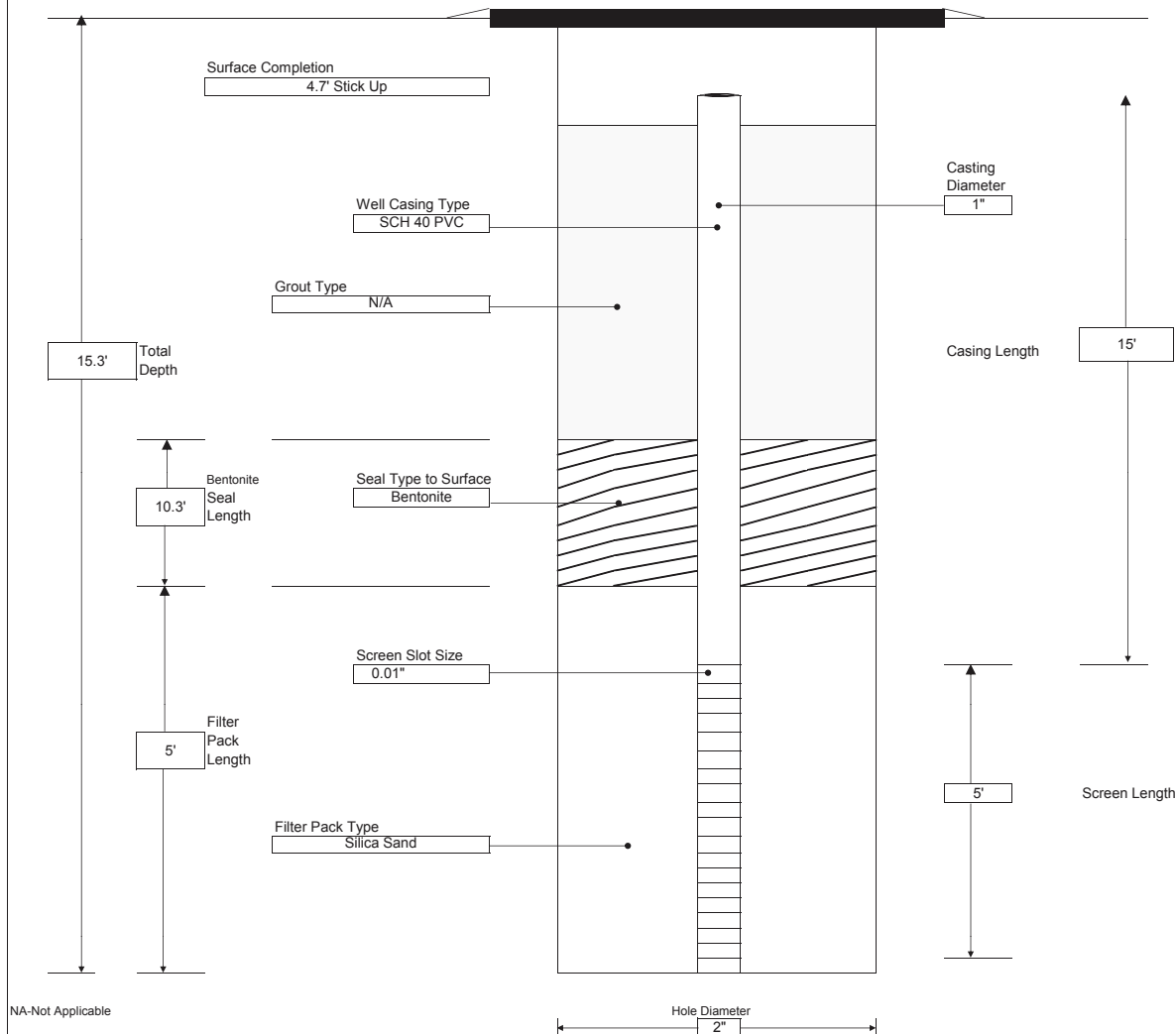
AUGER SIZE AND TYPE: N/A

OVERBURDEN SAMPLING METHOD: Direct-Push

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS



GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.



300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

Buffalo Niagara Riverkeeper
1660 Niagara Street, Buffalo, New York

BORING: TPMW3

SHEET 3 OF 3

JOB # 2151177

CHKD. BY: CK

CONTRACTOR: Nature's Way Environmental

DRILLER:

LABELLA REPRESENTATIVE: Chris Kibler

BORING LOCATION: SB8

GROUND SURFACE ELEVATION:

DATUM:

START DATE: 12/11/2015

END DATE:

TYPE OF DRILL RIG:

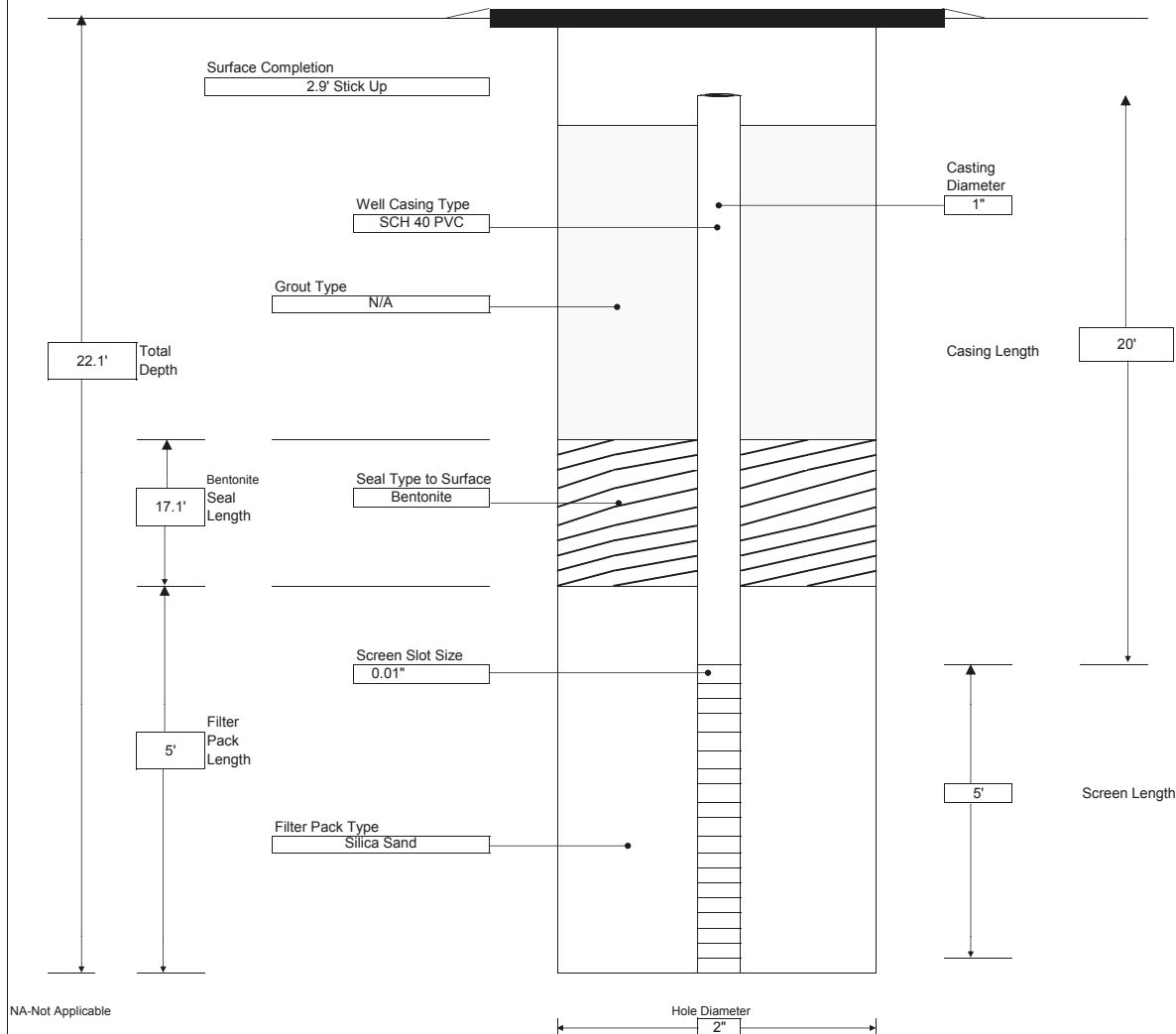
AUGER SIZE AND TYPE: N/A

OVERBURDEN SAMPLING METHOD: Direct-Push

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS



GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.



