APPENDIX B WELL CONSTRUCTION DIAGRAMS

31 TONAWANDA STREET SITE NO. C915299











Q:/Exchange/Montroy/31-MW-5 Construction Log/Stick-Up (2)-11/21/2018-10:06 AM

31 TONAWANDA STREET OFF-SITE SITE NO. C915299A

DRILL	ING SUMMARY					
Geologist:		1			_	Flush Mount with Lockable Cap
Steve Moe						
TREC Environmental		Ground	Surfaco	foot		
	i onnonai	Top of R	iser	0.27 feet		Expandable plug with lock
Driller:						
Eric Hamm	an	Top of S	eal	1 foot		
Rig Make/	Model:					
Geoprobe	6620 DT					
Date:						
September	24, 2020	ļ				
GEO	DLOGIC LOG					Schedule 40 PVC Riser 2 inch dia.
Depth(ft.)	Description	1				13.37 feet length
	See log for soil boring					
	SB-100.					Borehole Diameter
						<u> </u>
		Top of S	and Pack	12 feet		
		Top of S	croon	13.64 foot		
		100 01 3	CIEEII	15.04 1001		
		D				
						Schedule 40 PVC Screen
		E				2 inch dia.
						15 feet length
		Р				
		Т				
		ц –				
		п				
		Bottom of	of Screen	28.64 feet		
		Screen B	Bottom Cap	28.89 feet		
WE	ELL DESIGN	Bottom of	of Borehole	29 feet		End Cap
SU	RFACE COMPLETION		S	CREEN MATE	RIAL	
Surrace:	o-inch ulameter steel fi	iusn- rt	iype:	2-INCN ID SCh	O ring soci	Softing: 12 20 fact bac
		i t			C-mig sear	Jetting. 12 - 29 leet bys
	RISER MATERIAL		Slot Size:	0.010" machir	ne slotted	SEAL MATERIAL
Type:	2-inch ID Schedule 40	PVC				Type: CETCO PureGold Medium
	threaded with O-ring se	eal	Setting:	13.64 - 28.64	feet bgs	Bentonite Chips
Setting: 0.27 - 13.64 feet bgs			_		_	Setting: 1 - 12 feet bgs
COMMENT	rs:					LEGEND
Well is located west of the bike path in a g			ass strip adj	acent to the 57	-71	
I onawanda Street BCP Site, Site No. C91		0024. This v	vell is at the bas	se of the	Cement	
nike paur ramp near an asphait pau.						Bontonite Chin Sool
						Demonite Chip Sea
						Silica Sandpack
Client: NY	'SDEC		Location:	Bike Path off Buffalo, NY	West Ave.	Site Name: 31 Tonawanda Off Site Site No.: C915299A
1	NEW YORK Department of		N	MONITORING V	VELL	
NEW YORK STATIOT Environmental Conservation			CON	ISTRUCTION D	DETAILS	vveii Number: MVV-100

DRILL	ING SUMMARY					
Geologist:		┫				Flush Mount with Lockable Cap
Steve Moe	ller					
	ompany:]		6		
IREC Envi	ronmentai	Ground S	Surface	10013 feet		Expandable plug with lock
Driller:			Ser	0.43 1661		Exhaligane hing with lock
Eric Hamm	ian	Top of Se	eal	1 foot		
Rig Make/	Model:	1				
Geoprobe	6620 DT	1				
Date:	- 0.0 - 0.00					
Sehrenner	23, 2020	4				
GEO	OLOGIC LOG					Schedule 40 PVC Riser 2 inch dia.
Depth(ft.)	Description	Top of Sa	and Pack	7 feet		8.2 feet length
	See log for soil boring	Top of Sc	roon	8.63 feet		Borehole Diameter
	SB-103.	100 01 00	reen	0.00 1001		8 inch dia.
		D				
		E				
						Schedule 40 PVC Screen
		Р				<u> </u>
		I _				15feet length
		Т				
		Ιн				
		Bottom o	of Scroon	23.63 foot		
		Screen B	ottom Cap	23.88 feet		
WE	ELL DESIGN	Bottom o	f Borehole	24 feet		End Cap
Surface	RFACE COMPLETION	luch	S	CREEN MATE	RIAL	FILTER MATERIAL
Surface.	mount with 12-inch ski	rt	i ype.	threaded with	O-ring seal	Setting: 7 - 24 feet bas
					<u> </u>	
	RISER MATERIAL		Slot Size:	0.010" machir	e slotted	SEAL MATERIAL
Type:	2-inch ID Schedule 40	PVC	Catting	0.62 02.62 6	at has	Type: CETCO PureGold Medium
Setting:	inreaded with O-ring se	eai	Setting:	8.63 - 23.63 16	eet bgs	Setting: 1 - 7 feet bas
COMMENT	TS:	I				
Well is loca	ated west of the bike pa	th in a gra	ass strip adj	acent to the 57	-71	
Tonawanda Street BCP Site, Site No. C91		No. C915	024.			Cement
						Bentonite Chip Seal
						Silica Sandpack
Client: NY	(SDEC		Location:	Bike Path off Buffalo, NY	West Ave.	Site Name: 31 Tonawanda Off Site Site No.: C915299A
	NEW YORK Department of		N	MONITORING V	VELL	
			CON	ISTRUCTION D	ETAILS	vveli number: MVV-103

DRILL	ING SUMMARY					
Geologist:		4				Flush Mount with Lockable Cap
Steve Moe	ller					
Drilling Co TREC Envi	ompany: ironmental	Ground S	Surface	feet		Expandable plug with look
Driller:			1561	0.45 1001		Expandable plug with lock
Eric Hamm	nan	Top of Se	eal	1 foot		
Rig Make/	Model:					
Geoprobe	6620 DT	-				
September	23, 2020					
GE	OLOGIC LOG	1				Schedule 40 PVC Riser
Depth(ft.)	Description	Top of Sa	and Pack	7 feet		2 inch dia. 8.13 feet length
	See log for soil boring					
	SB-106.	Top of So	creen	8.58 feet		Borehole Diameter
		D				
		F				
						Schedule 40 PVC Screen
		Р				<u> </u>
		-				15feet length
		'				
		н				
		Bottom o	of Screen	23.58 feet		
		Screen B	ottom Cap	23.83 feet		
WE	ELL DESIGN	Bottom o	of Borehole	24 feet		End Cap
					DIAL	
Surface:	8-inch diameter steel f	ueh-	S Type:	2-inch ID Sch	RIAL	FILTER MATERIAL
oundee.	mount with 12-inch ski	rt	Type.	threaded with	O-ring seal	Setting: 7 - 24 feet bgs
	RISER MATERIAL		Slot Size:	0.010" machir	e slotted	SEAL MATERIAL
Туре:	2-inch ID Schedule 40	PVC				Type: CETCO PureGold Medium
Cotting	threaded with O-ring so	eal	Setting:	8.58 - 23.58 fe	eet bgs	Bentonite Chips
Setting:	0.45 - 8.58 feet bgs					Setting: 1 - 7 feet bgs
Well is loca	ated west of the bike pa	th in a gr	ass strip adi	acent to the for	mer	
Pratt & Lambert Paint Company, Site No. 9 The well is close to where the Scajaquada			15251, at 7 Expressway	5 Tonawanda S crosses the bik	treet. e path.	Cement
						Bentonite Chip Seal
						Silica Sandpack
Client: NY	/SDEC		Location:	Bike Path off Buffalo. NY	West Ave.	Site Name: 31 Tonawanda Off Site Site No.: C915299A
<i>ل</i> ے	NEW YORK Department of		Γ	MONITORING W	VELL	Wall Number: MW 106
2			CON	ISTRUCTION D	ETAILS	

DRILL	ING SUMMARY					
Geologist		ł				Fluch Mount with Lockable Can
Steve Moe	ller					
Drilling Co	ompany:	1				
TREC Environmental		Ground S Top of Ri	Surface Iser	feet 0.32 feet		Expandable plug with lock
Driller:		1				
Eric Hamm	nan	Top of Se	eal	1 foot		
Rig Make/	Model:					
Geoprobe	6620 DT					
September	r 15, 2020					
GE	OLOGIC LOG					Schedule 40 PVC Riser 2 inch dia.
Depth(ft.)	Description	1				16.18 feet length
	•					
	See log for soil boring					
	1675-SB-1.	Top of Sa	and Pack	13 feet		Borehole Diameter
						<u> </u>
		Top of Sc	reen	16.5. foot		
		100 01 00		10.0 1001		
		D				
		E				
						Schedule 40 PVC Screen
		P				<u> </u>
		Т				
		-				
		н				
		Bottom o	f Screen	31.5 feet		
		Screen B	ottom Cap	31.75 feet		End Cap
WE	ELL DESIGN	Bottom o	f Borehole	32.0 feet		
SU		lu u a la	S		RIAL	FILTER MATERIAL
Surface:	mount with 12-inch ski	usn- rt	Type:	2-Inch ID Sche	O-ring seal	Setting: 13-32 feet bas
		L.			O-Ing Seal	
	RISER MATERIAL		Slot Size:	0.010" machir	e slotted	SEAL MATERIAL
Type:	2-inch ID Schedule 40	PVC				Type: CETCO PureGold Medium
	threaded with O-ring se	eal	Setting:	16.5 - 31.5 fee	et bgs	Bentonite Chips
Setting:	0.32 - 16.5 feet bgs					Setting: 1 - 13 feet bgs
Well is loc	15: ated in front of the east	ornmost n	ortion of the	huilding in a g	ass strip	LEGEND
between the building and sidewalk.				building in a g		Cement
						Bentonite Chip Seal
						Silica Sandpack
Client: NY	/SDEC		Location:	1675 Niagara Buffalo, NY	Street	Site Name: 31 Tonawanda Off Site
	NEW YORK Department of		Ν	MONITORING V	VELL	
~	Conservation		CON	ISTRUCTION D	ETAILS	Well Number: 1675-MW-1