Associates, D.P.C.
300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

1660 Niagara Street
Buffalo, New York
Remedial Investigation

Well ID: **RI-MW-1**

SHEET 1 OF 1

JOB # 2161447

CHKD. BY:

CONTRACTOR: LaBella LLC

DRILLER: Matt Pepe

LABELLA REPRESENTATIVE: Jessica Dombrowski

BORING LOCATION: RI-SB-1

GROUND SURFACE ELEVATION:

DATUM: Top of Riser

START DATE: 5/30/2017

END DATE: 5/30/2017

TYPE OF DRILL RIG:

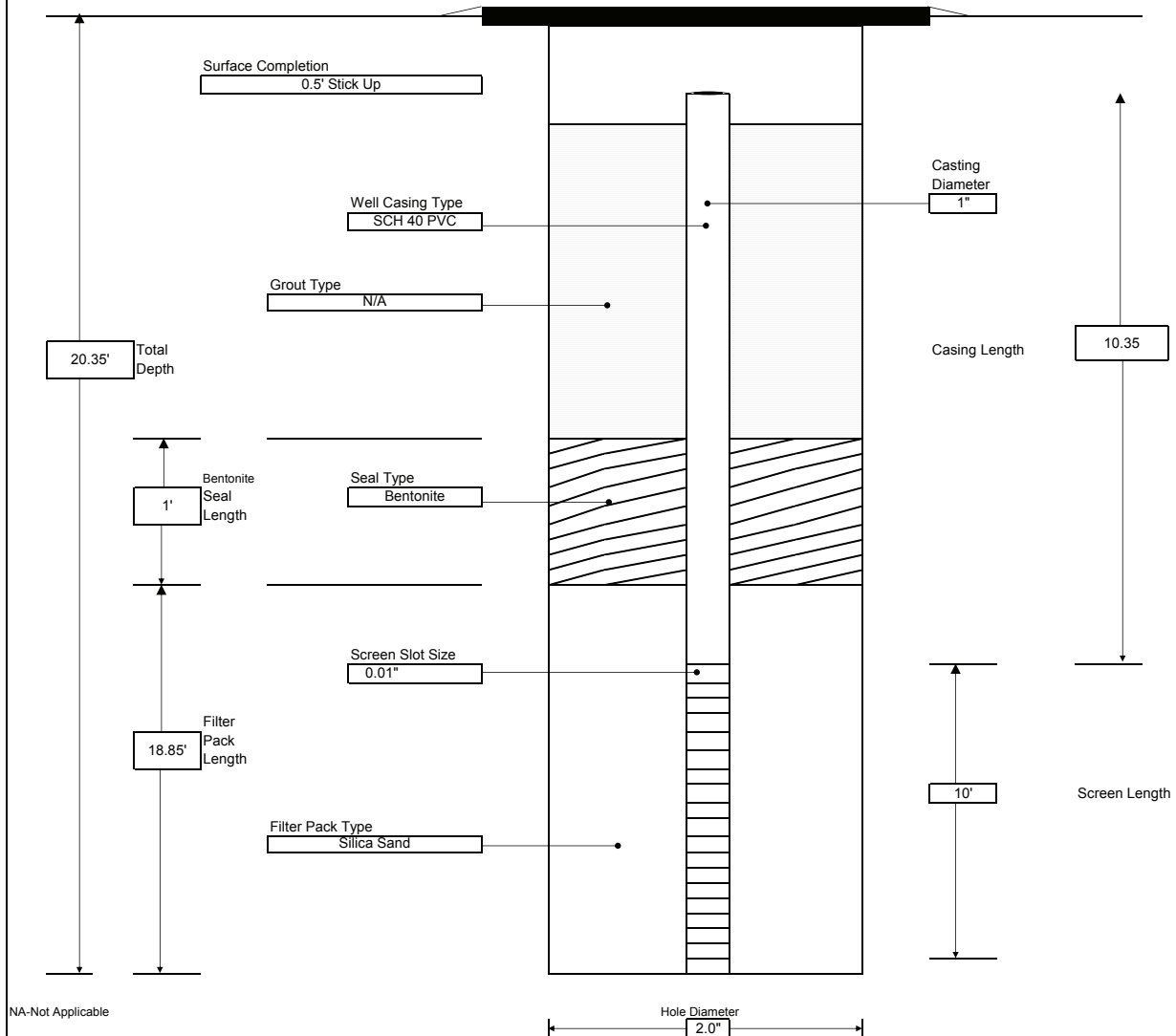
AUGER SIZE AND TYPE: 2 inch Direct Push

OVERBURDEN SAMPLING METHOD: 5-foot MacroCore® sampler

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
6/1/2017	1610	7.9'		



GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

LABELIAAssociates, D.P.C.
300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

1660 Niagara Street
Buffalo, New York
Remedial InvestigationWell ID: **RI-MW-2**

SHEET 1 OF 1

JOB # 2161447

CHKD. BY:

CONTRACTOR: LaBella LLC

DRILLER: Matt Pepe

LABELLA REPRESENTATIVE: Jessica Dombrowski

BORING LOCATION: RI-SB-2

GROUND SURFACE ELEVATION:

DATUM: Top of Riser

START DATE: 5/30/2017

END DATE: 5/30/2017

TYPE OF DRILL RIG:

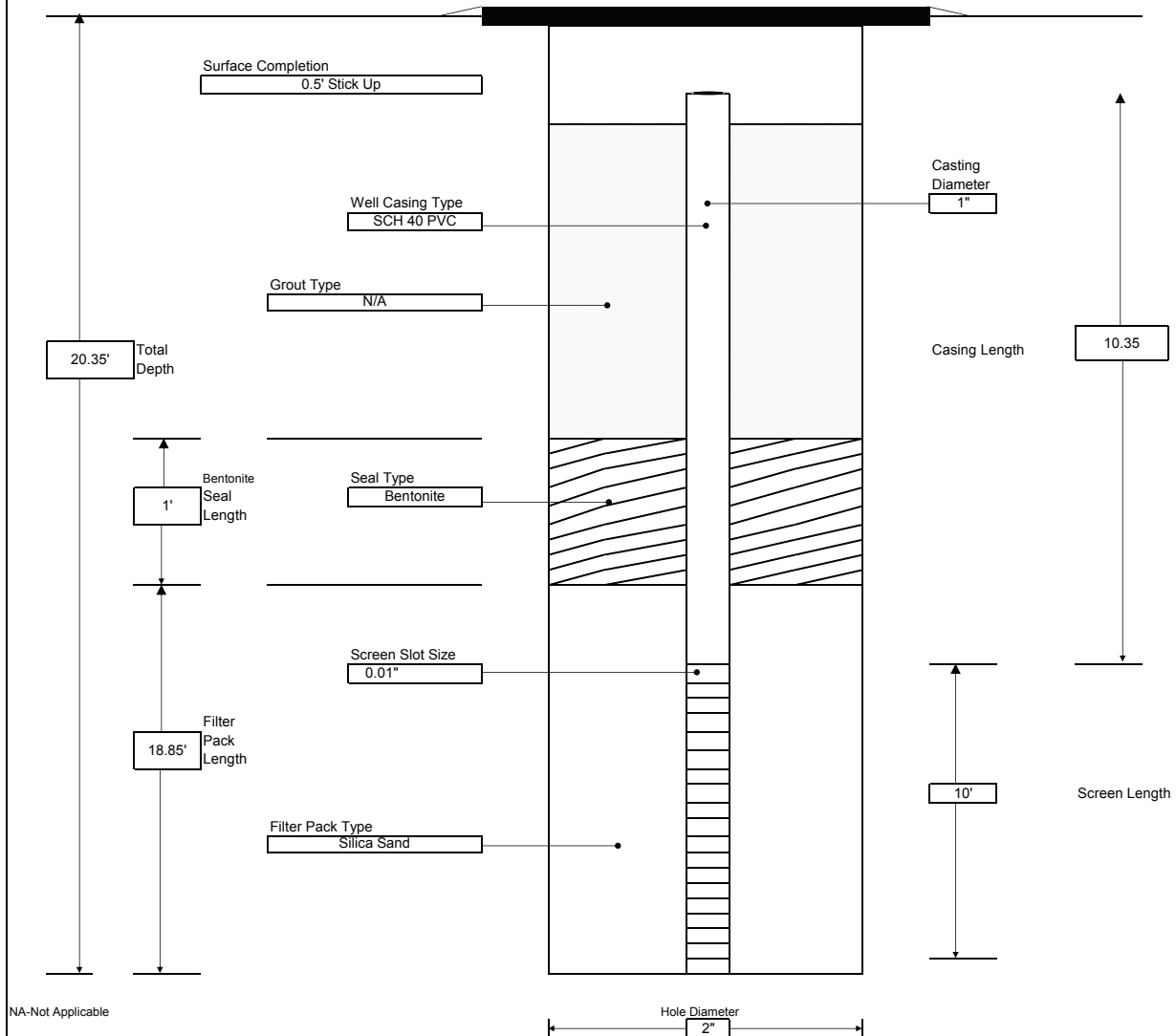
AUGER SIZE AND TYPE: 2 inch Direct Push

OVERBURDEN SAMPLING METHOD: 5-foot MacroCore® sampler

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
6/1/2017	1515	8.3'		



GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

LABELIA

Associates, D.P.C.
300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

1660 Niagara Street
Buffalo, New York
Remedial Investigation

Well ID: **RI-MW-3**

SHEET 1 OF 1

JOB # 2161447

CHKD. BY:

CONTRACTOR: LaBella LLC

DRILLER: Matt Pepe

LABELLA REPRESENTATIVE: Jessica Dombrowski

BORING LOCATION: RI-SB-3

GROUND SURFACE ELEVATION:

DATUM: Top of Riser

START DATE: 5/30/2017

END DATE: 5/30/2017

TYPE OF DRILL RIG:

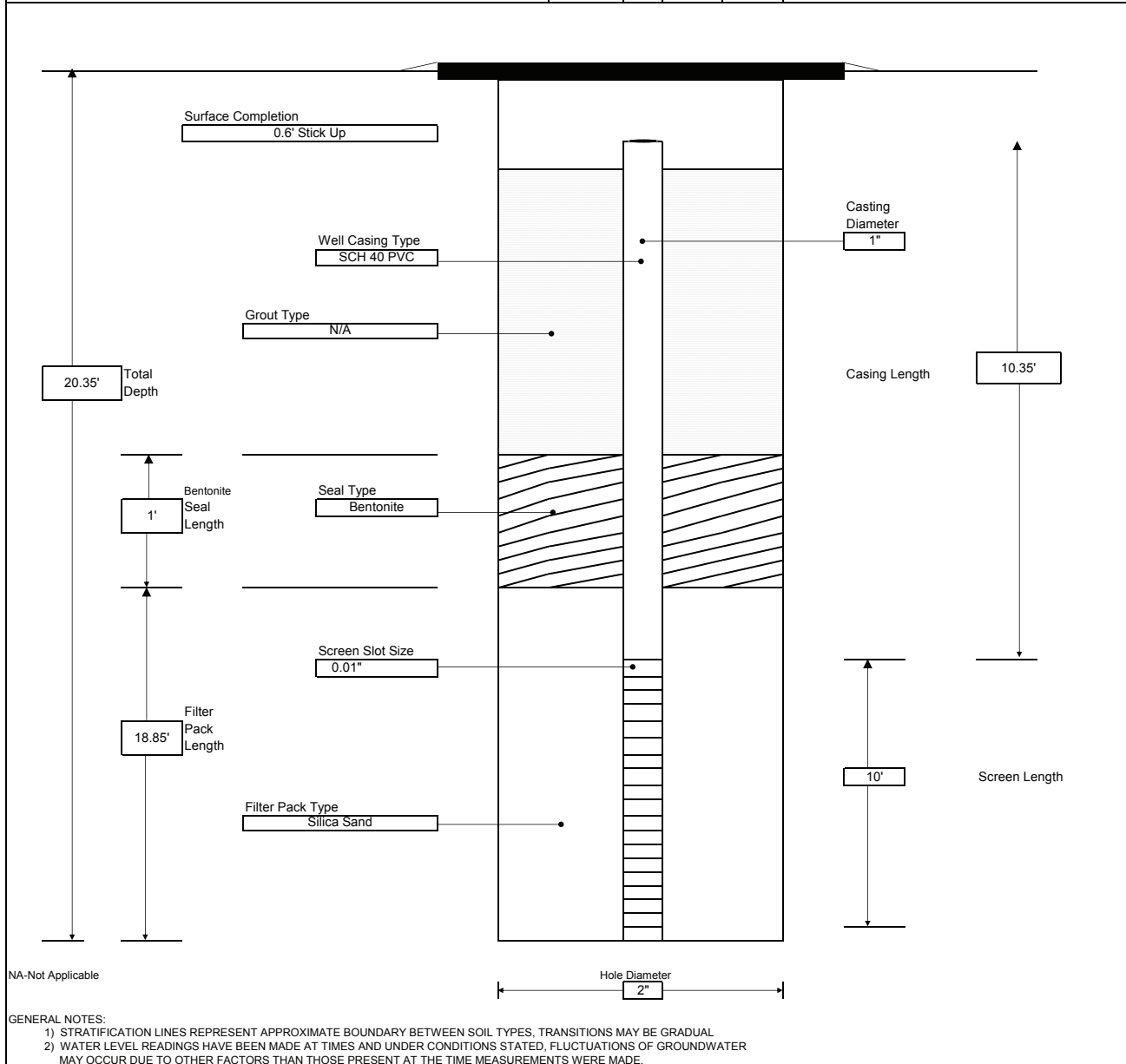
AUGER SIZE AND TYPE: 2 inch Direct Push

OVERBURDEN SAMPLING METHOD: 5-foot MacroCore® sampler

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
6/1/2017	1350	5.6'		



LABELIA

Associates, D.P.C.
300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

1660 Niagara Street
Buffalo, New York
Remedial Investigation

Well ID: **RI-MW-4**

SHEET 1 OF 1

JOB # 2161447

CHKD. BY:

CONTRACTOR: LaBella LLC

DRILLER: Matt Pepe

LABELLA REPRESENTATIVE: Jessica Dombrowski

BORING LOCATION: RI-SB-4

GROUND SURFACE ELEVATION:

DATUM: Top of Riser

START DATE: 5/30/2017

END DATE: 5/30/2017

TYPE OF DRILL RIG:

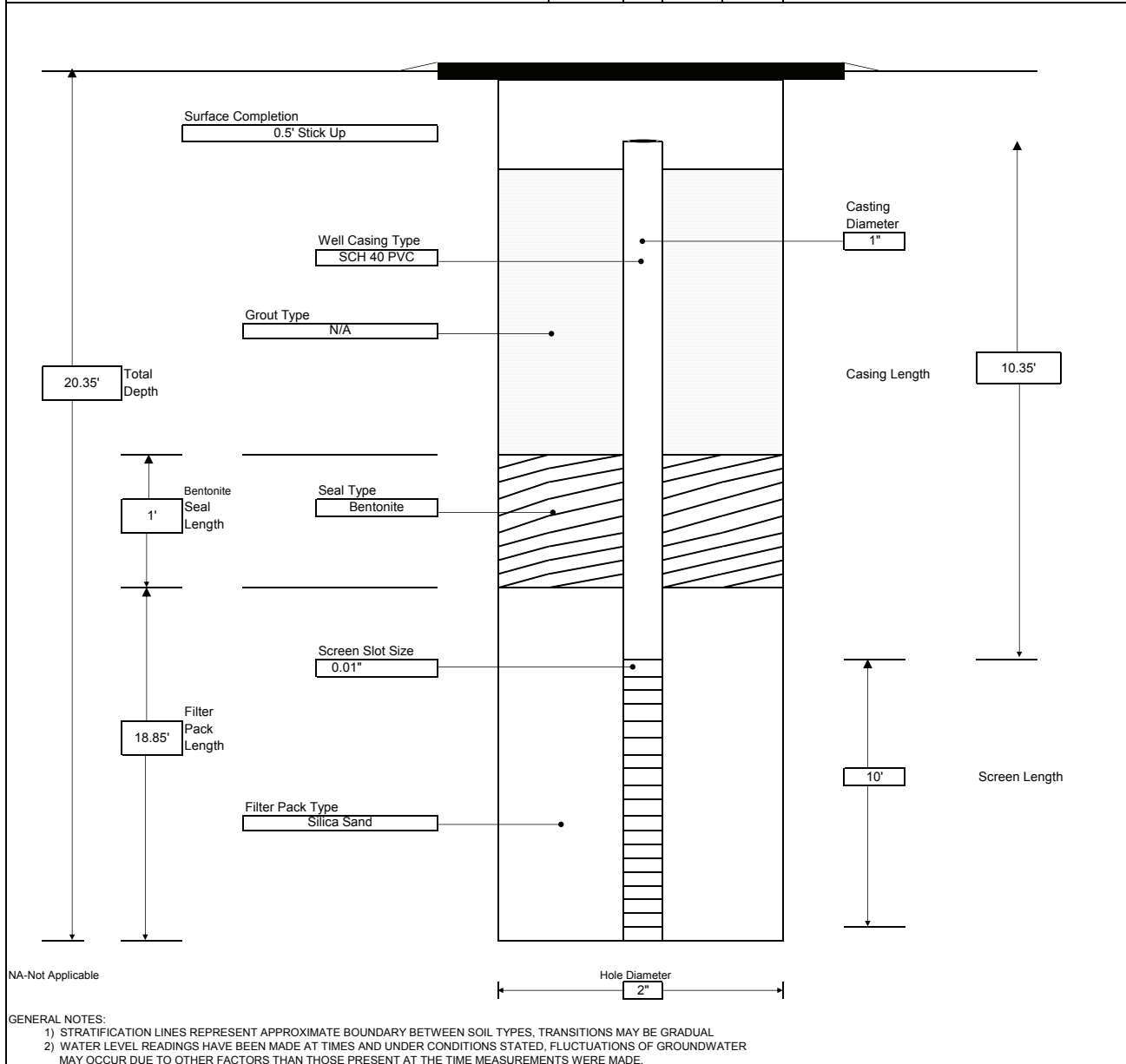
AUGER SIZE AND TYPE: 2 inch Direct Push

OVERBURDEN SAMPLING METHOD: 5-foot MacroCore® sampler

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
6/1/2017	1200	5.1'		



LABELIAAssociates, D.P.C.
300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

1660 Niagara Street
Buffalo, New York
Remedial InvestigationWell ID: **RI-MW-5**

SHEET 1 OF 1

JOB # 2161447

CHKD. BY:

CONTRACTOR: LaBella LLC

DRILLER: Matt Pepe

LABELLA REPRESENTATIVE: Jessica Dombrowski

BORING LOCATION: RI-SB-5

GROUND SURFACE ELEVATION:

DATUM: Top of Riser

START DATE: 5/30/2017

END DATE: 5/30/2017

TYPE OF DRILL RIG:

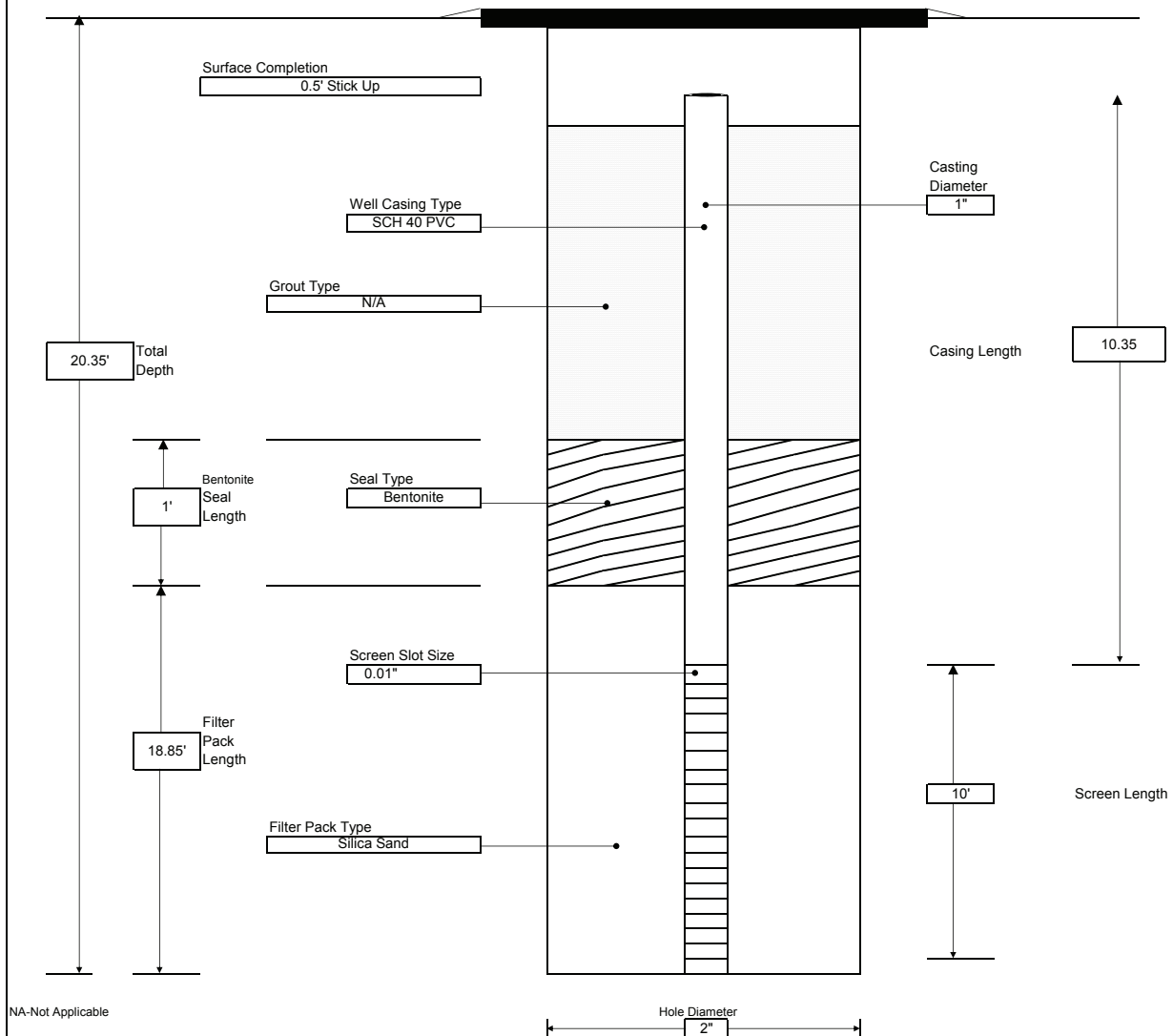
AUGER SIZE AND TYPE: 2 inch Direct Push

OVERBURDEN SAMPLING METHOD: 5-foot MacroCore® sampler

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
6/1/2017	900	10.8'		



GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

LABELIA

Associates, D.P.C.
300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

1660 Niagara Street
Buffalo, New York
Remedial Investigation

Well ID: **RI-MW-6**

SHEET 1 OF 1

JOB # 2161447

CHKD. BY:

CONTRACTOR: LaBella LLC

DRILLER: Matt Pepe

LABELLA REPRESENTATIVE: Jessica Dombrowski

BORING LOCATION: RI-SB-6

GROUND SURFACE ELEVATION:

DATUM: Top of Riser

START DATE: 5/30/2017

END DATE: 5/30/2017

TYPE OF DRILL RIG:

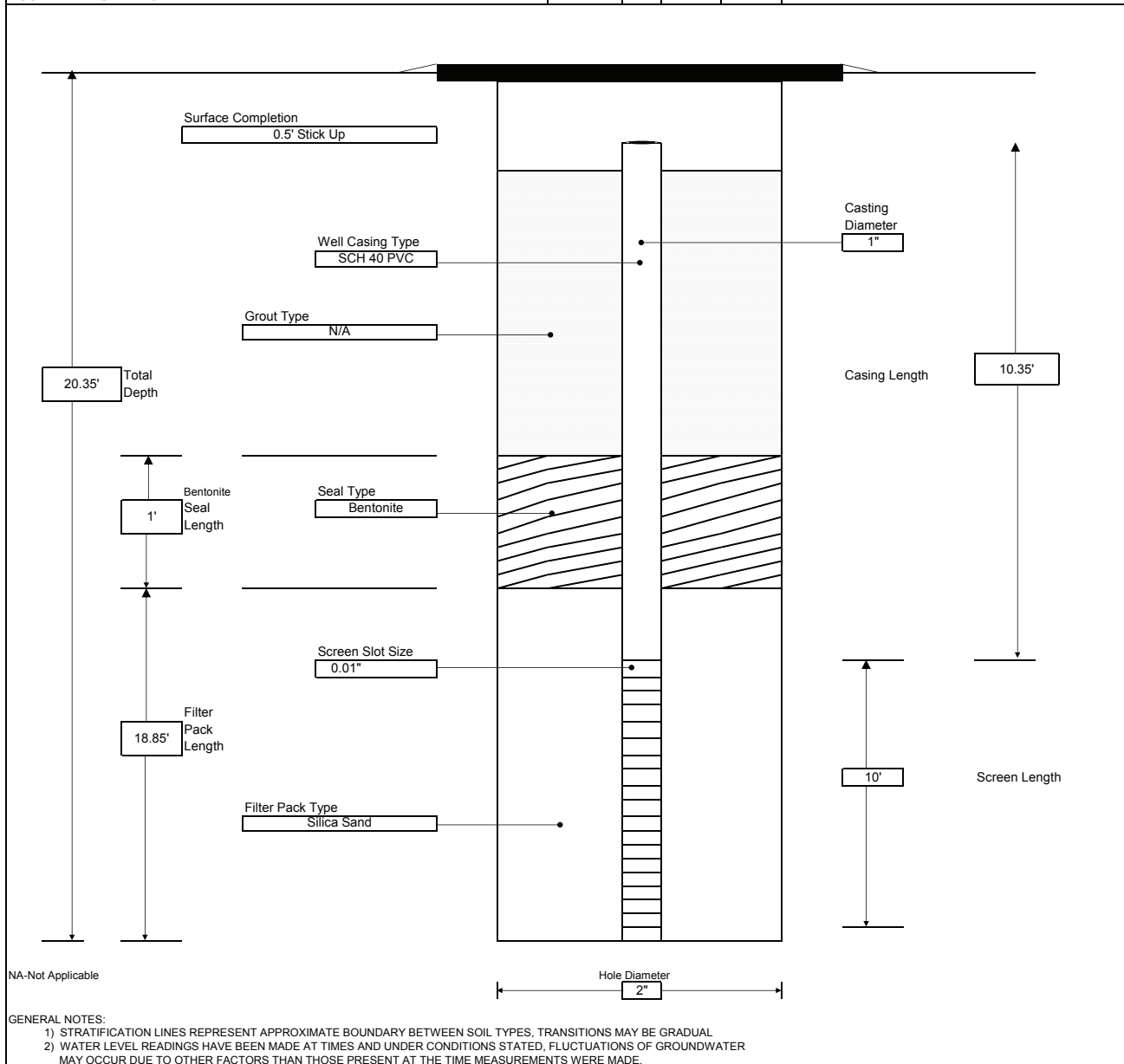
AUGER SIZE AND TYPE: 2 inch Direct Push

OVERBURDEN SAMPLING METHOD: 5-foot MacroCore® sampler

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
6/1/2017	835	6.1'		



LABELIA

Associates, D.P.C.
300 PEARL STREET, BUFFALO, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

1660 Niagara Street
Buffalo, New York
Remedial Investigation

Well ID: **RI-MW-7**

SHEET 1 OF 1

JOB # 2161447

CHKD. BY:

CONTRACTOR: LaBella LLC

DRILLER: Matt Pepe

LABELLA REPRESENTATIVE: Jessica Dombrowski

BORING LOCATION: RI-SB-7

GROUND SURFACE ELEVATION:

DATUM: Top of Riser

START DATE: 5/30/2017

END DATE: 5/30/2017

TYPE OF DRILL RIG:

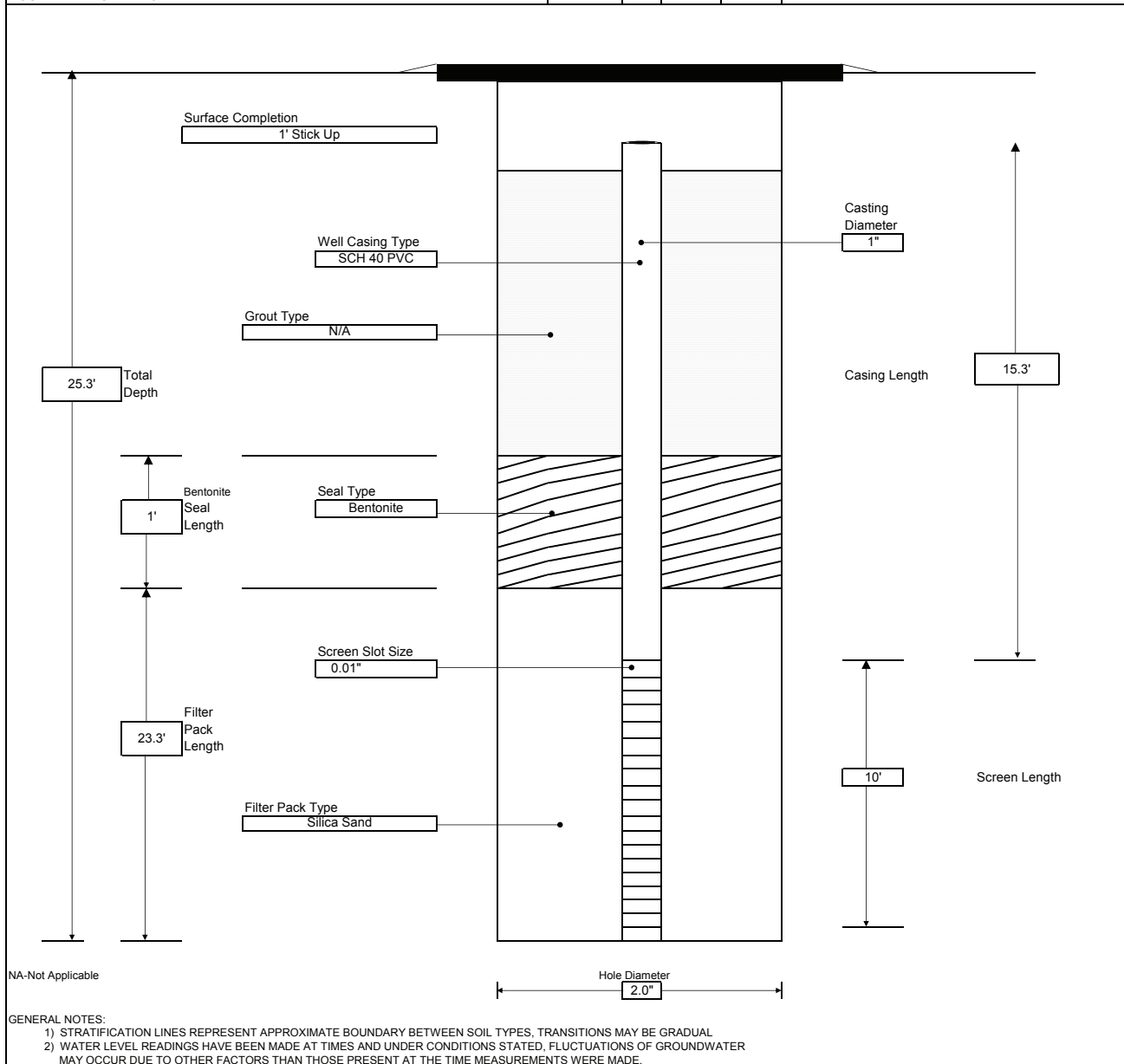
AUGER SIZE AND TYPE: 2 inch Direct Push

OVERBURDEN SAMPLING METHOD: 5-foot MacroCore® sampler

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
8/18/2017	1000	16.4'	25.3	Petroleum Odor and Sheen Observed



DRILLING SUMMARY																																																	
Geologist: Steve Moeller																																																	
Drilling Company: TREC Environmental																																																	
Driller: Eric Hamman																																																	
Rig Make/Model: Geoprobe 6620 DT																																																	
Date: September 22, 2020																																																	
GEOLOGIC LOG																																																	
Depth(ft.)	Description																																																
	See log for soil boring SB-3R.																																																
Ground Surface Top of Riser Top of Seal Top of Sand Pack Top of Screen D E P T H Bottom of Screen Screen Bottom Cap Bottom of Borehole 0.37 feet 1 foot 12 feet 13.75 feet 28.75 feet 29 feet 29 feet Flush Mount with Lockable Cap Expandable plug with lock Schedule 40 PVC Riser 2 inch dia. 13.38 feet length Borehole Diameter 8 inch dia. Schedule 40 PVC Screen 2 inch dia. 15 feet length End Cap																																																	
WELL DESIGN																																																	
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Client: NYSDEC																																																	
Location: 1660 Niagara Street Buffalo, NY																																																	
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NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation																																																	
MONITORING WELL CONSTRUCTION DETAILS																																																	
Well Number: 1660-MW-3R																																																	

DRILLING SUMMARY Geologist: Steve Moeller Drilling Company: TREC Environmental Driller: Eric Hamman Rig Make/Model: Geoprobe 6620 DT Date: September 17, 2020		Top of Casing Top of Riser Ground Surface Top of Seal D E P T H Top of Sand Pack Top of Screen Bottom of Screen Screen Bottom Cap Bottom of Borehole		feet 2.54 feet feet 1 foot 13 feet 16.25 feet 31.25 feet 31.5 feet 32.0 feet		Expandable plug with lock Protective Casing with Lockable Cap Schedule 40 PVC Riser 2 inch dia. 18.79 feet length Borehole Diameter 8 inch dia. Schedule 40 PVC Screen 2 inch dia. 15 feet length End Cap																																																
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Client: NYSDEC		Location: 1660 Niagara Street Buffalo, NY		Site Name: 1660 Niagara Street Site No.: C915311																																																		
		MONITORING WELL CONSTRUCTION DETAILS		Well Number: 1660-MW-8																																																		

1675 NIAGARA STREET

DRILLING SUMMARY

Geologist:
Steve Moeller

Drilling Company:
TREC Environmental

Driller: Eric Hamman

Rig Make/Model: Geoprobe 6620 DT
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Date:
September 15, 2020

GEOLOGIC LOG

Depth(ft.)	Description
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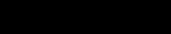
Depth(ft.)	Description
	See log for soil boring 1675-SB-1.

WELL DESIGN

Bottom of Borehole

32.0 feet

End Cap

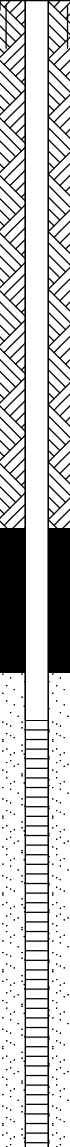
SURFACE COMPLETION		SCREEN MATERIAL		FILTER MATERIAL	
Surface: 8-inch diameter steel flush-mount with 12-inch skirt		Type: 2-inch ID Schedule 40 PVC, threaded with O-ring seal		Type: Filpro #00N Silica Sand	
RISER MATERIAL		Slot Size: 0.010" machine slotted		SEAL MATERIAL	
Type: 2-inch ID Schedule 40 PVC threaded with O-ring seal		Setting: 16.5 - 31.5 feet bgs		Type: CETCO PureGold Medium Bentonite Chips	
Setting: 0.32 - 16.5 feet bgs				Setting: 1 - 13 feet bgs	
COMMENTS: Well is located in front of the easternmost portion of the building in a grass strip between the building and sidewalk.				LEGEND	
				 Cement  Bentonite Chip Seal  Silica Sandpack	
Client: NYSDEC		Location: 1675 Niagara Street Buffalo, NY		Site Name: 31 Tonawanda Off Site Site No.: C915299A	
 Department of Environmental Conservation		MONITORING WELL CONSTRUCTION DETAILS		Well Number: 1675-MW-1	

**FORMER BUFFALO GAS LIGHT/
IROQUOIS GAS CORPORATION
SITE NO. 915351**

Boring Location NORTHING: 1,067,341 EASTING: 1,063,933 STATION: N/A OFFSET: N/A HORIZONTAL DATUM: NAD83 NY West Zone STATION CENTERLINE: N/A VERTICAL DATUM: NAVD88 GROUND SURFACE ELEVATION (FT): 582.17 LOCATION: P-Site		BORING MW-BGL-1 PAGE 1 of 2
--	--	---

Drilling Information DATE START / END: 11/11/2021 - 11/11/2021 CONTRACTOR: Nothnagle DRILLER: Tom Mangefreda EQUIPMENT: Hand/Geoprobe 7822DT AUGER ID/OD: 4.25 in / N/A CASING ID/OD: 2 in / 2 in HAMMER TYPE: Direct Push HAMMER WEIGHT (lbs): N/A HAMMER DROP (inch): N/A WATER LEVEL ELEVATIONS (ft): _____ GENERAL NOTES: Top of Riser Elevation: 581.74'			TOTAL DEPTH (FT): 28.0 LOGGED BY: M. Cummings BORING METHOD: Hand/Geoprobe
--	--	--	---

ABBREVIATIONS:	ID = Inside Diameter OD = Outside Diameter Pen. = Penetration Length Rec. = Recovery Length	bpf = Blows per Foot mpf = Minute per Foot S = Split Spoon DP = Direct Push Sample	U = Undisturbed Tube Sample C = Rock Core V = Field Vane Shear SC = Sonic Core	WOR = Weight of Rods WOH = Weight of Hammer RQD = Rock Quality Designation OVM = Organic Vapor Meter	Q _p = Pocket Penetrometer Strength S _v = Pocket Torvane Shear Strength F _v = Field Vane Shear Strength NA, NM = Not Applicable, Not Measured
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Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION						GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS			
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data						
580	5		1		4 to 8	48/30		OVM=0.0		Hand clear to 5.0' bgs. FILL Reddish-brown silty clay with trace fine sand and fine angular gravel. Moist throughout (reworked native material)		- Flush mount surface casing - 2" dia. schedule 40 PVC well riser - Cement/bentonite grout 3/8" dia. bentonite chips - 2" dia. schedule 40 PVC well screen #00N Filter Sand		
			2		8 to 12	48/48		OVM=0.1					Lacustrine Clay Reddish-brown silty clay with trace fine sand and fine angular gravel, stiff, low plasticity fines, moist throughout.	
575			3		12 to 16	48/48		OVM=0.0						Lacustrine Clay , as above, moist.
			4		16 to 20	48/48		OVM=0.0						
570			5		20 to 24	48/48		OVM=0.0						Lacustrine Clay , as above, moist.
565	15													
560	20													

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.	CLIENT: National Fuel Gas PROJECT NAME: National Fuel Lower Scajaquada Creek CITY/STATE: Buffalo, New York GEI PROJECT NUMBER: 2101620	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228
---	---	---

GLASTONBURY - GEOTECHNICAL BORING LOG 02_2101620_NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ_NEW.GDT_4/15/22

Boring Location
NORTHING: 1,067,341 **EASTING:** 1,063,933 **STATION:** N/A **OFFSET:** N/A
HORIZONTAL DATUM: NAD83 NY West Zone **STATION CENTERLINE:** N/A
VERTICAL DATUM: NAVD88 **GROUND SURFACE ELEVATION (FT):** 582.17
LOCATION: P-Site

BORING

MW-BGL-1

PAGE 2 of 2

Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			
25			6		24 to 28	48/48				
555										
30									End of Boring at 28 feet	
550									Samples to Alpha Analytical: 16-20' below ground surface (566.17-562.17' elev.)	
35										
545										
40										
540										
45										
535										
50										
530										

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.