DRILL	ING SUMMARY					
Geologist	:					Flush Mount with Lockable Cap
Steve Moe	ller	4				
TREC Envi	ompany: ironmental	Ground	Surface	feet		
	ionnontai	Top of R	liser	0.56 feet		Expandable plug with lock
Driller:		1				
Eric Hamm	nan	Top of S	eal	1 foot		
Rig Make/						
Date:	0020 D1	-				
September	⁻ 15, 2020	Top of S	and Pack	2.5 feet		
GE	OLOGIC LOG]				Schedule 40 PVC Riser
Domth/ft)	Description	Top of S	creen	3.5 feet		2 inch dia.
Deptn(tt.)	Description	1				<u>2.94</u> Teet length
	See log for soil boring					
	1675-SB-2.	_				Borehole Diameter
		D				<u> </u>
		E				
		Р				
		₊				
						Schedule 40 PVC Screen
		н				<u> </u>
						10 feet length
		Bottom o	of Screen	13.5 feet		End Con
		Screen	Sottom Cap	15.75 1661		
		1				
WE	ELL DESIGN	Bottom of	of Borehole	15 feet		
SU	RFACE COMPLETION	/	S	CREEN MATE	RIAL	FILTER MATERIAL
Surface:	8-inch diameter steel f	lush-	Туре:	2-inch ID Sche	edule 40 PVC,	Type: Filpro #00N Silica Sand
	mount with 12-inch ski	rt		threaded with	O-ring seal	Setting: 2.5 - 15 feet bgs
			Slot Sizo:	0 010" machin	a slattad	
Type:	2-inch ID Schedule 40	PVC				Type: CETCO PureGold Medium
	threaded with O-ring s	eal	Setting:	3.5 - 13.5 feet	bgs	Bentonite Chips
Setting:	0.56 - 3.5 feet bgs					Setting: 1 - 2.5 feet bgs
Well is loc	IS:	lot just so	with of easte	rnmost overher	nd door	LEGEND
	ated in asphalt parking					Cement
						Bentonite Chip Seal
						Silica Sandpack
Client: NY	/SDEC		Location:	1675 Niagara Buffalo, NY	Street	Site Name: 31 Tonawanda Off Site Site No.: C915299A
~	NEW YORK STATE OF Environmental			MONITORING V	VELL	Well Number: 1675-MW-2
	Conservation					

57-71 TONAWANDA STREET SITE NO. C915024

TABLE 2

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MONITORING WELL STRATIGRAPHY

Well Description	Depth (BGS)	Material Description
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.
* BG	S - I	pelow ground surface	
** AG	S -	above ground surface	

TABLE 2

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MONITORING WELL STRATIGRAPHY

Well Description	Depth (BGS)	Material Description
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

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DATE STARTED $9-24-90$ FINISHED $9-24-90$ SHEET 1 OF 1					LING AND TESTING CO., INC. SUBSURFACE LOG ()			
	PROJ		edders Aul Pleo40	to	LOCATION HW comen of	10t.		
DEPTH — FT	WELL DIAGRAM	SAMPLE TYPE SAMPLE NO.	BLOWS ON SAMPLER 0 6 12 12 18 24	PROFILE SAMPLE ID -CI-SI-SI-GI-	FIELD IDENTIFICATION OF SOILS		NOTES	
	0 0 0	55 Z 55 Z 55 3	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	SB-1A SB-2 SB-1C	55#1 0-2' 1.3' Recavery 0-0.5' Black gravelly sand Fill 0.5-0.65' Red brick. 0.65-1.0' Concrete 1.0-1.3' Black sand fill.	١	OVA =0 HHU=0 DEY	
2	TD=Q' screen Z-Q' sand 3.5-Q'	55 4 55 6	1 2 7 14 19 20 15 13 18 14	28-12	SS#2 2-4' 1.1' Recovery 0-0.7' Black sandy Fillu queasy appearance + oil- aroma. 0.7'-1.1' Reddish known cla w/knick	nitu like 14 Fill	0VA > 1000 HNU = 15 pp MOIST.	
	seal , 2.5-3.5				SS I 3 4-6' 0.7' Recovery All Moist reddish krown can't see any Foreign Fragm .: renhans its natural (?)	clay- ents	0JA = 10 HHLL: 3 MOIST.	
					SS#4 6-8' 0.8' Recovery All wet reddish known cla W/ no visible signs of Fill Materiae. Clay (as in # Clay is highly cohesive & moderately plastic.	ግ 3)	UVA =0 HNW=0 WET.	
					SS #5 8-10' 1.1 Recovery All dry reddish known clay, highly cohesive + plastic. Appears natural. Water sitting on top of this larger	, tiqlet,	OVA=0 HNU=0 DRY	
					Sstle 9-11/ Same as # 5 There is water in the hole.		ova HNu = 0	

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DEPTH

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PROJECT

Fedders Auto

YPLOOUD

HOLE NUMBER GW-2

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ELEVATION GROUNDWATER

SURFACE E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG DEPTH_ NE comen of lot near LOCATION_ Scalacanda Creek FIELD IDENTIFICATION OF SOILS 55#1 0-2' 1.7' Recovery 0-0.6 Black sandy fill w/ brick, glass, slag, etc. 0.6-1.1' Concrete (weathered) etc. SS #2 2-4' 1. le Recovery 0-1.0' Dank known sandy fill w/ brick, slag, a white ceramic 1.0 - 1.12' Black sandy clack fill, greasy in appearance but not in touch. 55 #3 4-6' 0.4' Recarenze Limited sample volume : will spoon again. 0-0.4' Wet black sandy fill. 2nd time retrieved nothing but water. 55 #4 4-8' 0.4' Recovery. stuck in bit. Augen cuttings

BLOWS ON NO. SAMPLER PROFILE WELL ш TYPE SAMPL SAMPLE DIAGRAM NOTES 0 6 SAMPLE ID 6 12 12 18 CI SI Sel Gr 18 24 0. U 11 HNL = 10 ppm SB-2A 55 l 0 12 8 . OVA= 10 ppm ٠. Both only @ 8 Ч 2 58-2B SS 000 00 very end d 2. 3 3 spoon. ۱ 58-30. 3 55 1.1-1.7' redick-brown + black clay 3 MOIST. ۱ fill w/ sand, slag, (foundry material 2 4 4 ____ SS NONE 1 _ 2 2 HNK=0 5 -SS 2 OVA = 0 2 4 _ Damp SS 6 11 16 material, black glass (foundry) -2 4 SS 7 2 ł TD=14.5 screen 4.5-14.5 HNW=0 OVA= 0 sand 4-14.5 wet. seal 3-4 1 Appears to be naterial matures indicate saturated black sandy Fill, spoon shows damp sandy clay fill. 55 # 5 8 - 10' No recovery. HNU=0 Try again - 24d spoon is OVA= 0 saturated gravely sand fill. saturated. 55 # Le 10-12' 1.0' Recovery. OVA=10 All wood, as in GW-36. HNU N/A 55 #7 12-14' 1.0' Recovery 0-0.4' Reddish known sandy clay OVA = 100 HHL = 0 Fill w/ brick Fragments. 0.4-0.9' Wood 0.9-1.0' Black clay w/ wood. 640088 C-3 CLASSIFICATION/BY R. Wat ecology and environment recycled paper

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E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE	NUMBE	R <u>GW-3</u>
	ACE ATION _	•

GROUNDWATER

SHEET					•	()
	PROJ	ECT	_Fr	eddens !	Auto	LOCATION SE corner of Lot	en_
		-	<u> </u>	P6040		<u>Scajacanda</u> Cree	12
DEPTH - FT	WELL DIAGRAM	SAMPLE TYPE	SAMPLE NO.	BLOWS ON SAMPLER 0 6 12 12 18 18 24	PROFILE CI SI Sa Gr	FIELD IDENTIFICATION OF SOILS	NOTES
	0.00 0.00	SS		$ \begin{array}{c} 0 \\ 6 \\ 12 \\ 12 \\ 18 \\ 24 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$	CI SI Sa Gr	FIELD IDENTIFICATION OF SOILS Third try @ Gw-3 Augen to y' then splitspoon SS#1 1.2' Recovery. 4-le' All black sandy fill as we've alen befae. Contains timestore gravel, brick, wood, etc. Wet below 5'. SS#2 le-8' 1.2' Recovery. Reddish brown + black clay fill with slag+cole fragments Moist to wet. SS #3 8-10' 1.8' Recovery Saturated. o-o.S' Sandy clayey fill(black) o.s-1.1' Reddish brown + black clay fill with gravel. 1.1-1.8' coarse sand + coke/slag. Gill meteriae. SS #4 10-12' O. le' Recovery Saturated black sandy clay fill SS #5 12-14' Ho recovery put Spoon is all wet. Will run another spoar #try to get Something	HHU = 0 OVA 2 Impm Water table near 51 HNU = 0 OVA 2 I mm SATURATED HNU = 0 OVA = 51 HNU = 0 OVA = 51 OVA = 51 SATURATED HNU = 0 OVA = 0 Wet to Saturated.
					(14.5 ⁷ . Contains: 0-0.5 Brown sandy fill w/ clay + brick fragments. 0.5-1.1 Black organic-rich ictay 1.1-1.4 Clayy reat moss 1.4-1.8 Brown Sandy clay, organic rich w/~30% intact shells of gastupads.	
					- 24	CLASSIFICATION/BY R. Watt	

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



1270 Niagara Street Buffalo, New York, 14213



Monitoring Well Designation: MW-02 Latitude: 42.9308709° Longitude: -78.8951537° Elevation: 578.33 Feet **BEGGCORP** BRYDGES ENGINEERING IN ENVIRONMENT & ENERGY 1270 Niagara Street Buffalo, New York, 14213