CLIENT: National Fuel Gas
PROJECT NAME: National Fuel Lower Scajaquada Creek
CITY/STATE: Buffalo, New York
GEI PROJECT NUMBER: 2101620

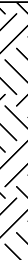
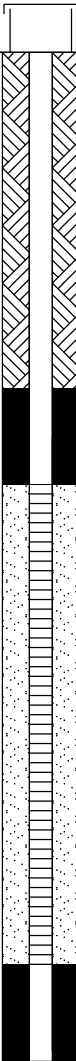
GEI Consultants
 GEI Consultants, Inc.
 100 Sylvan Parkway
 Suite 400
 Buffalo, NY 14228

GLASTONBURY - GEOTECHNICAL BORING LOG 02_2101620_NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ_NEW.GDT_4/15/22

Boring Location NORTHING: 1,067,421 EASTING: 1,063,786 STATION: N/A OFFSET: N/A HORIZONTAL DATUM: NAD83 NY West Zone STATION CENTERLINE: N/A VERTICAL DATUM: NAVD88 GROUND SURFACE ELEVATION (FT): 576.88 LOCATION: P-Site		BORING MW-BGL-3 PAGE 1 of 2
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Drilling Information DATE START / END: 11/9/2021 - 11/9/2021 CONTRACTOR: Nothnagle DRILLER: Tom Mangefreda EQUIPMENT: Hand/Geoprobe 7822DT AUGER ID/OD: 4.25 in / N/A CASING ID/OD: 2 in / 2 in HAMMER TYPE: Direct Push HAMMER WEIGHT (lbs): N/A HAMMER DROP (inch): N/A WATER LEVEL ELEVATIONS (ft): _____ GENERAL NOTES: Top of Riser Elevation: 579.82'			TOTAL DEPTH (FT): 28.0 LOGGED BY: M. Cummings BORING METHOD: Hand/Geoprobe
--	--	--	---

ABBREVIATIONS:	ID = Inside Diameter OD = Outside Diameter Pen. = Penetration Length Rec. = Recovery Length	bpf = Blows per Foot mpf = Minute per Foot S = Split Spoon DP = Direct Push Sample	U = Undisturbed Tube Sample C = Rock Core V = Field Vane Shear SC = Sonic Core	WOR = Weight of Rods WOH = Weight of Hammer RQD = Rock Quality Designation OVM = Organic Vapor Meter	Q _p = Pocket Penetrometer Strength S _v = Pocket Torvane Shear Strength F _v = Field Vane Shear Strength NA, NM = Not Applicable, Not Measured
-----------------------	--	---	---	---	--

Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION						GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data			
575	5		1		4 to 8	48/48		OVM=0.5		Hand clear to 5.0' bgs. FILL Reddish-brown silty clay with coarse angular limestone gravel, weathered concrete pieces, moist. Locally mottled with black silty clay, firm to hard.	 - Flush mount surface casing - 2" dia. schedule 40 PVC well riser Cement/ bentonite grout - 3/8" dia. bentonite chips - 2" dia. schedule 40 PVC well screen - #00N Filter Sand
570		2	8 to 12		48/48		OVM=0.1				
565	10		3	12 to 16	48/0		OVM=--			No recovery 12-16' interval.	
560		4	16 to 20	48/21		OVM=20					
555	20		5	20 to 24	48/48		OVM=0.0		Lacustrine Clay Reddish-brown silty clay with trace fine sand and fine angular gravel, stiff, low plasticity fines, moist throughout.	- 2' sump - 3/8" dia. bentonite chips	

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.	CLIENT: National Fuel Gas PROJECT NAME: National Fuel Lower Scajaquada Creek CITY/STATE: Buffalo, New York GEI PROJECT NUMBER: 2101620	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228
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GLASTONBURY - GEOTECHNICAL BORING LOG 02_2101620_NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ_NEW.GDT_4/15/22

Boring Location
NORTHING: 1,067,421 **EASTING:** 1,063,786 **STATION:** N/A **OFFSET:** N/A
HORIZONTAL DATUM: NAD83 NY West Zone **STATION CENTERLINE:** N/A
VERTICAL DATUM: NAVD88 **GROUND SURFACE ELEVATION (FT):** 576.88
LOCATION: P-Site

BORING
MW-BGL-3
PAGE 2 of 2

Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			
550	25		6		24 to 28	48/48		OVM=0.0		- 3/8" dia. bentonite chips
545	30								End of Boring at 28 feet	
540	35								<u>Samples to Alpha Analytical:</u> 17-19' below ground surface (559.88' to 561.88' elev.) <u>Samples for forensics (Meta Env.)</u> 18-19' below ground surface (560.88' to 559.88' elev.)	
535	40									
530	45									
525	50									

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.

CLIENT: National Fuel Gas
PROJECT NAME: National Fuel Lower Scajaquada Creek
CITY/STATE: Buffalo, New York
GEI PROJECT NUMBER: 2101620



Consultants

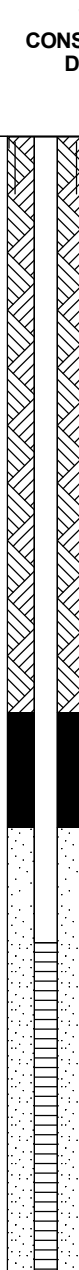
GEI Consultants, Inc.
100 Sylvan Parkway
Suite 400
Buffalo, NY 14228

GLASTONBURY - GEOTECHNICAL BORING LOG 02_2101620_NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ_NEW.GDT_4/15/22

Boring Location NORTHING: 1,067,490 EASTING: 1,064,648 STATION: N/A OFFSET: N/A HORIZONTAL DATUM: NAD83 NY West Zone STATION CENTERLINE: N/A VERTICAL DATUM: NAVD88 GROUND SURFACE ELEVATION (FT): 585.76 LOCATION: Lower Scajaquada Creek Area		BORING MW-LSC-1 PAGE 1 of 2
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Drilling Information DATE START / END: 11/1/2021 - 11/1/2021 CONTRACTOR: Nothnagle DRILLER: Tom Mangefreda EQUIPMENT: Hand/Geoprobe 7822DT AUGER ID/OD: 4.25 in / N/A CASING ID/OD: 2 in / 2 in HAMMER TYPE: Direct Push HAMMER WEIGHT (lbs): N/A HAMMER DROP (inch): N/A WATER LEVEL ELEVATIONS (ft): _____ GENERAL NOTES: Top of Riser Elevation: 585.69'			TOTAL DEPTH (FT): 24.0 LOGGED BY: E. Wood BORING METHOD: Hand/Geoprobe
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ABBREVIATIONS:	ID = Inside Diameter OD = Outside Diameter Pen. = Penetration Length Rec. = Recovery Length	bpf = Blows per Foot mpf = Minute per Foot S = Split Spoon DP = Direct Push Sample	U = Undisturbed Tube Sample C = Rock Core V = Field Vane Shear SC = Sonic Core	WOR = Weight of Rods WOH = Weight of Hammer RQD = Rock Quality Designation OVM = Organic Vapor Meter	Q _p = Pocket Penetrometer Strength S _v = Pocket Torvane Shear Strength F _v = Field Vane Shear Strength NA, NM = Not Applicable, Not Measured
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Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION						GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS		
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data					
585			1		0 to 5	60/		OVM=0.4		Topsoil FILL Brown/dark brown, fine grained to medium grained sand, trace organics, 1'x1' sandstone blocks from 3' to 5', dry		- Flush mount surface casing - 2" dia. schedule 40 PVC well riser Cement/ bentonite grout - 3/8" dia. bentonite chips - 2" dia. schedule 40 PVC well screen - #00N Filter Sand	
								OVM=0.2					
								OVM=0.0					
580	5		2	5 to 8	36/19		OVM=0.0		Brown silty sand, fine grained to medium grained, well rounded, well sorted, moist Medium gravel, slag, red brick fragments, some black gravel (wet, no odors) Reddish brown silty clay, trace small gravel, dry 4" seam of black, coarse-grained poorly-sorted, angular sand and fine gravel Transitions to reddish-brown silty clay, trace fine gravel Black coarse grained, poorly sorted, angular, sand and fine gravel Reddish brown silty clay, trace small gravel, dry. Black fine grained to coarse grained sand with fine gravel, some cinders and possible coal, trace Red brick fragments, saturated, some medium gravel, angular				
							OVM=0.0						
							OVM=0.1						
575	10		3	8 to 12	48/39		OVM=0.2						
							OVM=0.2						
							OVM=0.1						
570	15		4	12 to 16	48/24		OVM=0.2						
							OVM=0.1						
							OVM=0.3						
			5	16 to 20	48/41.5				Native Alluvium Gray silty clay, little fine grained sand, trace wood/organic material, saturated (4"), increasing fine grained sand at 18' Gray silty clay, organic material (roots, wood, plant material) noted, saturated				

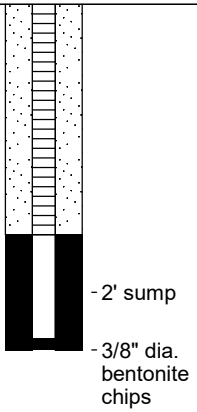
Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.	CLIENT: National Fuel Gas PROJECT NAME: National Fuel Lower Scajaquada Creek CITY/STATE: Buffalo, New York GEI PROJECT NUMBER: 2101620	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228
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GLASTONBURY - GEOTECHNICAL BORING LOG 02_2101620_NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ_NEW.GDT_4/15/22

Boring Location
NORTHING: 1,067,490 **EASTING:** 1,064,648 **STATION:** N/A **OFFSET:** N/A
HORIZONTAL DATUM: NAD83 NY West Zone **STATION CENTERLINE:** N/A
VERTICAL DATUM: NAVD88 **GROUND SURFACE ELEVATION (FT):** 585.76
LOCATION: Lower Scajaquada Creek Area