Latitude: 42.9306862° Longitude: -78.8958226° Elevation: 579.15 Feet





1270 Niagara Street Buffalo, New York, 14213



BIKE PATH ADJACENT TO 57-71 TONAWANDA STREET

DRILL	ING SUMMARY							
Geologist:		1			_	Flush Mount with Lockable Cap		
Steve Moe								
	ompany: ironmental	Ground	Surfaco	foot				
	i onnonai	Top of R	iser	0.27 feet		Expandable plug with lock		
Driller:								
Eric Hamm	an	Top of S	eal	1 foot				
Rig Make/	Model:							
Geoprobe	6620 DT							
Date:								
September	24, 2020	ļ						
GEO	DLOGIC LOG					Schedule 40 PVC Riser 2 inch dia.		
Depth(ft.)	Description	1				13.37 feet length		
	See log for soil boring							
	SB-100.					Borehole Diameter		
						<u> </u>		
		Top of S	and Pack	12 feet				
		Top of S	croon	13.64 foot				
		100 01 3	CIEEII	13.04 1001				
		D						
						Schedule 40 PVC Screen		
		Е				2 inch dia.		
						15 feet length		
		Р						
		Т						
		ц –						
		п						
		Bottom of	of Screen	28.64 feet				
		Screen B	Bottom Cap	28.89 feet				
WE	ELL DESIGN	Bottom of	of Borehole	29 feet		End Cap		
SU	RFACE COMPLETION		S	CREEN MATE	RIAL			
Surrace:	o-inch ulameter steel fi	iusn- rt	iype:	2-INCN ID SCh	O ring soci	Softing: 12 20 fact bac		
		i t			C-mig sear	Jetting. 12 - 29 leet bys		
	RISER MATERIAL		Slot Size:	0.010" machir	ne slotted	SEAL MATERIAL		
Type:	2-inch ID Schedule 40	PVC				Type: CETCO PureGold Medium		
	threaded with O-ring se	eal	Setting:	13.64 - 28.64	feet bgs	Bentonite Chips		
Setting:	0.27 - 13.64 feet bgs		_		_	Setting: 1 - 12 feet bgs		
COMMENT	rs:					LEGEND		
Well is loca	ated west of the bike pa	th in a gr	ass strip adj	acent to the 57	-71			
Ionawanda	a Street BCP Site, Site	NO. C915	0024. This v	vell is at the bas	se of the	Cement		
bike patri fa	amp near an asphait pa	u.				Bontonite Chin Sool		
						Dentonite Chip Sea		
						Silica Sandpack		
Client: NY	'SDEC	Location: Bike Path off West Ave.				Site Name: 31 Tonawanda Off Site		
1	NEW YORK Department of		N	MONITORING V	VELL			
~	Environmental Conservation		CON	ISTRUCTION D	vveii Number: MVV-100			

DRILL	ING SUMMARY							
Geologist:		┫				Flush Mount with Lockable Cap		
Steve Moe	ller							
	ompany:]		6				
IREC Envi	ronmentai	Ground S	Surface	10013 feet		Expandable plug with lock		
Driller:			Ser	0.43 1661		Exhaligane hing with lock		
Eric Hamm	ian	Top of Se	eal	1 foot				
Rig Make/	Model:	1						
Geoprobe	6620 DT	1						
Date:	- 0.0 - 0.00							
Sehrenner	23, 2020	4						
GEO	OLOGIC LOG					Schedule 40 PVC Riser 2 inch dia.		
Depth(ft.)	Description	Top of Sa	and Pack	7 feet		8.2 feet length		
	See log for soil boring	Top of Sc	roon	863 feet		Borehole Diameter		
	SB-103.	100 01 00	reen	0.00 1001		8 inch dia.		
		D						
		E						
						Schedule 40 PVC Screen		
		Р				<u> </u>		
		I _				15feet length		
		Т						
		Ιн						
		Bottom o	of Scroon	23.63 foot				
		Screen B	ottom Cap	23.88 feet				
WE	ELL DESIGN	Bottom o	f Borehole	24 feet		End Cap		
Surface	RFACE COMPLETION	luch	S	CREEN MATE	RIAL	FILTER MATERIAL		
Surface.	mount with 12-inch ski	rt	i ype.	threaded with	O-ring seal	Setting: 7 - 24 feet bas		
					<u> </u>			
	RISER MATERIAL		Slot Size:	0.010" machir	e slotted	SEAL MATERIAL		
Type:	2-inch ID Schedule 40	PVC	Catting	0.62 02.62 6	at has	Type: CETCO PureGold Medium		
Setting:	inreaded with O-ring se	eai	Setting:	8.63 - 23.63 16	eet bgs	Setting: 1 - 7 feet bas		
COMMENT	TS:	I						
Well is loca	ated west of the bike pa	th in a gra	ass strip adj	acent to the 57	-71			
Tonawanda	a Street BCP Site, Site	No. C915	024.			Cement		
						Bentonite Chip Seal		
						Silica Sandpack		
Client: NY	(SDEC		Location:	Bike Path off Buffalo, NY	Site Name: 31 Tonawanda Off Site Site No.: C915299A			
	NEW YORK Department of		N	MONITORING V				
			CON	ISTRUCTION D	ETAILS	Well Number: MW-103		

DRILL	ING SUMMARY						
Geologist:		4				Flush Mount with Lockable Cap	
Steve Moe	ller						
Drilling Co TREC Envi	ompany: ironmental	Ground S	Surface	feet		Expandable plug with look	
Driller:			1561	0.45 1001		Expandable plug with lock	
Eric Hamm	nan	Top of Se	eal	1 foot			
Rig Make/	Model:						
Geoprobe	6620 DT	-					
September	23, 2020						
GE	OLOGIC LOG	1				Schedule 40 PVC Riser	
Depth(ft.)	Description	Top of Sa	and Pack	7 feet		2 inch dia. 8.13 feet length	
	See log for soil boring						
	SB-106.	Top of So	creen	8.58 feet		Borehole Diameter	
		D					
		F					
						Schedule 40 PVC Screen	
		Р				<u> </u>	
		-				15feet length	
		'					
		н					
		Bottom o	of Screen	23.58 feet			
		Screen B	ottom Cap	23.83 feet			
WE	ELL DESIGN	Bottom o	of Borehole	24 feet		End Cap	
					DIAL		
Surface:	8-inch diameter steel f	ueh-	S Type:	2-inch ID Sch	RIAL	FILTER MATERIAL	
ounace.	mount with 12-inch ski	rt	Type.	threaded with	O-ring seal	Setting: 7 - 24 feet bgs	
	RISER MATERIAL		Slot Size:	0.010" machir	e slotted	SEAL MATERIAL	
Туре:	2-inch ID Schedule 40	PVC				Type: CETCO PureGold Medium	
Cotting	threaded with O-ring so	eal	Setting:	8.58 - 23.58 fe	eet bgs	Bentonite Chips	
Setting:	0.45 - 8.58 feet bgs					Setting: 1 - 7 feet bgs	
Well is loca	ated west of the bike pa	th in a gr	ass strip adi	acent to the for	mer		
Pratt & Lan The well is	nbert Paint Company, S close to where the Sca	Site No. 9 jaquada l	15251, at 7 Expressway	5 Tonawanda S crosses the bik	treet. e path.	Cement	
						Bentonite Chip Seal	
						Silica Sandpack	
Client: NY	/SDEC		Location:	Bike Path off Buffalo. NY	Site Name: 31 Tonawanda Off Site Site No.: C915299A		
~	NEW YORK Department of	MONITORING WELL				Wall Number: MW 106	
2			CON	ISTRUCTION D	Well Number: MW-106		

68 TONAWANDA STREET SITE NO. C915316



Q:/Exchange/Montroy/MW-1 Construction Log/Stick-Up (2)-4/9/2018-1:32 PM



Q:/Exchange/Montroy/MW-2 Construction Log/Stick-Up (2)-4/9/2018-1:32 PM



Q:/Exchange/Montroy/MW-3 Construction Log/Stick-Up (2)-4/9/2018-1:33 PM



Q:/Exchange/Montroy/New MW-4 Construction Log/Stick-Up (2)-4/9/2018-1:33 PM

150 TONAWANDA STREET SITE NO. C915299



Q:/Exchange/Montroy/150 MW-1 Construction Log/Stick-Up (2)-11/21/2018-9:49 AM



Q:/Exchange/Montroy/150 MW-2 Construction Log/Stick-Up (2)-11/21/2018-9:50 AM



Q:/Exchange/Montroy/150 MW-3 Construction Log/Stick-Up (2)-11/21/2018-9:50 AM



Q:/Exchange/Montroy/150 MW-4 Construction Log/Stick-Up (2)-11/21/2018-9:50 AM

1660 NIAGARA STREET SITE NO. C915311





















DRILL	ING SUMMARY								
Geologist:		ł					Fluch Mount with Lockable Cap		
Steve Moe	ller								
Drilling Co	ompany:								
TREC Envi	ironmental	Ground S	Surface	feet			Expandable plug with lock		
Driller:			1961	0.07 1000					
Eric Hamm	an	Top of S	eal	1 foot					
Rig Make/	Model:								
Geoprobe	6620 DT								
Date: September	- 22 2020								
September	22, 2020								
GEO	OLOGIC LOG						Schedule 40 PVC Riser 2 inch dia.		
Depth(ft.)	Description						13.38 feet length		
	See log for soil boring								
	SB-3R.						Borehole Diameter		
		Top of S	and Pack	12 foot					
		100 01 3	and Fack	12 1001					
		Top of S	creen	13.75 feet					
		-							
		D							
						_	Schedule 40 PVC Screen		
		E				_	<u>2</u> inch dia.		
						_	15feet length		
		Р				_			
		т				-			
		•							
		н							
		Bottom o	of Screen	28.75 feet		_			
		Screen B	ottom Cap	29 feet	_				
VVE	ELL DESIGN	Bottom o	of Borehole	29 feet			End Cap		
SU	RFACE COMPLETION		S	CREEN MATE	RIAL		FILTER MATERIAL		
Surface:	8-inch diameter steel f	lush-	Type:	2-inch ID Sch	edule 40 P	VC,	Type: Filpro #00N Silica Sand		
	mount with 12-inch ski	rt		threaded with	O-ring sea	l	Setting: 12 - 29 feet bgs		
						L			
	RISER MATERIAL		Slot Size:	0.010" machir	e slotted	Ļ	SEAL MATERIAL		
Туре:	2-inch ID Schedule 40	PVC	0.41	40.75 00.75	6 1		Type: CETCO PureGold Medium		
Catting	threaded with O-ring so	eal	Setting:	13.75 - 28.75	feet bgs		Bentonite Chips		
COMMENT	0.27 - 13.75 ieet bys								
Well is a re	eplacement for original v	vell MW-:	3 and is in t	he north-centra	l portion	ŀ	ELGEND		
of the site.					r portion		Cement		
							Bentonite Chip Seal		
							Silica Sandpack		
Client: NY	'SDEC		Location:	1660 Niagara	Street		Site Name: 1660 Niagara Street		
		Buffalo, NY					Site No.: C915311		
ئے	NEW YORK STATE OF OPPORTUNITY CONSERVATION		CON	ISTRUCTION E		Well Number: 1660-MW-3R			

DRILL	ING SUMMARY						
Goologist		ł				Fluck Mount with Lookable Con	
Steve Moel	ller					Flush Mount with Lockable Cap	
Drilling Co	ompany:	1					
TREC Envi	ronmental	Ground S	Surface	feet		Expandable plug with lock	
Driller:			1961	0.41 1001			
Eric Hamm	an	Top of S	eal	1 foot			
Rig Make/I	Model:	1					
Geoprobe	6620 DT						
Date:	- /						
September	21, 2020	ļ					
GEO	DLOGIC LOG					Schedule 40 PVC Riser 2 inch dia.	
Depth(ft.)	Description	1				12.34 feet length	
	See log for soil boring						
	SB-3R.					Borehole Diameter	
		Top of S	and Pack	11 foot			
		100 01 0					
		Top of S	creen	12.75 feet			
		D					
						Schedule 40 PVC Screen	
						2 inch dia.	
		Р					
		т					
		н					
		Bottom o	fearaan	27.75 foot			
		Scroon B	ottom Can	27.75 Teet		End Can	
WF		Bottom c	of Borehole	28 5 feet			
		Bottom	Derendie	20.0 1001			
SU	RFACE COMPLETION		S	CREEN MATE	RIAL	FILTER MATERIAL	
Surface:	8-inch diameter steel fl	ush-	Type:	2-inch ID Sch	edule 40 PVC,	Type: Filpro #00N Silica Sand	
	mount with 12-inch ski	rt		threaded with	O-ring seal	Setting: 12 - 28.5 feet bgs	
			Slot Sizer	0 010" machir	a slotted		
Type:	2-inch ID Schedule 40	PVC	SIDE SIZE:			Type: CETCO PureGold Medium	
	threaded with O-ring se	eal	Settina:	12.75 - 27.75	feet bas	Bentonite Chips	
Setting:	0.41 - 12.75 feet bgs					Setting: 1 - 11 feet bas	
COMMENT	rs:						
Well is a re	placement for original v	vell MW-	5, and is in t	he northern por	tion of the		
site about ?	15 feet west of the site of	divider fei	nce.			Cement	
						Rentonito Chin Soal	
						Bentonite Olip Seal	
						Silica Sandpack	
Client: NV	YSDEC	Location: 4660 Niegov			nara Street Site Name: 1660 Niagara Street		
Chefit: NY	SDEC		Location:	Ruffalo NV	Site No.: C915311		
. 1	NEW YORK Department of	MONITORING WELL				Sile NO.: C915311	
2	STATE OF OPPORTUNITY Environmental Conservation		CON	ISTRUCTION D	well Number: 1660-MW-5R		