BORING
MW-LSC-1
PAGE 2 of 2

Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			
565			6		20 to 24	48/42				
									OVM=0.2	
									OVM=0.1	
									Lacustrine Clay Reddish brown silty clay, little fine sand, low plasticity fines, moist, firm.	
									End of Boring at 24 feet	
	25									
560										
									<u>Samples to Alpha Analytical:</u>	
									13-15' below ground surface (572.76 to 570.76' elev.)	
									22-24' below ground surface (563.76' to 561.76' elev.)	
	30									
555										
	35									
550										
	40									
545										
	45									



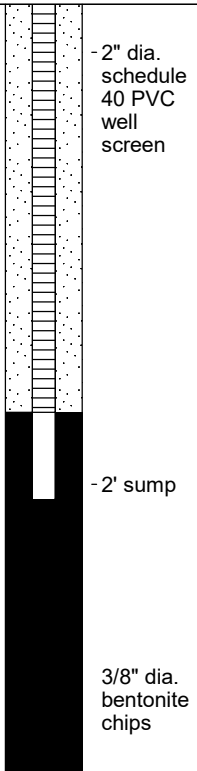
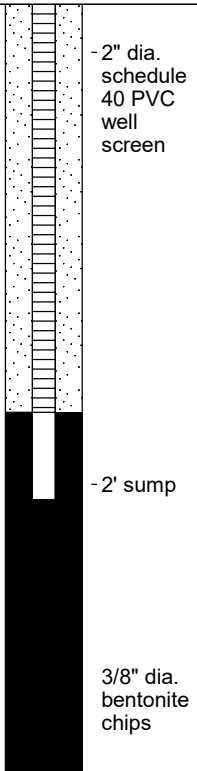
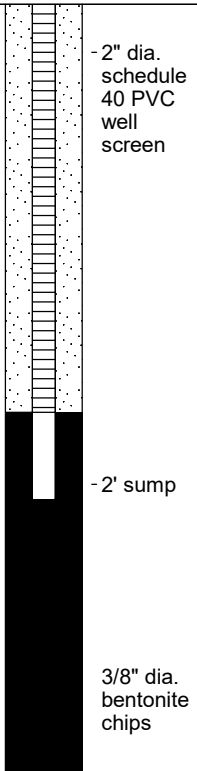
GLASTONBURY - GEOTECHNICAL BORING LOG 02_2101620_NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ_NEW.GDT_4/15/22

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.	CLIENT: National Fuel Gas	 GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228
	PROJECT NAME: National Fuel Lower Scajaquada Creek	
	CITY/STATE: Buffalo, New York	
	GEI PROJECT NUMBER: 2101620	

Boring Location										BORING	
NORTHING: 1,067,487 EASTING: 1,064,471 STATION: N/A OFFSET: N/A										MW-LSC-2 PAGE 1 of 2	
HORIZONTAL DATUM: NAD83 NY West Zone STATION CENTERLINE: N/A											
VERTICAL DATUM: NAVD88 GROUND SURFACE ELEVATION (FT): 582.46											
LOCATION: Lower Scajaquada Creek Area											
Drilling Information											
DATE START / END: 11/1/2021 - 11/1/2021										TOTAL DEPTH (FT): 40.0	
CONTRACTOR: Nothnagle DRILLER: Tom Mangefreda										LOGGED BY: E. Wood	
EQUIPMENT: Hand/Geoprobe 7822DT										BORING METHOD: Hand/Geoprobe	
AUGER ID/OD: 4.25 in / N/A CASING ID/OD: 2 in / 2 in											
HAMMER TYPE: Direct Push HAMMER WEIGHT (lbs): N/A										HAMMER DROP (inch): N/A	
WATER LEVEL ELEVATIONS (ft):											
GENERAL NOTES: Top of Riser Elevation: 585.35'											
ABBREVIATIONS:											
ID = Inside Diameter bpf = Blows per Foot U = Undisturbed Tube Sample WOR = Weight of Rods Q _p = Pocket Penetrometer Strength											
OD = Outside Diameter mpf = Minute per Foot C = Rock Core WOH = Weight of Hammer S _v = Pocket Torvane Shear Strength											
Pen. = Penetration Length S = Split Spoon V = Field Vane Shear RQD = Rock Quality Designation F _v = Field Vane Shear Strength											
Rec. = Recovery Length DP = Direct Push Sample SC = Sonic Core OVM = Organic Vapor Meter NA, NM = Not Applicable, Not Measured											
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS	
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			Field Test Data	
580	5		1		0 to 5	60/				Topsoil	- stickup protective casing
									FILL Organics, root material, dry, trace silty clay Gray/red brown silty clay, dry		
									Gray silt, little clay, trace fine grained gravel, well sorted, trace angular gravel, slug at 4'		
									Reworked native reddish brown silty clay, angular fine gravel, firm, moist		
									OVM=0.1		
575			2		5 to 8	36/31					- 2" dia. schedule 40 PVC well riser
									OVM=0.0		
570	10		3		8 to 12	48/48				FILL as above, red brown reworked native to 9.5' then loose brown silty sand, bricks, angular, fine grained gravel, cinders, slag	Cement/bentonite grout
									OVM=0.3		
565	15		4		12 to 16	48/35				Loose cindery fill, saturated, top of clay at ~15' bgs, black, slight septic-like odor, no sheen or other odors	
									OVM=0.3		
560	20		5		16 to 20	48/30				Native Alluvium firm to hard, medium plasticity, light gray grading to gray brown at 20' bgs	- 3/8" dia. bentonite chips
									OVM=0.5		
									OVM=1.5		
					20 to 24	48/45				Moist, firm, gray-brown	#00N Filter Sand
									OVM=0.2		
										Sandy silt with little low plasticity fines, firm, wood pieces, shells	
Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.											
CLIENT: National Fuel Gas											
PROJECT NAME: National Fuel Lower Scajaquada Creek											
CITY/STATE: Buffalo, New York											
GEI PROJECT NUMBER: 2101620											
GEI Consultants										GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228	

Boring Location
NORTHING: 1,067,487 **EASTING:** 1,064,471 **STATION:** N/A **OFFSET:** N/A
HORIZONTAL DATUM: NAD83 NY West Zone **STATION CENTERLINE:** N/A
VERTICAL DATUM: NAVD88 **GROUND SURFACE ELEVATION (FT):** 582.46
LOCATION: Lower Scajaquada Creek Area

BORING
MW-LSC-2
PAGE 2 of 2

Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			
25			6		24 to 28	48/12			Gray silty sand with gravel, saturated top 6", becoming moist, fine to medium angular gravel, no visual impacts	
555			7		28 to 32	48/1			Slough from above, little red-brown clay in shoe (1") with staining and moderate coal tar-like odor Lacustrine Clay Reddish brown silty clay, little fine sand, low plasticity fines, moist, firm, no visual impacts	
30			8		32 to 36	48/38			OVM=59.4	
550			9		36 to 40	48/44				
35										
545										
40									End of Boring at 40 feet	
540									Samples to Alpha Analytical: 18-20' below ground surface (564.46 to 562.46' elev.)	
45										
535										
50										
530										

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.

CLIENT: National Fuel Gas
PROJECT NAME: National Fuel Lower Scajaquada Creek
CITY/STATE: Buffalo, New York
GEI PROJECT NUMBER: 2101620

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 100 Sylvan Parkway
 Suite 400
 Buffalo, NY 14228

Boring Location										BORING		
NORTHING: 1,067,270 EASTING: 1,064,263 STATION: N/A OFFSET: N/A										MW-LSC-3 PAGE 1 of 2		
HORIZONTAL DATUM: NAD83 NY West Zone STATION CENTERLINE: N/A												
VERTICAL DATUM: NAVD88 GROUND SURFACE ELEVATION (FT): 584.19												
LOCATION: Lower Scajaquada Creek Area												
Drilling Information												
DATE START / END: 11/1/2021 - 11/8/2021										TOTAL DEPTH (FT): 32.0		
CONTRACTOR: Nothnagle DRILLER: Tom Mangefreda										LOGGED BY: E. Wood		
EQUIPMENT: Hand/Geoprobe 7822DT										BORING METHOD: Hand/Geoprobe		
AUGER ID/OD: 4.25 in / N/A CASING ID/OD: 2 in / 2 in												
HAMMER TYPE: Direct Push HAMMER WEIGHT (lbs): N/A										HAMMER DROP (inch): N/A		
WATER LEVEL ELEVATIONS (ft):												
GENERAL NOTES: Top of Riser Elevation: 586.95'												
ABBREVIATIONS: ID = Inside Diameter bpf = Blows per Foot U = Undisturbed Tube Sample WOR = Weight of Rods Q_p = Pocket Penetrometer Strength OD = Outside Diameter mpf = Minute per Foot C = Rock Core WOH = Weight of Hammer S_p = Pocket Torvane Shear Strength Pen. = Penetration Length S = Split Spoon V = Field Vane Shear RQD = Rock Quality Designation F_v = Field Vane Shear Strength Rec. = Recovery Length DP = Direct Push Sample SC = Sonic Core OVM = Organic Vapor Meter NA, NM = Not Applicable, Not Measured												
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS		
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			Field Test Data		
			1		0 to 4	48/					FILL Brown/gray silty clay, trace fine grained sand, little concrete, moist	- stickup protective casing
580	5		2		4 to 8	48/26				OVM=0.2	FILL as above, brown silty clay with fine grained to coarse grained sand, angular limestone at 1.5', some coal in upper 1' of core, trace root material, dry	- 2" dia. schedule 40 PVC well riser
										OVM=1.7		- Cement/bentonite grout
575	10		3		8 to 12	48/44				OVM=2.0	Fill: Same as above, locally saturated (4'), increasing brown silty clay dry, transitioning to dark brown, gray, and black, trace fine grained to medium grained sand in lower 1', little to small medium subrounded gravel, slight possible solvent odor in lower 1'	- 3/8" dia. bentonite chips
										OVM=88.4		
570	15		4		12 to 16	48/38				OVM=16.2	Dark gray to black silty clay with medium gravel and gray slug, locally saturated, transitions to brown silty clay (reworked) with trace medium rounded gravel, very slight possible solvent odor 12-14', moist	- 2" dia. schedule 40 PVC well screen (1)
										OVM=3.1		
			5		16 to 20	48/48				OVM=1.1	Reddish brown silty clay, trace fine to medium sand, dry	
								OVM=19.1				
565	20		6		20 to 24	48/42		OVM=0.1	Native Alluvium Black silty fine grained sand, locally saturated, septic odor, with clay, saturated Trace wood material and shell fragments in lower 2'			
								OVM=1.1		- #00N Filter Sand		
Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.												
CLIENT: National Fuel Gas										GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228		
PROJECT NAME: National Fuel Lower Scajaquada Creek												
CITY/STATE: Buffalo, New York												
GEI PROJECT NUMBER: 2101620										GEI Consultants		