DRILL	ING SUMMARY	Top of C	asing		feet		•
Goologist		Top of R	iser	2.54	feet		Expandable plug with lock
Steve Moe	ller						
Drilling Co	ompany:						Protective Casing with Lockable Cap
TREC Envi	ironmental				_		
Drillor		Ground	Surface		feet		
Eric Hamm	ian						
Rig Make/	Model:	Top of S	eal	1	foot		
Geoprobe	6620 DT	_					
Date:	17 2020	D					
September	17,2020	E					
GEO	OLOGIC LOG	_					Schedule 40 PVC Riser
		Р					2 inch dia.
Depth(ft.)	Description						18.79 feet length
		н					Borehole Diameter
							8 inch dia.
		Top of S	and Pack	13	feet		
		Top of S	creen	16.25	feet		
							Schedule 40 PVC Screen
							<u> </u>
		Bottom of	of Screen	31.25	feet		
\\/[Screen E	Bottom Cap	31.5	feet		End Cap
~~~	ELL DESIGN	Bottom o	of Borehole	32.0	feet		
SU	RFACE COMPLETION		S	CREEN M	ATE	RIAL	FILTER MATERIAL
Surface:	8-inch diameter steel f	lush-	Туре:	2-inch ID	Sche	edule 40 PVC,	Type: Filpro #00N Silica Sand
	mount with 12-inch ski	rt		threaded	with	O-ring seal	Setting: 13 - 32 feet bgs
	RISER MATERIAL		Slot Size:	0.010" ma	achin	e slotted	SEAL MATERIAL
Туре:	2-inch ID Schedule 40	PVC					Type: CETCO PureGold Medium
	threaded with O-ring se	eal	Setting:	16.25 - 3´	1.5 fe	et bgs	Bentonite Chips
Setting:	-2.54 - 16.25 feet bgs						Setting: 1 - 13 feet bgs
Well is loca	is. ated in the southeasterr	n portion	of the site al	oout 15 fee	t wes	st of the	
the BSA pu	imp house building.	rpertien					Cement/Bentonite Grout
							Bentonite Seal
							Silica Sandpack
Client: NY	/SDEC		Location:	1660 Nia	gara	Street	Site Name: 1660 Niagara Street
	NEW YORK Department of		MONITORING WELL				
~	STATE OF OPPORTUNITY Conservation			ISTRUCTIO	<u>ON</u> D	ETAILS	Well Number: 1660-MW-8

**1675 NIAGARA STREET** 

DRILL	ING SUMMARY								
Geologist		ł				Fluch Mount with Lockable Can			
Steve Moe	ller								
Drilling Co	ompany:	1							
TREC Envi	ironmental	Ground S Top of Ri	Surface Iser	feet 0.32 feet		Expandable plug with lock			
Driller:		1							
Eric Hamm	nan	Top of Se	eal	1 foot					
Rig Make/	Model:								
Geoprobe	6620 DT								
September	r 15, 2020								
GE	OLOGIC LOG					Schedule 40 PVC Riser 2 inch dia.			
Depth(ft.)	Description	1				16.18 feet length			
	•								
	See log for soil boring								
	1675-SB-1.	Top of Sa	and Pack	13 feet		Borehole Diameter			
						<u> </u>			
		Top of Sc	reen	16.5. foot					
		100 01 00		10.0 1001					
		D							
		E							
						Schedule 40 PVC Screen			
		P				<u> </u>			
		Т							
		-							
		н							
		Bottom o	f Screen	31.5 feet					
		Screen B	ottom Cap	31.75 feet		End Cap			
WE	ELL DESIGN	Bottom o	f Borehole	32.0 feet					
SU		lu v a la	S		RIAL	FILTER MATERIAL			
Surface:	mount with 12-inch ski	usn- rt	Type:	2-Inch ID Sche	O-ring seal	Setting: 13-32 feet bas			
		L.			O-Ing Seal				
	RISER MATERIAL		Slot Size:	0.010" machir	e slotted	SEAL MATERIAL			
Type:	2-inch ID Schedule 40	PVC				Type: CETCO PureGold Medium			
	threaded with O-ring se	eal	Setting:	16.5 - 31.5 fee	et bgs	Bentonite Chips			
Setting:	0.32 - 16.5 feet bgs					Setting: 1 - 13 feet bgs			
Well is loc	15: ated in front of the east	ornmost n	ortion of the	huilding in a g	ass strip	LEGEND			
between th	he building and sidewalk			building in a g		Cement			
						Bentonite Chip Seal			
						Silica Sandpack			
Client: NY	/SDEC	Location: 1675 Niagara Stre			Street	eet Site Name: 31 Tonawanda Off Site Site No.: C915299A			
	NEW YORK Department of		Ν	MONITORING V					
~	Conservation		CON	ISTRUCTION D	Well Number: 1675-MW-1				

DRILL	ING SUMMARY					
Geologist	:					Flush Mount with Lockable Cap
Steve Moe	ller	4				
TREC Envi	ompany: ironmental	Ground	Surface	feet		
	lonnondi	Top of R	liser	0.56 feet		Expandable plug with lock
Driller:		1				
Eric Hamm	nan	Top of S	eal	1 foot		
Rig Make/						
Date:	0020 D1	-				
September	⁻ 15, 2020	Top of S	and Pack	2.5 feet		
GE	OLOGIC LOG	]				Schedule 40 PVC Riser
Domth/ft )	Description	Top of S	creen	3.5 feet		2 inch dia.
Deptn(tt.)	Description	1				<u>2.94</u> Teet length
	See log for soil boring					
	1675-SB-2.	_				Borehole Diameter
		D				<u> </u>
		E				
		Р				
		₊				
						Schedule 40 PVC Screen
		н				<u> </u>
						10 feet length
		Bottom of Screen		13.5 feet		End Con
		Screen	Sottom Cap	15.75 1661		
		1				
WE	ELL DESIGN	Bottom of	of Borehole	15 feet		
SU	RFACE COMPLETION	/	S	CREEN MATE	RIAL	FILTER MATERIAL
Surface:	8-inch diameter steel f	lush-	Туре:	2-inch ID Sche	edule 40 PVC,	Type: Filpro #00N Silica Sand
	mount with 12-inch ski	rt		threaded with	O-ring seal	Setting: 2.5 - 15 feet bgs
			Slot Sizo:	0 010" machin	a slattad	SEAL MATERIAL
Type:	2-inch ID Schedule 40	PVC				Type: CETCO PureGold Medium
	threaded with O-ring s	eal	Setting:	3.5 - 13.5 feet	bgs	Bentonite Chips
Setting:	0.56 - 3.5 feet bgs					Setting: 1 - 2.5 feet bgs
Well is loc	<b>IS:</b>	lot just so	with of easte	rnmost overher	nd door	LEGEND
	ated in asphalt parking					Cement
						Bentonite Chip Seal
						Silica Sandpack
Client: NY	/SDEC		Location:	1675 Niagara Buffalo, NY	Site Name: 31 Tonawanda Off Site Site No.: C915299A	
~	NEW YORK STATE OF Environmental			MONITORING V	VELL	Well Number: 1675-MW-2
	Conservation					

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

Borin NORT HORIZ VERT LOCA	ng Loca Fhing: Zontai TCAL D Ation:	ation 1,0 L DAT ATUN P-Site	<u>67,341</u> <b>'UM:</b> <u>N</u> I: <u>NAV</u>	I AD8 D88	EASTIN 33 NY \	<b>NG:</b> 1, West Zo	<u>,063,933</u> n <u>e</u> ST/ GR(	STAT	ON: FERLI	N/A OFFSET: <u>N/A</u> NE: <u>N/A</u> Elevation (FT): <u>582.17</u>		BORING MW-BGL-1 PAGE 1 of 2
Drillin DATE CONTI EQUIP AUGE	ng Info Start / Ractor Ment: R ID/OD: IER TYPI	<b>END:</b> END: Hand 4.2 E: D	<u>11/11/</u> othnagle d/Geoprol 5 in / N/A	2021 be 78	- 11/11/ 322DT	/2021 C C	DRILLER: CASING ID		efreda 2 in : N/	TOTAL DEPTH (FT):       28.0         LOGGED BY:       M. Cummings         BORING METHOD:       Hand/Geo         HAMMER DROP (inch):       N/A	probe	
WATE	R LEVEL	_ ELEV . ELEV 	ATIONS	( <b>ft):</b> iser l	Elevatio	on: 581.74	4'			<u> </u>		
ABBR	EVIATION	S: ID OI Pe Re	= Inside D D = Outside en. = Penet ec. = Recov	iamet Dian ration very L	ter meter h Length l.ength	bpf = E mpf = I S = Sp DP = D	Blows per Fo Minute per F Ilit Spoon Direct Push S	oot U Foot C V Sample St	= Undis = Rock = Field C = Son	trubed Tube Sample WOR = Weight of Rods Core WOH = Weight of Hammer Vane Shear RQD = Rock Quality Designa ic Core OVM = Organic Vapor Meter	Q _P =   S _v = F tion F _v = F NA, N	Pocket Penetrometer Strength Pocket Torvane Shear Strength Field Vane Shear Strength JM = Not Applicable, Not Measured
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	Sample No.	Type	Depth (ft)	E INFOI Pen./ Rec. (in)	RMATION Blow Count or RQD	N Field Test Data	GRAPHIC LOG	Sample Description & Classification		WELL CONSTRUCTION DETAILS
	- 5		1		4 to 8	48/30		OVM=0.0		Hand clear to 5.0' bgs. FILL Reddish-brown silty clay with trace fi sand and fine angular gravel. Moist throug (reworked native material)	ne hout	- Flush mount surface casing - 2" dia. schedule 40 PVC well riser
AQUADA CREEK SITE_EV	10		2		8 to 12	48/48		OVM=0.1		Lacustrine Clay Reddish-brown silty clay trace fine sand and fine angular gravel, stil plasticity fines, moist throughout.	with f, low	- Cement/ bentonite grout
	- - - - 15		3		12 to 16	48/48		OVM=0.0		Lacustrine Clay, as above, moist.		3/8" dia. bentonite chips
			4		16 to 20	48/48		OVM=0.0				- 2" dia. schedule 40 PVC well
	- 20		5		20 to 24	48/48		OVM=0.0		Lacustrine Clay, as above, moist.		screen #00N Filter Sand
Strata lir boundar may be made at different	nes repres ries betwee gradual. W t times stat t at other til	ent the a en soil ty /ater lev /ed. Wat mes.	approximate /pes. Actua /el readings er levels m	e I trans have ay be	sitions been C	CLIENT: PROJEC CITY/ST/ GEI PRO	Nationa T NAME: ATE: Bu	al Fuel Gas National   uffalo, New` JMBER:2^	⁻ uel L York 0162	ower Scajaquada Creek	C 1 S nsultants B	GEI Consultants, Inc. 00 Sylvan Parkway suite 400 suffalo, NY 14228

Borir	ng Loca	ation	_									BORING
NORT	HING:	1,0	67,341		EASTI	NG: <u>1</u> ,	063,933	STATIC	DN:	N/A OFFSET:	N/A	
HORIZ	ZONTA 1CAL D	L DAT	'UM: <u>N</u> I· NAVI		<u>83 NY \</u> 8	West Zo	ne STA GR	ATION CENT	FACE	INE: <u>N/A</u> FIFVATION (FT): 582	17	_ <u>MW-BGL-1</u>
LOCA	TION:	P-Site	e		•							PAGE 2 of 2
		Casing			SAMPL	E INFO	RMATIO	N	g		WELL	
Elev. (ft)	Depth (ft)	Pen. (bpf) or Core Rate (mpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data	GRAPHIC LO	Samı Descript Classific	ble ion & ation	CONSTRUCTION DETAILS
- - 555 —	- 25		6		24 to 28	48/48		OVM=0.0				- 2' sump
-	- 30									End of Boring at 28 feet		
- 550										Samples to Alpha Analyti	<u>cal:</u> ace	
-										(000.11-002.17 Elev.)		
-	- 35											
545 — -												
-	- 40											
540 — -	-											
-	- - 45											
- 535 — -												
-	50											
- 530 — -	1  -  -  -											
Strata lir	nes repres	ent the a	approximate		usitions C	LIENT:	Nation	al Fuel Gas				GEI Consultants, Inc.
may be made at	gradual. W	ater lev ed. Wat	el readings er levels ma	hav ay b	e been F	ROJEC	T NAME	National F	⁻ uel l	ower Scajaquada Creek	~	100 Sylvan Parkway
different	fferent at other times.											
	GEI PROJECT NUMBER: GE									Consultants Buffalo, NY 14228		

Borin NORT HORIZ VERT LOCA	ng Loca Thing: Zonta ICAL D Ation:	ation 1,0 L DAT ATUN P-Site	<u>67,421</u> T <b>UM:</b> <u>N</u> 1: <u>NAV</u>	AD D8	EASTI 983 NY 1 8	NG: <u>1</u> , West Zo	<u>,063,786</u> n <u>e</u> ST/ GR	STATIC ATION CEN COUND SUR	ON: TERL	N/A OFFSET: <u>N/A</u> NE: <u>N/A</u> ELEVATION (FT): <u>576.88</u>		BORING MW-BGL-3 PAGE 1 of 2	
Drillin DATE CONTI EQUIP AUGE HAMM WATE	Jrilling Information         DATE START / END:       11/9/2021 - 11/9/2021         DATE START / END:       11/9/2021 - 11/9/2021         CONTRACTOR:       Nothnagle         DRILLER:       Tom Mangefreda         LOGGED BY:       M. Cummings         SQUIPMENT:       Hand/Geoprobe 7822DT         AUGER ID/OD:       4.25 in / N/A         CASING ID/OD:       2 in / 2 in         HAMMER TYPE:       Direct Push         HAMMER WEIGHT (Ibs):       N/A         HAMMER TYPE:       Direct Push         HAMMER WEIGHT (Ibs):       N/A         HAMMER DROP (inch):       N/A												
GENEI	SERERAL NOTES:         Top of Riser Elevation: 579.82'           ABBREVIATIONS:         ID = Inside Diameter OD = Outside Diameter Pen. = Penetration Length Rec. = Recovery Length         bpf = Blows per Foot S = Split Spoon DP = Direct Push Sample         U = Undistrubed Tube Sample C = Rock Core V = Field Vane Shear Sc = Sonic Core         WOR = Weight of Rods WOH = Weight of Hammer ROD = Rock Quality Designation OVM = Organic Vapor Meter         Qp = Pocket Penetrometer Strength S, = Pocket Torvane Shear Strength NA, NM = Not Applicable, Not Measured												
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	Sample No.	Type	SAMPL Depth (ft)	E INFO	RMATIO Blow Count or RQD	N Field Test Data	SRAPHIC LOG	Sample Description & Classification		WELL CONSTRUCTION DETAILS	
575	- 5 - 5 - 10 - 10 - 15 - 15 - 20		1 2 3 4 5		4 to 8 8 to 12 12 to 16 16 to 20 20 to 24	48/48 48/48 48/0 48/21 48/21		OVM=0.5 OVM=0.1 OVM= OVM=20 OVM=0.0		Hand clear to 5.0' bgs. FILL Reddish-brown silty clay with coarse angular limestone gravel, weathered cond pieces, moist. Locally mottled with black is clay, firm to hard. No recovery 12-16' interval. Loose angular fine gravel with little fine sat light to moderate diesel-like odor, light she saturated. Lacustrine Clay Reddish-brown silty cla trace fine sand and fine angular gravel, st plasticity fines, moist throughout.	errete silty	<ul> <li>Flush mount surface casing</li> <li>-2" dia. schedule 40 PVC well riser</li> <li>Cement/ bentonite grout</li> <li>-3/8" dia. bentonite chips</li> <li>-2" dia. schedule 40 PVC well screen</li> <li>-4000 Filter Sand</li> <li>-2" sump - 3/8" dia. bentonite chips</li> </ul>	
Strata lir boundar may be made at different	nes repres ies betwee gradual. W times stat at other ti	ent the soil ty ater lev ed. Wat mes.	approximate /pes. Actual /el readings ter levels ma	e I trar hav ay b	nsitions ve been ie	CLIENT: PROJEC CITY/ST/ GEI PRO	Nation T NAME ATE: Bi JECT N	al Fuel Gas : <u>National</u> uffalo, New UMBER: <u>2</u>	Fuel L York 10162	ower Scajaquada Creek	onsultants	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228	

Borir	ng Loca	ation			FAOTU	10: 4	000 700	074710			 BORING
HORE	THING: ZONTA	1,00 <b>DAT</b>	57,421 <b>'UM: <u>N</u></b>	AD	EASTIN 83 NY \	NG: <u>1,</u> Nest Zo	<u>063,786</u> ne ST/	STATIC	DN: FERL	<u>N/A</u> OFFSET: <u>N/A</u>	MW-BGL-3
		ATUN P-Site	I: <u>NAV</u>	D8	8		GR	OUND SURI	FACE	ELEVATION (FT): 576.88	 PAGE 2 of 2
							N	U			
Elev. (ft)	Depth (ft)	Pen. (bpf) or Core Rate (mpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data	GRAPHIC LO	Sample Description & Classification	CONSTRUCTION DETAILS
	- 25 -		6	$\left  \right\rangle$	24 to 28	48/48		OVM=0.0			- 3/8" dia. bentonite chips
-	- 30									End of Boring at 28 feet	
545										Samples to Alpha Analytical: 17-19' below ground surface (559.88' to 561.88' elev.)	
_										Samples for forensics (Meta Env.)	
-	- 35									18-19' below ground surface (560.88' to 559.88' elev.)	
540 — - - -	   40										
- 535 — -											
	- 45										
530 — - -											
	50										
-	  -  -										
Strata lin boundar may be made at	nes repres ries betwee gradual. W times stat	ent the a en soil ty /ater lev ed. Wat	approximate pes. Actual el readings er levels ma	tran hav	nsitions ve been e	LIENT: ROJEC	Nation T NAME	al Fuel Gas National F	-uel L	ower Scajaquada Creek	GEI Consultants, Inc. 100 Sylvan Parkway
different	Ifferent at other times.       CITY/STATE: Buffalo, New York         GEI PROJECT NUMBER: 2101620       GEI Consultants										

Borin NORT HORIZ VERT	ig Loc: THING: ZONTA ICAL D	ation 1,0 L DAT ATUN	67,490 FUM: <u>N</u> I: <u>NAV</u>	EAS AD83 N D88	TING: <u>1</u> Y West Zo	.064,648 one STA	STATION ATION CEN OUND SUR	on: Terl Face	N/AOFFSET:/A INE:/A E LEVATION (FT):585.76	BORING MW-LSC-1 PAGE 1 of 2
Drillin DATE CONTI EQUIP AUGEI HAMM	ng Info Start / RACTOR MENT: R ID/OD:	Elower	ion <u>11/1/20</u> <u>11/1/20</u> othnagle d/Geoprot 5 in / N/A Direct Push	021 - 11/ 027 - 11/ 0e 7822D	I/2021 T	DRILLER: CASING IE HAMMER	_Tom Mang 0/OD: _2 in / WEIGHT (Ibs)	efreda 2 in : _N	TOTAL DEPTH (FT):       24.0         LOGGED BY:       E. Wood         BORING METHOD:       Hand/Geoprobe         //A       HAMMER DROP (inch):       N/A	
	R LEVEL	ELEV	Top of Ri	( <b>ft):</b> iser Elev	ation: 585.69	)' Blown par Fr		- Lindi	etruhed Tube Sample WOD - Weight of Dada	) - Dockat Danatromator Strangth
		OI Pe Re	D = Outside en. = Peneti ec. = Recov	Diameter ration Leng rery Length	ith S=Spiller pth S=Spiller pdf DP=1	Minute per l blit Spoon Direct Push	Foot C Sample S	= Rocl = Field C = So	Core         WOH         Weight of Hammer         S           Vane Shear         RQD = Rock Quality Designation         F           nic Core         OVM = Organic Vapor Meter         N	$S_v = Pocket Torvane Shear Strength  S_v = Field Vane Shear Strength  NA, NM = Not Applicable, Not Measured$
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	Sample No.	SAM	PLE INFO	RMATIO Blow Count or RQD	N Field Test Data	GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
585 —	- - -		1	0 to 5	60/		OVM=0.4 OVM=0.2		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
- - 580			2	5 to 8	36/19		OVM=0.0 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)	- 2" dia. schedule 40 PVC well riser
-	- - - 10		3	8 to 12	48/39		OVM=0.1 OVM=0.2		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	Cement/ bentonite grout
575—	- - - -		4	12 to 16	48/24		OVM=0.2		Black fine grained to coarse grained sand with fine gravel, some cinders and possible coal, track Red brick fragments, saturated, some medium gravel, angular	e - 3/8" dia. bentonite chips
570 —	- 15 - 15 		5	16 to 20	48/41.5		OVM=0.1 OVM=0.3		<b>Native Alluvium</b> 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, plont motorial) are to a converted	- 2" dia. schedule 40 PVC well screen
Strata lir boundar may be made at different	hes repres ies betwer gradual. W times stat at other ti	ent the a en soil ty /ater lev ed. Wat mes.	approximate /pes. Actual rel readings ter levels ma	transitions have been ay be	CLIENT: PROJEC CITY/ST GEI PRO	Nation: T NAME ATE: Bi	al Fuel Gas <u>National</u> uffalo, New J <b>MBER:</b> 2	Fuel I York	Lower Scajaquada Creek	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 s Buffalo, NY 14228

Boring	Loca	ation											BORING
HORIZO	ING: DNTAI	1,06 DAT	57,490 <b>UM:</b> <u>N</u>		MW-LSC-1								
VERTIC	AL D.	ATUM Lower	I: <u>NAV</u> Scajaqua	D8 ada	8 I Creek A	rea	GR	OUND SURI	FACE	<b>ELEVATION (FT):</b> <u>585.</u>	76		PAGE 2 of 2
		Casing			SAMPI								
Elev. D (ft)	Depth (ft)	Pen. (bpf) or Core Rate (mpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data	GRAPHIC LO	Samp Descript Classific	ble ion & ation		CONSTRUCTION DETAILS
565			6	$\left  \right\rangle$	20 to 24	48/42		OVM=0.2 OVM=0.1		Lacustrine Clay Reddish I fine sand, low plasticity fine	prown silty cl es, moist, firi	ay, little m.	
	- 25									End of Boring at 24 feet			- 2' sump
	- 30									Samples to Alpha Ana 13-15' below ground s (572.76 to 570.76' elev 22-24' below ground s (563.76' to 561.76' ele	l <u>ytical:</u> urface /.) urface v.)		- 3/8" dia. bentonite chips
	- 35												
	- 40												
545	- 45												
Strata lines boundaries may be gra made at tim different at o	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.							al Fuel Gas :_National F uffalo, New \ JMBER: _21	 =uel   York  0162	Lower Scajaquada Creek	GEI	Consultants	l GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228

Borin NORT HORT VERT	ng Loca [HING: ZONTA  [ICAL D ATION:	ation 1,0 L DAT ATUN Lower		<b>EA</b> S AD83 M D88 ada Cre	STING:1 IY West Zo	,064,471 one STA GR(	STATIC ATION CEN OUND SUR	on: Terl Face	N/AOFFSET:/A INE: ELEVATION (FT):582.46	M	BORING W-LSC-2 PAGE 1 of 2
Drilli DATE CONT EQUIF AUGE HAMM WATE GENE	ng Info Start / Ractor PMENT: R ID/OD: IER TYPI R LEVEI RAL NO	END: END: Hand: 4.2 E: E: E: E: ELEV FES:	ion <u>11/1/20</u> othnagle d/Geoprot 25 in / N/A Direct Push /ATIONS ( Top of Ri	021 - 11/ 0e 7822[ 1 ( <b>ft):</b>	1/2021 T	DRILLER: CASING ID HAMMER V	_Tom Mang /OD: _2 in / WEIGHT (Ibs)	efreda 2 in : _N	TOTAL DEPTH (FT):       40.0         LOGGED BY:       E. Wood         BORING METHOD:       Hand/Geopro         /A       HAMMER DROP (inch):       N/A	be	