Boring Location
NORTHING: 1,067,270 **EASTING:** 1,064,263 **STATION:** N/A **OFFSET:** N/A
HORIZONTAL DATUM: NAD83 NY West Zone **STATION CENTERLINE:** N/A
VERTICAL DATUM: NAVD88 **GROUND SURFACE ELEVATION (FT):** 584.19
LOCATION: Lower Scajaquada Creek Area

BORING
MW-LSC-3
PAGE 2 of 2

Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			
560	25		7		24 to 28	48/47			Lacustrine Clay Reddish brown silty clay, trace fine sand, (locally high plasticity), moist OVM=0.3 OVM=0.6 OVM=0.4 OVM=0.5 Same as above, little fine to coarse angular sand, trace angular small gravel, saturated	 - 3/8" dia. bentonite chips
			8		28 to 32	48/				
555	30									
550	35								End of Boring at 32 feet <u>Samples to Alpha Analytical:</u> 11-12' below ground surface (573.19 to 571.19' elev.) 22-24' below ground surface (562.19 to 560.19' elev.)	(1) Longer well screen selected to monitor groundwater in fill with solvent odor and material above clay.
545	40									
540	45									
535	50									
530										

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.

CLIENT: National Fuel Gas
PROJECT NAME: National Fuel Lower Scajaquada Creek
CITY/STATE: Buffalo, New York
GEI PROJECT NUMBER: 2101620

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Suite 400
Buffalo, NY 14228

[illegible]

Boring Location
NORTHING: 1,067,415 **EASTING:** 1,064,262 **STATION:** N/A **OFFSET:** N/A
HORIZONTAL DATUM: NAD83 NY West Zone **STATION CENTERLINE:** N/A
VERTICAL DATUM: NAVD88 **GROUND SURFACE ELEVATION (FT):** 582.37
LOCATION: Lower Scajaquada Creek Area

BORING
MW-LSC-4
PAGE 2 of 2

Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			
25			7		24 to 28	48/47			Grades to small gravel, angular and more coarse grained sand at 24' Dark brown fine to coarse grained sand and gravel, silt, coal tar-like odors throughout, angular small to medium grained, liquid tar-like material present, saturated	
555			8		28 to 32	48/19			Lacustrine Clay Reddish brown silty clay with trace fine angular gravel, dry, tar-like material impacts and odors on outside of clay only.	
30									Reddish brown silty clay as above, trace fine grained sand, low plasticity fines, stiff, moist	
550									End of Boring at 32 feet	
35									<u>Samples to Alpha Analytical:</u> 20-22' below ground surface (562.37' to 560.37' elev.) 24-28' below ground surface (558.37' to 556.37' elev.) <u>Samples for forensics (Meta Env.)</u> 24-25' below ground surface (558.37' to 557.37' elev.)	
545										
40										
540										
45										
535										
50										
530										

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.

CLIENT: National Fuel Gas
PROJECT NAME: National Fuel Lower Scajaquada Creek
CITY/STATE: Buffalo, New York
GEI PROJECT NUMBER: 2101620

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 100 Sylvan Parkway
 Suite 400
 Buffalo, NY 14228

GLASTONBURY - GEOTECHNICAL BORING LOG 02_2101620_NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ NEW.GDT 4/15/22

Boring Location NORTHING: 1,067,445 EASTING: 1,064,113 STATION: N/A OFFSET: N/A HORIZONTAL DATUM: NAD83 NY West Zone STATION CENTERLINE: N/A VERTICAL DATUM: NAVD88 GROUND SURFACE ELEVATION (FT): 582.72 LOCATION: Lower Scajaquada Creek Area	BORING MW-LSC-5 PAGE 1 of 2
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Drilling Information DATE START / END: 1/4/2022 - 1/4/2022 CONTRACTOR: Nothnagle DRILLER: Tom Mangefreda EQUIPMENT: Hand/Geoprobe 7822DT AUGER ID/OD: 4.25 in / N/A CASING ID/OD: 2 in / 2 in HAMMER TYPE: Direct Push HAMMER WEIGHT (lbs): N/A HAMMER DROP (inch): N/A WATER LEVEL ELEVATIONS (ft): GENERAL NOTES: Top of Riser Elevation: 582.46'		TOTAL DEPTH (FT): 42.0 LOGGED BY: M. Cummings BORING METHOD: Hand/Geoprobe
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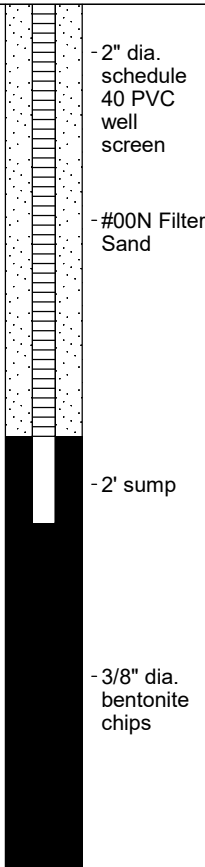
ABBREVIATIONS:	ID = Inside Diameter OD = Outside Diameter Pen. = Penetration Length Rec. = Recovery Length	bpf = Blows per Foot mpf = Minute per Foot S = Split Spoon DP = Direct Push Sample	U = Undisturbed Tube Sample C = Rock Core V = Field Vane Shear SC = Sonic Core	WOR = Weight of Rods WOH = Weight of Hammer RQD = Rock Quality Designation OVM = Organic Vapor Meter	Q _p = Pocket Penetrometer Strength S _v = Pocket Torvane Shear Strength F _v = Field Vane Shear Strength NA, NM = Not Applicable, Not Measured
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Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			
580	5		1		5 to 8	36/3			Hand bore to 11' bgs, (bricks, gravel), concrete. Advance augers to 5.0' without sampling.	- Flush mount surface casing
575	10		2		10 to 14	48/13		OVM=0.0	FILL Loose angular crushed limestone gravel, moist Steady grinding at 8.5' bgs (likely concrete basement flooring) grind through 6" then advance HSA to 10 bgs without sampling.	- 2" dia. schedule 40 PVC well riser
570	15		3		14 to 18	48/37		OVM=0.0	Native Alluvium Gray to light gray silty fine sand, little black wood pieces, firm, moist throughout	Cement/bentonite grout
565	20		4		18 to 22	48/42		OVM=0.0	Gray fine sand and silt with little low plasticity fines, moist throughout, rootlets bottom 6", firm	
560			5		22 to 26	48/48		OVM=2.7	Gray to dark gray clayey silt with trace fine sand, shell fragments (white) at 21' with few shells, scattered throughout, little peat and cobbles Gray silty fine sand, saturated, soft, slight petroleum odor	- 3/8" dia. bentonite chips

GLASTONBURY - GEOTECHNICAL BORING LOG 02 2101620 NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ NEW.GDT 4/15/22	Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.	CLIENT: National Fuel Gas PROJECT NAME: National Fuel Lower Scajaquada Creek CITY/STATE: Buffalo, New York GEI PROJECT NUMBER: 2101620	 GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228
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Boring Location
NORTHING: 1,067,445 **EASTING:** 1,064,113 **STATION:** N/A **OFFSET:** N/A
HORIZONTAL DATUM: NAD83 NY West Zone **STATION CENTERLINE:** N/A
VERTICAL DATUM: NAVD88 **GROUND SURFACE ELEVATION (FT):** 582.72
LOCATION: Lower Scajaquada Creek Area

BORING
MW-LSC-5
PAGE 2 of 2

Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	SAMPLE INFORMATION					GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
			Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD			
555	25		6		26 to 30	48/32			As above, saturated, then 6", wood fragments from 28.5-30', coarse fine sand, silt, slight coal-tar like odor, gray clay in shoe with tar-like material staining, firm, 1' red clay in very bottom of shoe	
550	30		7		30 to 34	48/24			OVM=2.7 OVM=26 OVM=0.4 Silty red clay with trace fine angular gravel, firm, medium to high plasticity, slight coal-tar like odor in top 1.5'	
545	35		8		34 to 38	48/48			OVM=0.0 As above, little coal tar present on shoe only, likely resulting from withdrawing sampling assembly through impacted interval above, little red clay in sampler	
540	40		9		38 to 42	48/2			OVM=0.0 Poor recovery, little red clay in sampler	
535	45								End of Boring at 42 feet	
530	50								<u>Samples to Alpha Analytical:</u> 18-22' below ground surface (564.72 to 560.72 elev.) 26-30' below ground surface (556.72 to 552.72 elev.)	

Strata lines represent the approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at times stated. Water levels may be different at other times.

CLIENT: National Fuel Gas
PROJECT NAME: National Fuel Lower Scajaquada Creek
CITY/STATE: Buffalo, New York
GEI PROJECT NUMBER: 2101620

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GEI Consultants, Inc.
100 Sylvan Parkway
Suite 400
Buffalo, NY 14228

GLASTONBURY - GEOTECHNICAL BORING LOG 02_2101620_NATIONAL FUEL LOWER SCAJAQUADA CREEK SITE_EW.GPJ NEW.GDT 4/15/22