ABBRI	EVIATION	S: ID Ol Pe Re	) = Inside Di D = Outside en. = Peneti ec. = Recov	ameter Diamete ration Ler very Lengt	bpf =   mpf = gth S = S  n DP =	Blows per Fo Minute per F blit Spoon Direct Push \$	ot U Foot C V Sample S	= Undi = Rock = Field C = So	strubed Tube Sample       WOR = Weight of Rods         core       WOH = Weight of Hammer         Vane Shear       RQD = Rock Quality Designation         nic Core       OVM = Organic Vapor Meter	Q _P = Poc S _v = Pock n F _v = Field NA, NM =	ket Penetrometer Strength ket Torvane Shear Strength I Vane Shear Strength = Not Applicable, Not Measured
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	Sample No.	SAN ed Dep	th Pen./ (in)	RMATION Blow Count or RQD	N Field Test Data	GRAPHIC LOG	Sample Description & Classification		WELL CONSTRUCTION DETAILS
	- 5		1 2 3	00 to 55 to 88 to 12 12 to 16	60/ 36/31 48/48 48/35		OVM=0.1 OVM=0.0 OVM=0.3		Topsoil         FILL Organics, root material, dry, trace silty of Gray/red brown silty clay, dry         Gray silt, little clay, trace fine grained gravel, sorted, trace angular gravel, slug at 4'         Reworked native reddish brown silty clay, ang fine gravel, firm, moist         FILL as above, red brown reworked native to 9.5' then loose brown silty sand, bricks, angu fine grained gravel, cinders, slag         Loose cindery fill, saturated, top of clay at ~1 bgs, black, slight septic-like odor, no sheen or other odors	Jay well gular lar, 5' r	- stickup protective casing - 2" dia. schedule 40 PVC well riser Cement/ bentonite grout
	- 15		4		48/30		OVM=0.3 OVM=0.5 OVM=1.5 OVM=0.2		<b>Native Alluvium</b> firm to hard, medium plastic light gray grading to gray brown at 20' bgs Moist, firm, gray-brown	ity,	- 3/8" dia. bentonite chips
560 — Strata lii bounda may be made at different	mes repres gradual. W gt times stat t at other ti	ent the a en soil ty /ater lev ed. Wat mes.	approximate ypes. Actual vel readings ter levels ma	transition have been	CLIENT: PROJEC CITY/ST GEI PRO	<u>Nationa</u> T NAME: ATE: <u>Bu</u>	OVM=0.2	Fuel I York	Sandy silt with little low plasticity fines, firm, v pieces, shells	vood GEI 100 Suit	-#00N Filter Sand Consultants, Inc. Sylvan Parkway te 400 falo, NY 14228

Borir	ng Loc	ation										BORING
HOR	rhing: Zontai	1,00 L <b>DAT</b>		MW-LSC-2								
		ATUN	I: <u>NAV</u> Scalagua	D8	8 Creek A	rea	GR		ACE	ELEVATION (FT): 582.46		PAGE 2 of 2
		Casing		iuu	SAMDI		ρματις	N	U			
Elev. (ft)	Depth (ft)	Pen. (bpf) or Core Rate (mpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data	GRAPHIC LO	Sample Description & Classification		WELL CONSTRUCTION DETAILS
-	- 25		6	V	24 to 28	48/12		OVM=0.0		Gray silty sand with gravel, saturated top becoming moist, fine to medium angular no visual impacts	6", gravel,	-2" dia. schedule 40 PVC well screen
555	- - - - - - - - - - - - -		7		28 to 32	48/1				Slough from above, little red-brown clay in (1") with staining and moderate coal tar-li <b>Lacustrine Clay</b> Reddish brown silty clay fine sand, low plasticity fines, moist, firm, visual impacts	n shoe ke odor _/ , little no	
550 —			8		32 to 36	48/38		OVM=59.4				- 2' sump
545 —	- 35		9		36 to 40	48/44						3/8" dia. bentonite chips
540	- 40 - - - - -									End of Boring at 40 feet Samples to Alpha Analytical:		
-	- - - - - -									18-20' below ground surface (564.46 to 562.46' elev.)		
535-	- 50											
530-	- - - - - - - -											
Strata li bounda may be made a different	Ata lines represent the approximate undaries between soil types. Actual transitions tybe gradual. Water level readings have been de at times stated. Water levels may be ferent at other times. CLIENT: National Fuel Gas PROJECT NAME: National Fuel Cover Scajaquada Creek CITY/STATE: Buffalo, New York GEI PROJECT NUMBER: 2101620 GEI PROJECT NUMBER: 2101620											

Borin NOR HORI VERT	ng Loca Thing: Zonta Tical D Ation:	ation 1,0 L DAT ATUN Lower		EASI	<b>FING:</b> <u>1</u> (West Zo Area	,064,263 one ST. GR	STATIC ATION CEN COUND SUR	on: Terl Face	N/A OFFSET: <u>N/A</u> NE: <u>N/A</u> ELEVATION (FT): <u>584.19</u>	BORING MW-LSC-3 PAGE 1 of 2
Drilli DATE CONT EQUIF AUGE HAMM WATE	ng Info START / RACTOR PMENT: R ID/OD: MER TYPE R LEVEL	END: END: Hano 4.2 E: D E: D	ion 11/1/20 othnagle d/Geoprob 55 in / N/A birect Push ATIONS (	021 - 11/8/ e 7822DT	2021	DRILLER: CASING IE HAMMER		efreda 2 in : _N	TOTAL DEPTH (FT):       32.0         LOGGED BY:       E. Wood         BORING METHOD:       Hand/Geop         A       HAMMER DROP (inch):       N/A	robe
GENE	RAL NO	TES: S: ID OI Pe Re	Top of Ris = Inside Dia D = Outside en. = Penetr ec. = Recove	er Elevat ameter Diameter ation Lengt ery Length	ion: 586.95 bpf = E mpf = h S = Sp DP = E	Blows per Fe Minute per I blit Spoon Direct Push	oot U Foot C V Sample S	= Undi = Rock = Field C = Sol	strubed Tube Sample       WOR = Weight of Rods         Core       WOH = Weight of Hammer         Vane Shear       RQD = Rock Quality Designati         ic Core       OVM = Organic Vapor Meter	$Q_p$ = Pocket Penetrometer Strength S _v = Pocket Torvane Shear Strength ion F _v = Field Vane Shear Strength NA, NM = Not Applicable, Not Measured
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	Sample No.	SAMF	PLE INFO	RMATIO Blow Count or RQD	N Field Test Data	SRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS - stickup
- - - - - - - - - - - - - - - - - - -		(	2	0 to 4 4 to 8	48/		OVM=0.2 OVM=1.7		FILL Brown/gray silty clay, trace fine grain sand, little concrete, moist FILL as above, brown silty clay with fine grained to coarse grained sand, angular limestone at 1.5', some coal in upper 1' of co trace root material, dry	ed ed -2" dia. schedule 40 PVC well riser - Cement/ bentonite grout
	- - - - - - - - - - - - - - - - - - -		3	8 to 12	48/44		OVM=2.0 OVM=88.4		Fill: Same as above, locally saturated (4'), increasing brown silty clay dry, transitioning dark brown, gray, and black, trace fine grain medium grained sand in lower 1', little to sn medium subrounded gravel, slight possible solvent odor in lower 1'	to hed to hall
- - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		4	12 to 16	48/38		OVM=16.2 OVM=3.1		Dark gray to black silty clay with medium gr and gray slug, locally saturated, transitions brown silty clay (reworked) with trace mediu rounded gravel, very slight possible solvent 12-14', moist	avel to m odor
02 2101620_NATIONA			5	16 to 20	48/48		OVM=1.1 OVM=19.1		Reddish brown silty clay, trace fine to mediu sand, dry	m
- 6601ECHNICAL BORING L060	- 20		6	20 to 24	48/42		OVM=0.1 OVM=1.1		<b>Native Alluvium</b> Black silty fine grained sa locally saturated, septic odor, with clay, satu Trace wood material and shell fragments in 2'	nd, Jrated lower -#00N Filter Sand
Strata li bounda may be made a differen	nes repres ries betwee gradual. W t times stat t at other ti	ent the a en soil ty /ater lev /ed. Wat mes.	approximate /pes. Actual /el readings /er levels ma	transitions have been ay be	CLIENT: PROJEC CITY/ST/ GEI PRO	Nation T NAME ATE: B	al Fuel Gas : National uffalo, New UMBER: _2	Fuel I York 10162	ower Scajaquada Creek	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 sultants Buffalo, NY 14228

Borin NORT	IG LOCA HING:	ation 1,00				<b>NG:</b> _1, West Zo	064,263		N:	N/A OFFSET:		BORING
VERT	ICAL D	ATUM	l: <u>NAVI</u> Scajaqua	D8 da	8 Creek Ai	rea	GR		ACE	ELEVATION (FT): 584.19		PAGE 2 of 2
		Casing			SAMPL	E INFO	RMATIO	N	g			WELL
Elev. (ft)	Depth (ft)	Pen. (bpf) or Core Rate (mpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data	GRAPHIC LO	Sample Description & Classification		CONSTRUCTION DETAILS
560 —	— 25 -		7	V	24 to 28	48/47		OVM=0.3		Lacustrine Clay Reddish brown silty clay, fine sand, (locally high plasticity), moist	, trace	
-	_		8	$\wedge$	28	48/		OVM=0.6		Same as above, little fine to coarse angul	ar sand,	
555 — _	- 30			V	to 32			OVM=0.4		trace angular small gravel, saturated		- 3/8" dia. bentonite
-	-			$\left  \right\rangle$						End of Boring at 32 feet		chips
-	_											(1) I onger well screen
550 — - -	- - 35									Samples to Alpha Analytical:		selected to monitor groundwater in fill with solvent odor and material above clay.
-	_									(573.19 to 571.19' elev.)		
- 545 —	 									22-24' below ground surface (562.19 to 560.19' elev.)		
-	— 40 -											
_	_											
540 —	- 45											
_	_											
-	_											
535 —	- 50											
-	_											
- 530 —	_											
Strata lin	ies repres	ent the a	approximate		nsitions	LIENT:	Nation	al Fuel Gas			$\square$	EI Consultants, Inc.
may be of made at	gradual. N times stat	ater leve ed. Wate	pes. Actual el readings er levels ma	hav hav ay b	ve been	ROJEC	TNAME		100 Sylvan Parkway			
different	at other ti	mes.		-		CITY/ST/	ATE: <u>B</u> JECT NI	uffalo, New \ JMBER: 21	<u>/ork</u> 0162		onsultants F	Suite 400 Buffalo, NY 14228

Borin NORT HORIZ VERT LOCA	ig Loca "Hing: Zonta ICAL D TION:	ation 1,00 L DAT ATUN Lower		<b>EAST</b> AD83 NY 088 da Creek .	T <b>ING:</b> <u>1</u> West Zo	,064,262 one STA GR(	STATION ATION CEN DUND SUR	on: Terl Face	N/A OFFSET: INE:N/A ELEVATION (FT):582.37	BORING MW-LSC-4 PAGE 1 of 2
Drillin DATE CONTR EQUIP AUGEL HAMM WATE GENER	ng Info Start / Ractor Ment: R ID/OD: ER TYP R LEVEI RAL NO	END: END: Hand 4.2 E: D EEEV FES: S: ID	ion 11/8/20 othnagle d/Geoprob 5 in / N/A birect Push ATIONS ( Top of Ri: = Inside Dia	21 - 11/8/ e 7822DT ft): ser Elevat	2021	DRILLER: CASING ID HAMMER V 3' Blows per Fo		efreda 2 in 1: _N	TOTAL DEPTH (FT):       32.0         LOGGED BY:       M. Cummings         BORING METHOD:       Hand/Geoprobe         A       HAMMER DROP (inch):       N/A         strubed Tube Sample       WOR = Weight of Rods       O	_ _  Ω _P = Pocket Penetrometer Strength
		Pe Re	D = Outside en. = Penetr ec. = Recove	ation Lengtl ery Length	n S=Sp DP=1	Direct Push S	oot C V Sample S	= Roci = Field C = So	Vane Shear RQD = Rock Quality Designation F ic Core OVM = Organic Vapor Meter	→ = Pocket Torvane Shear Strength → = Field Vane Shear Strength NA, NM = Not Applicable, Not Measured
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	Sample No.	SAMP ≝ Deptr ⊢ (ft)	Pen./ Rec. (in)	RMATION Blow Count or RQD	Field Test Data	GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
- - 580 — -			1	0 to 4	48/				Topsoil FILL Brown silt, sand, fine grained to medium grained, well rounded, rounded, gravel fine to coarse, subrounded to angular, cobbles	- Flush mount surface casing
575-	- 5 - 5		2	4 to 8	48/32		OVM=0.0 OVM=0.0		Black silty sand, fine grained to coarse grained, dry, organics, medium gravel, slag and black coal, root material	- 2" dia. schedule 40 PVC well riser
	- - - 10		3	8 to 12	48/6				Brown silty clay fill, fabric or fiber materials at 4.25', brick fragments, trace small angular gravel and cinders, dry Very low recovery, some material as above (4-8'', some black to gray silty clay with fine grained sand at end 1", moist	, Cement/ bentonite grout
570 —	- - - 15		4	12 to 16	48/44		OVM=0.1 OVM=0.1		<b>Native Alluvium</b> Dark gray to black silty clay, moist Dark gray to black, some olive color	
565 —	-		5	16 to 20	48/34		OVM=0.1		Clayey silt, trace fine grained sand, saturated at 14.5' Same as above, dark gray to black clayey silt, trace fine grained sand	- 3/8" dia. bentonite chips
	- - 20		6	20 to 24	48/44		OVM=0.1 OVM=0.2		Silty fine gravel, sand with gastropod shells, moist Silty fine to coarse grained sand, some wood material upper 6", gastropod shells throughout, saturated	- 2" dia. schedule 40 PVC well screen
560	 						OVM=0.4		Root organics at 22'	-#00N Filter Sand
Strata lin boundar may be made at different	hes repres ies betwee gradual. W times stat at other ti	ent the a en soil ty /ater lev ed. Wat mes.	approximate /pes. Actual /el readings er levels ma	transitions have been y be	CLIENT: PROJEC CITY/ST/ GEI PRC	Nationa T NAME: ATE: _Bu	I Fuel Gas National Iffalo, New	Fuel I York 10162	ower Scajaquada Creek 0 GEI Consultant	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 5 Buffalo, NY 14228

Borin NOR HORI	ng Loca THING: ZONTA		BORING MW-LSC-4									
LOCA	TICAL D	ATUM Lower	l: <u>NAV</u> Scajaqua	D8 ada	8 Creek A	rea	GR	OUND SURF	ACE	ELEVATION (FT): <u>582.37</u>		PAGE 2 of 2
		Casing Pen.			SAMPL		RMATIO	N	СG	Querrale		WELL
Elev. (ft)	Depth (ft)	(bpf) or Core Rate (mpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data	GRAPHIC	Description & Classification		DETAILS
-	- 25		7	Ň	24 to 28	48/47		OVM=55.6 OVM=80.4		Grades to small gravel, angular and more grained sand at 24' Dark brown fine to coarse grained sand a gravel, silt, coal tar-like odors throughout, small to medium grained, liquid tar-like m present, saturated	e coarse nd angular aterial	
555	- - -		8		28 to 32	48/19		OVM=1.9		Lacustrine Clay Reddish brown silty clay trace fine angular gravel, dry,tar-like mate impacts and odors on outside of clay only	with erial ⁄.	- 2' sump
-	- 30 - - -			$\wedge$				OVM=1.7		Reddish brown silty clay as above, trace f grained sand, low plasticity fines, stiff, mo	ine bist	- 3/8" dia. bentonite chips
550										End of Boring at 32 feet		
-	- 35									Samples to Alpha Analytical: 20-22' below ground surface		
- 545 —										24-28' below ground surface (558.37' to 556.37' elev.)		
-	-									Samples for forensics (Meta Env.) 24-25' below ground surface		
-	- 40 - -									(336.37 to 337.37 elev.)		
540 —	-  -  -											
-	- 45											
- 535 —	- - - -											
-	- - 50											
- 530 —												
		ent the s	approximate							<b></b>		
bounda may be	ries betwee gradual. W	en soil ty	pes. Actual el readings	l tra	nsitions ve been	CLIENT:	Nation: T NAME	al Fuel Gas : National F	uel I	_ower Scajaquada Creek	$\bigcirc$	GEI Consultants, Inc. 100 Sylvan Parkway
differen	ι umes stat t at other ti	ea. vvate mes.	er ievels ma	ay b	C	CITY/ST	ATE: B	uffalo, New Y	′ork		I all	Suite 400
						<b>GEI PRO</b>	JECT N	JMBER: 21	0162		onsultants	Buffalo, NY 14228

Borin NORT HORIZ VERT LOCA	ig Loca "Hing: Zonta ICAL D TION:	ation 1,0 L DAT ATUN Lower		<b>EAS</b> AD83 N D88 da Cree	STING:1 IY West Zo k Area	,064,113 one ST. GR	STATIC ATION CEN OUND SUR	on: Terl Face	<u>N/A</u> OFFSET: <u>N/A</u> INE: <u>N/A</u> E ELEVATION (FT): <u>582.72</u>	BORING MW-LSC-5 PAGE 1 of 2
Drillin DATE CONTI EQUIP AUGE HAMM WATE GENEI	ng Info Start / Ractor Ment: R ID/OD: IER TYP R LEVEI RAL NO	END: END: Hand: 4.2 E: D E: D ELEV TES:	ion 1/4/202 othnagle d/Geoprob 5 in / N/A birect Push ATIONS ( Top of Ris	22 - 1/4/2 e 7822D ft):	022 T	DRILLER: CASING IE HAMMER		efreda 2 in : _N	TOTAL DEPTH (FT):       42.0         LOGGED BY:       M. Cummings         BORING METHOD:       Hand/Geopr         /A       HAMMER DROP (inch):       N/A	robe
ABBRI		5: ID Ol Pe Re	= Inside Di D = Outside en. = Penetr ec. = Recov	ameter Diameter ation Len ery Lengt	ppr = mpf = gth S = S n DP =	Blows per Fo Minute per I blit Spoon Direct Push	oot U Foot C Sample S	= Und = Roc = Field C = So	strubes Tube Sample         WOR = Weight of Rods           k Core         WOH = Weight of Hammer           I Vane Shear         RQD = Rock Quality Designation           nic Core         OVM = Organic Vapor Meter	Q _p = Pocket Penetrometer Strength S _v = Pocket Torvane Shear Strength on F _v = Field Vane Shear Strength N _v = Not Applicable, Not Measured
Elev. (ft)	Depth (ft)	Casing Pen. (bpf) or Core Rate (mpf)	Sample No.	SAM	th Pen./ (in)	RMATIO Blow Count or RQD	N Field Test Data	GRAPHIC LOG	Sample Description & Classification	WELL CONSTRUCTION DETAILS
580	- 5		1	5 to 8	36/3		OVM=0.0		Hamblotheartto11'Hggs, britistes, ggravet), oconocette Advance augers to 5.0' without sampling. FILL Loose angular crushed limestone grav moist Steady grinding at 8.5' bgs (likely concrete basement flooring) grind through 6" then ad HSA to10 bgs without sampling. Native Alluvium Gray to light gray silty fine	e. vel, vance
	- - - 15 -		3	14	48/37		OVM=0.0		sand, little black wood pieces, firm, moist throughout Gray fine sand and silt with little low plasticit fines, moist throughout, rootlets bottom 6", f	ty irm
	- - 20 -		4		48/42		OVM=0.0 OVM=2.7		Gray to dark gray clayey silt with trace fine s shell fragments (white) at 21' with few shells scattered throughout, little peat and cobbles Gray silty fine sand, saturated, soft, slight petroleum odor	and, a, - 3/8" dia. bentonite chips
Strata lir boundar may be made at different	nes repres ies betwee gradual. W times stat at other ti	ent the a en soil ty /ater lev æd. Wat mes.	approximate /pes. Actual el readings er levels ma	transition have bee by be	CLIENT: PROJEC CITY/ST GEI PRC	Nation T NAME ATE: B	al Fuel Gas :_National uffalo, New JMBER:_2	Fuel York	Lower Scajaquada Creek	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Bultants Buffalo, NY 14228

Borin NOR	ng Loca THING: ZONTA	ation  L DAT			EASTI	<b>NG:</b> _1, West Zo	.064,113 ne ST		DN: TERL			BORING
VERT	TICAL D	ATUN _ower \$	<b>I: NAV</b> Scajaqua	D8 da	8 Creek Ar	ea	GR		FACE	ELEVATION (FT):		PAGE 2 of 2
		Casing			SAMPL	E INFO	RMATIO	N	g			WELL
Elev. (ft)	Depth (ft)	Pen. (bpf) or Core Rate (mpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field Test Data	GRAPHIC LO	Sample Description & Classification		CONSTRUCTION DETAILS
- - 555 — - -	- 25		6 7		26 to 30 30	48/32 48/24		OVM=2.7 OVM=26 OVM=0.4		As above, saturated, then 6", wood fragm from 28.5-30', coarse fine sand, silt, slight coal-tar like odor, gray clay in shoe with ta material staining, firm, 1' red clay in very shoe Silty red clay with trace fine angular gra	ents ir-like bottom of	- 2" dia. schedule 40 PVC well screen -#00N Filte Sand
- 550 — - -	- - - - - - - - - - - - - - - - - - -		8		34 34 to 38	48/48		OVM=0.0		firm, medium to high plasticity, slight coa like odor in top 1.5' As above, little coal tar present on shoe o likely resulting from withdrawing sampling assembly through impacted interval above red clay in sampler	I-taŕ nly, <b>e, little</b>	- 2' sump
- 545 - -	- - - - - - - - - - - - - - - - - - -		9		38 to 42	48/2		OVM=0.0		Poor recovery, little red clay in sampler		- 3/8" dia. bentonite chips
540 — - - 535 — -	- - - - - - - - - - - - - - - - - - -									End of Boring at 42 feet <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.)		
	- 50 											
Strata li bounda may be made a differen	nes repres ries betwee gradual. W t times stat t at other ti	ent the a en soil ty /ater lev æd. Wat mes.	approximate /pes. Actual /el readings /er levels ma	e I trai hav ay b	nsitions ve been le	CLIENT: PROJEC CITY/STA GEI PRO	<u>Nation</u> T NAME ATE: <u>B</u> JECT N	al Fuel Gas : National I uffalo, New ` UMBER: _21	⁼ uel   York  0162	Lower Scajaquada Creek	onsultants	GEI Consultants, Inc. 100 Sylvan Parkway Suite 400 Buffalo, NY 14228